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WHITEHORSE, Y.T.

A PRELIMINARY REPORT

ON

TURAM ELECTROMAGNETIC & GRAVITY SURVEYS

Kit Grid

Faro Area, Yukon Territory

Office Of The Supervising Mining Recorder
JUN 12 1978
WHITEHORSE
Yukon Territory

FOR

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INSPECTORS OFFICE
WHITEHORSE, Y.T.

CYPRUS ANVIL MINING CORPORATION

Vancouver, British Columbia

BY

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, British Columbia

MARCH 1978

This report has been examined by the Geological Evaluation Unit and is recommended to the Council as to be considered as representation work in the amount of $27,400.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 52 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

For Commissioner of Yukon Territory

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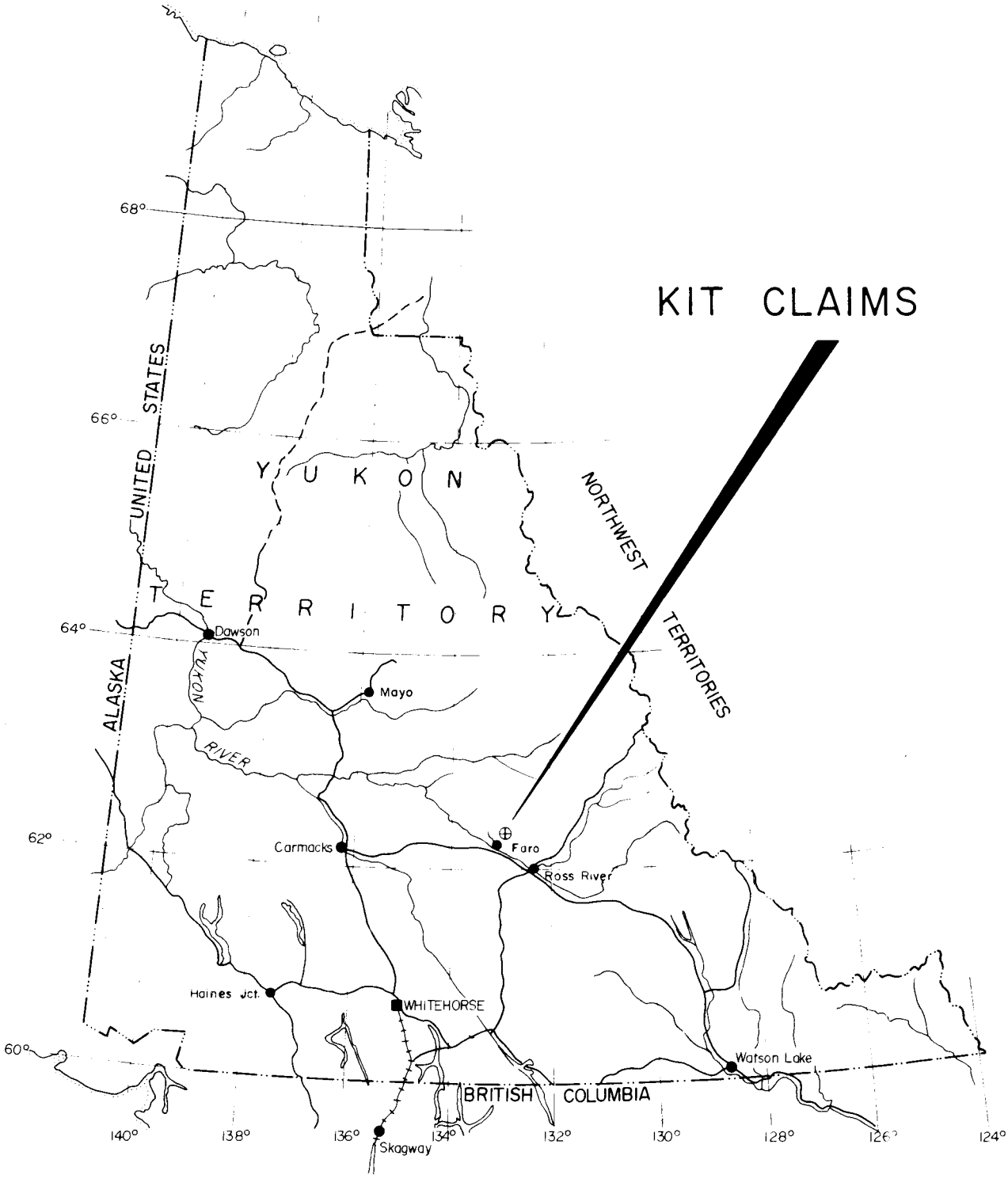
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CYPRUS ANVIL MINING CORPORATION

KIT CLAIMS

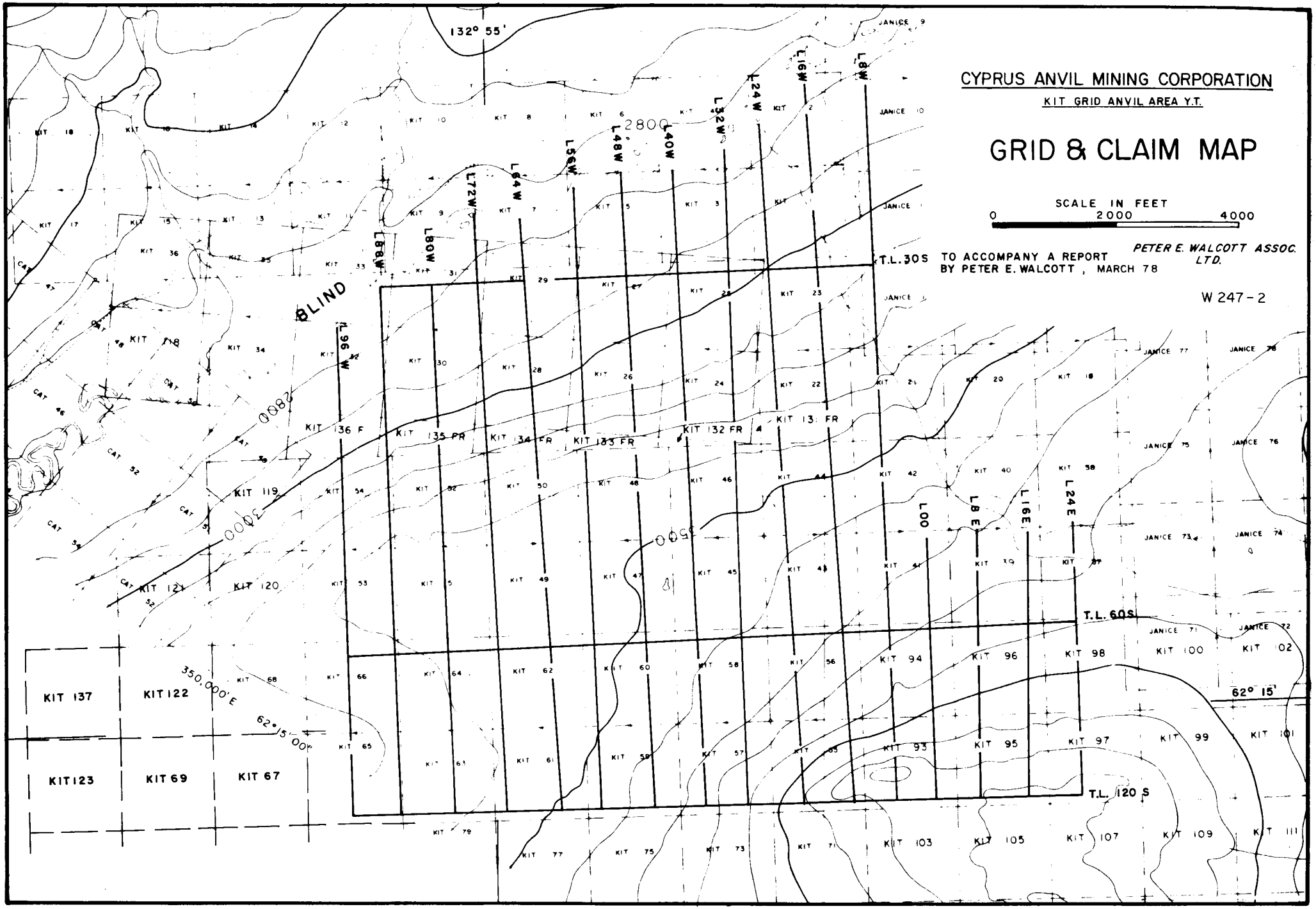
WHITEHORSE MINING DISTRICT

PROPERTY LOCATION MAP

YUKON

SCALE : 1" = 100 MILES

W 247 - 1


CYPRUS ANVIL MINING CORPORATION
KIT GRID ANVIL AREA Y.T.
GRID & CLAIM MAP
SCALE IN FEET
0 2000 4000
TO ACCOMPANY A REPORT BY PETER E. WALCOTT, MARCH 78
PETER E. WALCOTT ASSOC. LTD.
W 247-2
132° 55'
62° 15'
350,000' E
T.L. 30 S
T.L. 60 S
T.L. 120 S
BLIND
2800
2600
2500
L96W
L88W
L80W
L72W
L64W
L56W
L48W
L40W
L32W
L24W
L16W
L8W
L0
L8E
L16E
L24E
KIT 136 F
KIT 135 FR
KIT 134 FR
KIT 133 FR
KIT 132 FR
KIT 131 FR
KIT 119
KIT 120
KIT 121
KIT 137
KIT 122
KIT 123
KIT 69
KIT 67
KIT 94
KIT 96
KIT 98
KIT 100
KIT 102
KIT 93
KIT 95
KIT 97
KIT 99
KIT 101
KIT 103
KIT 105
KIT 107
KIT 109
KIT 111

INTRODUCTION

Between July 16th and 28th, 1977, Peter E. Walcott & Associates Limited carried out a Turam electromagnetic survey over the Kit grid for Cyprus Anvil Mining Corporation.

This was followed by a gravity survey between September 14th and October 11th, 1977 over the same grid.

Measurements of field strength and phase difference were made every 100 feet along the lines on the Turam survey with an S.E. 71 electromagnetic unit operating at a frequency of 400 Hz. and using a coil separation of 100 feet.

On the gravity survey measurements of relative gravity were made every 100 feet along the picket lines. In addition elevations at each of the gravity stations were obtained with theodolites and rods using the stadia method.

After corrections were applied in each method the data were plotted and presented in profile form on the accompanying maps.

PROPERTY, LOCATION AND ACCESS

The property is located in the Whitehorse Mining Division of the Yukon and consists of the following claims:

Claim Name	Record No.
KIT 1 - 92	YA 4730 - 4821
93 - 105	YA 8988 - 9000
106 - 117	YA 18002 - 18013

The claims are situated to the east of Blind Creek some 9 miles northeast of the town of Faro.

Access is obtainable from Faro either by helicopter or by a disused winter road that traverses the property and joins the old Blind Creek road some 6 miles away. During these surveys access was obtained by means of helicopter.

PREVIOUS WORK.

Previous work in the area consisted of airborne magnetic and electromagnetic surveying, ground electromagnetic investigation, geochemical soil sampling, geological mapping, and diamond drilling, the results of which are documented in reports and/or maps held by Cyprus Anvil Mining Corporation.

PURPOSE.

The Turam survey was carried out to trace out the graphitic horizons of Units 3 E and 5 A that run onto the grid from the adjoining Janice claims to the east where they had been successfully located using the Turam method.

The gravity survey was carried out in order to possibly screen the previously located graphitic horizons as to their association with economic sulphide mineralization i.e. to see if any excess mass was associated with the E.M. conductors.

GEOLOGY.

The reader is referred to reports held by Cyprus Anvil Mining Corporation.

SURVEY SPECIFICATIONS.

The basic principle of any electromagnetic survey is that when conductors are subjected to primary alternating fields secondary magnetic fields are induced in them. Measurements of these secondary fields give indications as to the soze, shape and conductivity of conductors. In the absence of conductors no secondary fields are obtained.

The electromagnetic survey was carried out using an S.E. 71 electromagnetic unit. The primary field was set up by closed inductive loops laid on the ground. Two receiver coils connected by a lightweight shielded cable to a compensator amplifier are used to measure the distortions in the electromagnetic field. The quantities measured are:

1. the ratio of the field strengths at each coil and

2. the phase difference in the fields at the two coils.

Large rectangular loops 4000' to 4800' wide and 2000' to 3000' deep were used on the survey with the loops to the south on the assumed footwall side of the formation.

Readings were taken every 100 feet along the picket lines perpendicular to the long side of the loops with a 100 foot coil separation and using a frequency of 400 Hz.

In all some 25.96 miles of surveying were completed using this method.

The gravity survey was carried out using a Scintrex CG-2 meter. This instrument measures variations in the earth's gravitational field to an accuracy of $\pm$ 0.01 milligals.

Values of observed gravity were obtained every 100 feet along the picket lines. Corrections for meter drift were made by tying-in to previously established base stations at intervals not exceeding two to three hours.

The elevations of the gravity stadias were determined by rod and transit (Sokkisha TM 20C theodolite) using the stadia method. Errors in the tying-in of loops were kept to a minimum, and did not exceed 1.0 foot per loop.

Corrections were then applied to the observed gravity values for differences in elevation using a density of 2.7 gm/cc i.e. an elevation correction factor of 0.06, and latitude.

These Bouguer values were then plotted in profile form.

In all some 31.95 miles of gravity surveying were carried out.

DISCUSSION OF RESULTS.

A full discussion of the results will await the completion of the terrain corrections for the gravity survey slated to be completed in late April.

To this end digitizing and keypunching of this and other Swim Basin data has been initiated as of March 1st, 1978.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Between July 16th and 28th and September 14th and October 11th, 1977, Peter E. Walcott & Associates Limited carried out Turam electromagnetic and gravity surveys over the Kit grid for Cyprus Anvil Mining Corporation.

The Kit grid adjoins the Janice grid to the east where similar surveys had been conducted in the spring of 77.

Although to date the data have been plotted, further discussion of the results will await the outcome of the terrain corrections for the gravity side slated to be completed by April 78.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED

Peter E. Walcott, P.Eng.
Geophysicist

Vancouver, B.C.

March 1978

L.96-W L.88-W L.80-W L.72-W L.64-W L.56-W L.48-W L.40-W L.32-W L.24-W L.16-W L.8-W L.0+00

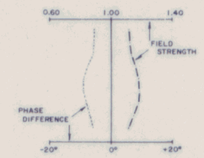
BASE-LINE
4-S
8-S
12-S
16-S
20-S
24-S
28-S
T.L.30-S
32-S
36-S
40-S
44-S
48-S
52-S
56-S
T.L.60-S
64-S
68-S
72-S
76-S
80-S
84-S
88-S
T.L.90-S
92-S
96-S
100-S
104-S
108-S
112-S
116-S
T.L.120-S
120-S

L.0+00 L.8-E L.16-E L.24-E

436.0

N

LEGEND



CYPRUS ANVIL MINING CORP.

KIT ; ANVIL AREA , WHITEHORSE M.D., YUKON

S.E.71 , FREQUENCY - 400 C.P.S.

TURAM ELECTROMAGNETIC SURVEY

PROFILES OF FIELD STRENGTH & PHASE DIFFERENCE

SCALE 1" = 1000 FEET

400 200 0 400 800 1200

MAP No. W-240-1
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT, P.Eng.

PETER E WALCOTT & ASSOC. LTD.
JULY - 1977

MAP NO. W-287-3

L.96 W.

L.88 W.

L.80 W.

L.72 W.

L.64 W.

L.56 W.

L.48 W.

CYPRUS ANVIL MINING CORPORATION

KIT 1320 - WHITEHORSE M.D., Y.T.

PRELIMINARY GRAVITY SURVEY MAP

Profiles of Bouguer Gravity & Surface Elevation

Scale 1"=200'

Map No. W-287-3

Fisher & Wilson Ltd. Assoc. Ltd.

March 1975





CYPRUS ANVIL MINING CORPORATION

KIT GROUP - WHITEHORSE M.D., Y.T.

PRELIMINARY GRAVITY SURVEY MAP

Profiles of Bouguer Gravity & Surface Elevation

Scale 1" = 200'

Map No. W-247-A

Peter E. Walcott & Assoc. Ltd.

March 1978

Map No. 247-4

CYPRUS ANVIL MINING CORPORATION

KIT 300 - WHITEHORSE M.D., Y.T.

PRELIMINARY GRAVITY SURVEY MAP

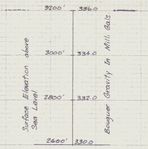
Profiles of Bouguer Gravity & Surface Elevation

Scale 1" = 200'

Map No. W-247-5

Peter E. Walcott & Assoc. Ltd.

March 1978



L 24 E

1205 1105 1005 905 805 745

T.L. 0+00

21+25W 10W 00

T.L. 30+00S

90W 80W 70W 60W 50W 40W 30W 20W 10W 00

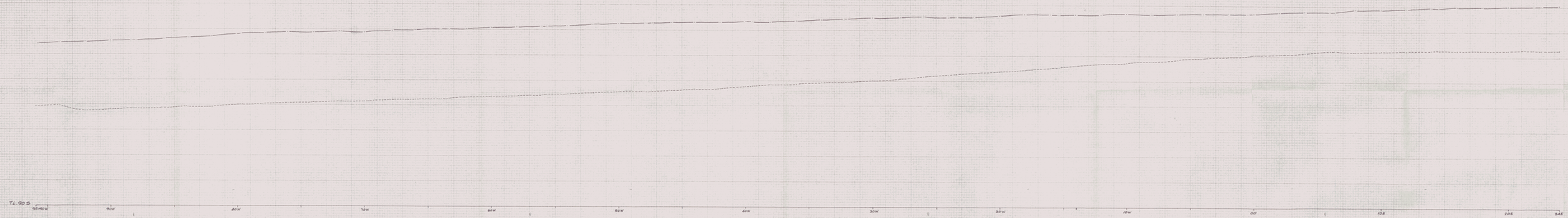
T.L. 30+00S

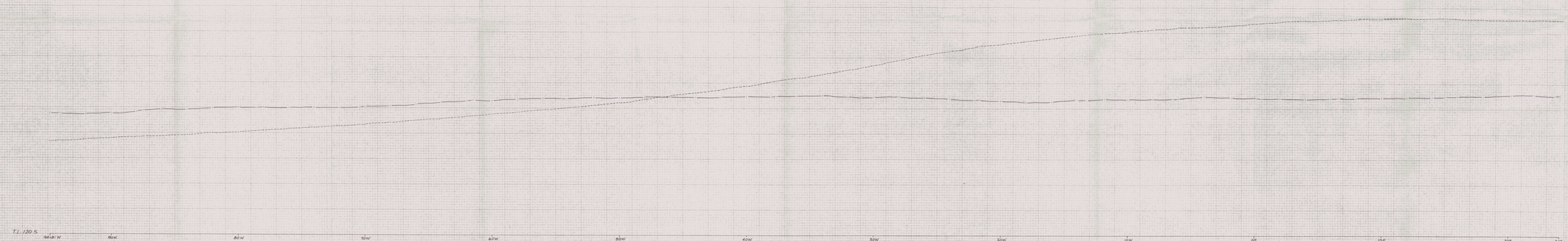
T.L. 60+00S

90W 80W 70W 60W 50W 40W 30W 20W 10W 00

T.L. 60+00S

MAP No. 247-5



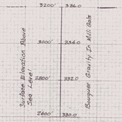


CYPRUS ANVIL MINING CORPORATION
CT CLAIMS - WHITEWATER M.G. B.C.
PRELIMINARY GRAVITY SURVEY MAP
Profiles of Bouguer Gravity & Surface Elevation

Scale 1" = 200

MAP No. W 247-G

Peter E. Walcott & Assoc. Ltd.
March 1976



MAP No. 247-G