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This is geophysical report no. A-70-112
For Premier Mining Corporation Ltd.
East of Bennett Lake, B.C.
November 10, 1970.

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PLANS

#1 Anomalous Plan

A-70-112

ELC GEOPHYSICS LTD.
250 N. Grosvenor Ave.
Burnaby 2, B. C.
Telephone: 298-9619

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2681 MAP.....



geophysics ltd.

250 NORTH GROSVENOR, VANCOUVER, CANADA TELEPHONE: (604) 298-9619

THIS IS GEOPHYSICAL REPORT NO. A-70-112 BY ELC
GEOPHYSICS LTD. FOR PREMIER MINING CORPORATION LTD.
OVER THE DICK AND OLD CLAIMS GROUP, EAST OF BENNETT
LAKE, ATLIN MINING DISTRICT, 134° W, 59°N, SEPT. 28,
1970 to NOVEMBER 10, 1970.

Purpose:

The purpose of the aeromagnetic survey conducted over the "DICK" and "OLD" claims group was to determine anomalous features that might prove to be significant in locating geological formations not readily observable from the surface and relative values with old workings.

Location:

The "DICK" and "OLD" claims group are shown relative to their location and Bennett Lake on the drawing A-70-112 which includes an insert map for regional location. The White Pass railroad track on the east side of Bennett Lake was surveyed for commencement points on the flight lines. The

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area is approximately 15 miles south of Carcross, Y.T. 134° W, 59° N. Claims and posts are shown on the plan.

Flight Lines:

The flight lines were established as shown on the drawing with commencement and termination controlled by ground personnel on radio and angular sightings for intersect points and line terminations. The operator and pilot in addition to the radio control utilized contour and topographic feature control with the data continuously fed into tape recorders. The line spacing averaged 500 feet.

Geological Reference:

Geological survey of Canada Map 19-1957, Bennett Lake, B.C., Sheet 104M.

Report on the "DICK" and "OLD" groups, Bennett Lake, Atlin Mining Division, B.C. by George L. Mills, P. Eng., August 3rd, 1970.

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Instrumentation:

The aeromagnetic survey was conducted with a two-component space charge magnetometer, providing two continuous recordings of the X and Y components. The data was recorded on magnetic tape along with flight and location information and ground communications. The instrument was suspended on a boom forward of the helicopter within a ball housing having self-leveling gimbols. The survey was conducted along straight flight lines with gradual changes in elevation in order to maintain an average height above the terrain of approximately 600 feet or less. The instrument was oriented magnetic-ally north.

The recording tapes were computer processed and oriented on the plan in accordance with event time markers, oral topographic reference, and ground crew control signals.

Presentation:

The presentation is shown by the location

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of significant figures of magnetic values, as they were measured in gammas, along the flight line. These figures represent anomalies having hundreds of gammas of change, which include both the positive and negative swing of the horizontal component, when supported substantially by the vertical component. Interpretation includes consideration of the shape, or signatures of these anomalies, wherein strong clustering of high frequencies are significant of prominent geological formations.

The interpretation is being confined chiefly to linear anomalies that may be referred to neighbouring line similarities, to thereby identify the strike of the anomaly.

Results:

A series of north south strikes are indicated by the figures C1 to C4 inclusive and C1A to C1C inclusive. It would appear that these are contact strikes, with the more anomalous features generally east of the C1 to C4 series. Faulting appears to have a north-east, south-west trend, with

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the remainder and the majority of the anomalies having a north-west, south-east trend.

Summary:

The stronger anomalies were in the vicinity of the L6, C3 intersection with persistent anomalies following the L3 linear strike that is nearly parallel to the old tramway and creek.

Conclusions:

The persistent series of anomalies along L3 may be associated with remnants of the tram line or be from the formation that the drainage follows. L3 appears to terminate at the fault F1 in the southeast and may continue to C1B to the northwest.

The linear anomaly L6 is the most prominent of the L2-L4-L5-L7-L8 anomalies.

The intersection of C3 and L6 has an unusually prominent anomaly.

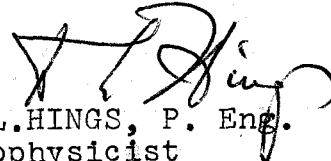
Recommendations:

The anomalies L3, C2 and F1 form an area

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near the old workings that should substantiate these anomalies and provide coordinating geological data.

The ringed zone Z1 also warrants surface detail work involving geophysical and geochemical surveys. The geology of the area favours north-west strikes which would support the investigation of the L6 anomaly.


D.L.HINGS, P. Eng.
Geophysicist

A STATEMENT OF COSTS FOR GEOPHYSICAL SURVEY NO. A-70-112
COVERING THE "DICK" AND "OLD" CLAIMS, BENNETT LAKE AREA,
B. C. 15 MILES SOUTH OF CARCROSS YUKON, BY ELC GEOPHYSICS
LTD. SEPTEMBER 28, 1970 to NOVEMBER 10, 1970.

Survey Crew

R. Reece	10 days @ 60.00	\$600.00	
G. Olheiser	9 days @ 35.00	310.00	
D. McCraig	2 days @ 25.00	<u>50.00</u>	
			\$ 960.00

Transportation

Air Fare		332.00	
Freight		211.99	
Train		80.00	
Truck		<u>48.75</u>	
			672.74

Living Costs

20 Man Days	@ 10.00		200.00
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Equipment

Airborne Instrument	9 days @ 50.00		450.00
Misc. Equipment, Transit, Power Supply, etc.			150.00

Data Processing and drafting

R. Reece	8 days @ 60.00	480.00	
D.A. Cramer	7 days @ 60.00	<u>420.00</u>	
			900.00

Interpretation and Report

D.L. Hings P. Eng.	5 days @ 150.00		750.00
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Aircraft

Klondike Helicopter			<u>825.00</u>
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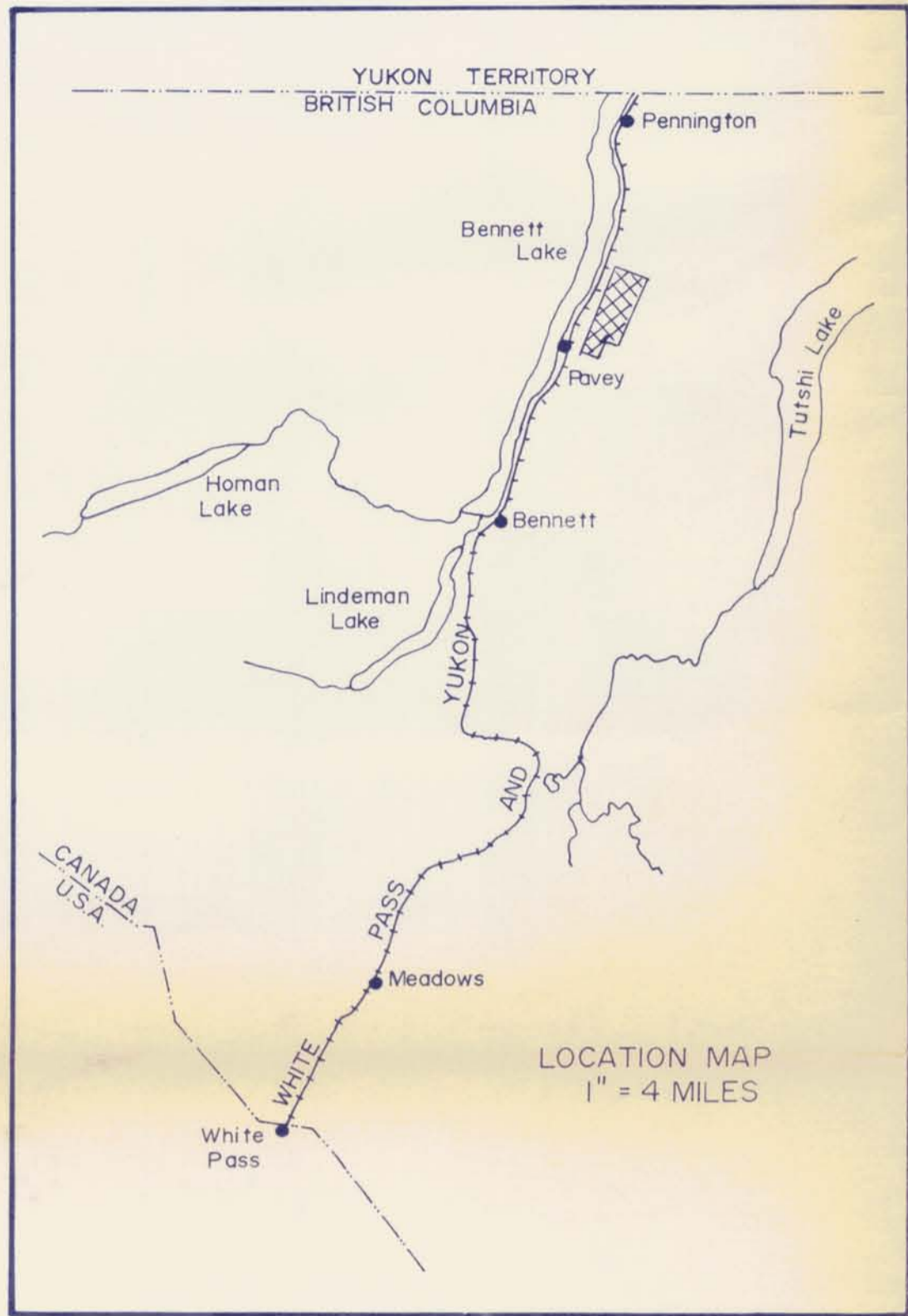
TOTAL			\$ <u>4,907.74</u>
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Declared before me at the *City*
of *Vancouver*, in the
Province of British Columbia, this *10th*
day of *November*, *1970*, A.D.

Raym Outil.

L. Hughes

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.



ELC GEOPHYSICAL SURVEY
DICK & OLD GROUPS BENNETT LAKE, B.C.
PREMIER MINING CORPORATION LTD.
NOV. 1970 SCALE 1"=1000' DWG. NO. -A-70-112
ANOMALOUS PLAN
APPROVED *[Signature]*

- NOTE -
- CONTROL POINTS
 - FLIGHT LINES
 - OLD TRAM (AIR)
 - - - FAULT
 - - - LINEAR ANOMALY
 - - - CONTACT
 - ANOMALOUS ZONE
 - CONTROL LINES
 - 7 5 MAGNETIC VALUES (X 100 GAMMAS)
 - CLAIM POST
 - - - CLAIM LINE

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