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A REPORT

ON

A GRAVITY SURVEY

Matt Berry Prospect, Frances Lake,

Watson Lake M.D., Y.T.

FOR

CYPRUS ANVIL MINING CORPORATION

Vancouver, British Columbia

BY

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Vancouver, British Columbia

MAY 1975

TABLE OF CONTENTS

	Page
INTRODUCTION	1
PURPOSE	2
SURVEY SPECIFICATIONS	3
DISCUSSION OF RESULTS	4
SUMMARY, RECOMMENDATIONS AND CONCLUSIONS	5

ACCOMPANYING MAPS - Scale 1"=200'	MAP POCKET
CONTOURS OF SURFACE ELEVATIONS.....	W-184-1
CONTOURS OF BOUGUER GRAVITY ρ = 2.5 gm/cc	W-184-2
" " " " ρ = 2.7 gm/cc	W-184-3
" " REGIONAL GRAVITY ρ = 2.5 gm/cc	W-184-4
" " RESIDUAL GRAVITY ρ = 2.5 gm/cc	W-184-5

INTRODUCTION

Between July 7th to August 6th, 1974, Peter E. Walcott & Associates Limited carried out a gravity survey over the Frances Lake property of Matt Berry Mines Ltd., optioned by Cyprus Anvil Mining Corporation.

The survey was carried out over the previously established line grid, which had to be brushed out and repicketed.

Measurements of relative gravity were made every 100 feet along the picket lines using a CG2 gravity meter. In addition elevations at each of the gravity stations were obtained using a Sokkisha TM-20C theodolite and rod.

The data was then processed and presented in contour form on maps W-184-1 to 5 that accompany this report.

PURPOSE

The purpose of the survey was to explore if possible using the gravimetric method for possible down dip extensions and/or enlargements of the known mineralization and for other occurrences of these same on the property.

SURVEY SPECIFICATIONS

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

12 Base stations were established at suitable locations within the area to be surveyed. The closure on these was 0.05 milligals.

Values of observed gravity were then 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 generally exceeding 2 hours. Drifts over 0.10 milligals per hour were not allowable.

Elevations of the gravity stations 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 minimal, this being dependent on the severity of the topography but was less than 1.0 feet per loop.

Corrections were then applied to the observed gravity values for differences in elevation (ρ= 2.5 & 2.7 gm/cc) and latitude.

The final Bouguer gravity values were then plotted and contoured (ρ= 2.5 and 2.7 gm/cc).

The regional gravity effects (ρ= 2.5 gm/cc) were established from profiles and contours by graphical smoothing. These were then plotted and contoured.

The differences between the Bouguer gravity values and the regional effects, the residual gravity values, were then computed and plotted (ρ= 2.5 gm/cc).

DISCUSSION OF RESULTS

A comparison of the contour maps of surface elevations (Map W-184-1) and the Bouguer gravity calculated for both densities, ρ = 2.5 & 2.7 gm/cc (Maps W-184-2 & 3) show good interdependence. This is occasioned by the fact that no terrain corrections were applied for the mass deficiencies caused by Frances Lake and Thompson Creek respectively.

Some effort was made to take these facts into account in constructing the regional map (Map W-184-4) and the resulting residual shows two 0.8 milligal peaks in the vicinity of the known mineralized body.

The residual anomalies represent the maximum possible response obtainable due to (a) the use of a fairly low density (ρ = 2.5 gm/cc) and (b) the fact that the mineralized body lies in the region of a small promontory of Frances Lake (which could not properly be accounted for in the regional).

As a result no estimates of excess mass and/or depth of body etc. have been made as in the writer's opinion they would not be valid until the above mentioned corrections can be applied for Frances Lake (entails some water depth measurements) and Thompson Creek which dissects the anomaly.

However no strong gravity features are discernible to the east of the zone on the contour maps or on the profiles (not drawn) that could suggest sizeable extensions of the mineralization at depth.

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

Between July 7th and August 6th, 1974, Peter E. Walcott & Associates Limited carried out a gravity survey over part of the Matt Berry prospect for Cyprus Anvil Mining Corporation.

The property is located on the east shore of Frances Lake in the Yukon Territory.

The survey indicated the presence of two 0.8 milligals anomalies, dissected by Thompson Creek, roughly coincident with the known mineralization.

No apparent anomalies were evident from the field profiles to suggest down dip extensions of an extent of the known mineralization or similar occurrences elsewhere and further participation by Cyprus Anvil Mining Corporation was held in abeyance.

Further investigation of these anomalies, i.e. removing effects due to terrain, etc. was prohibited by the cost, etc. and thus no calculations of excess mass(es) nor any predictions as to size and shape of causative body(ies) have been ventured by the writer for reasons previously put forward in the discussion of results section.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED

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Geophysicist

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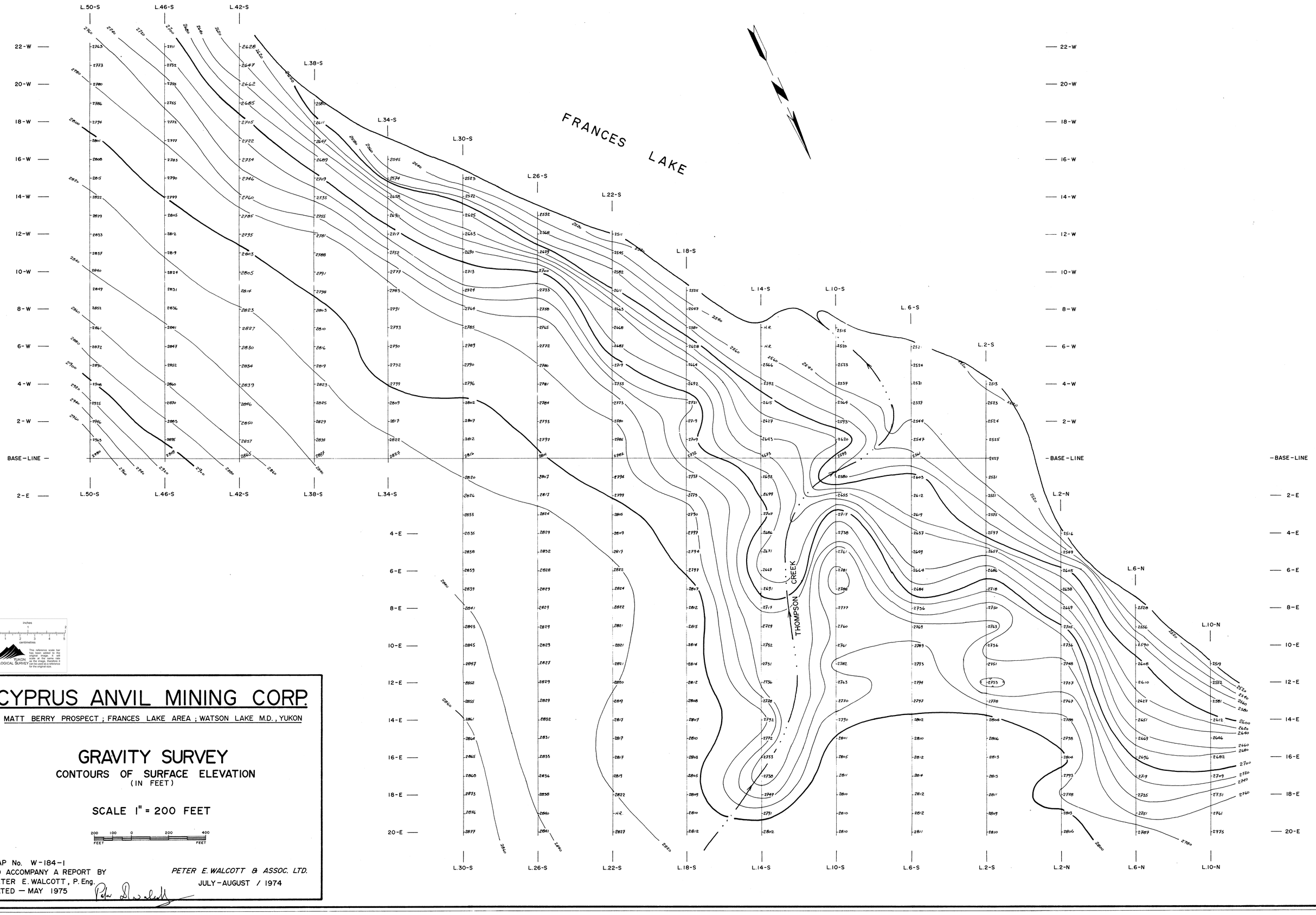
May 1975



inches
0 1 2
0 1 2 3 4 5
centimetres

YUKON GEOLOGICAL SURVEY

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CYPRUS ANVIL MINING CORP.

MATT BERRY PROSPECT ; FRANCES LAKE AREA ; WATSON LAKE M.D., YUKON

GRAVITY SURVEY

CONTOURS OF SURFACE ELEVATION
(IN FEET)

SCALE 1" = 200 FEET

200 100 0 200 400
FEET FEET

MAP No. W-184-1
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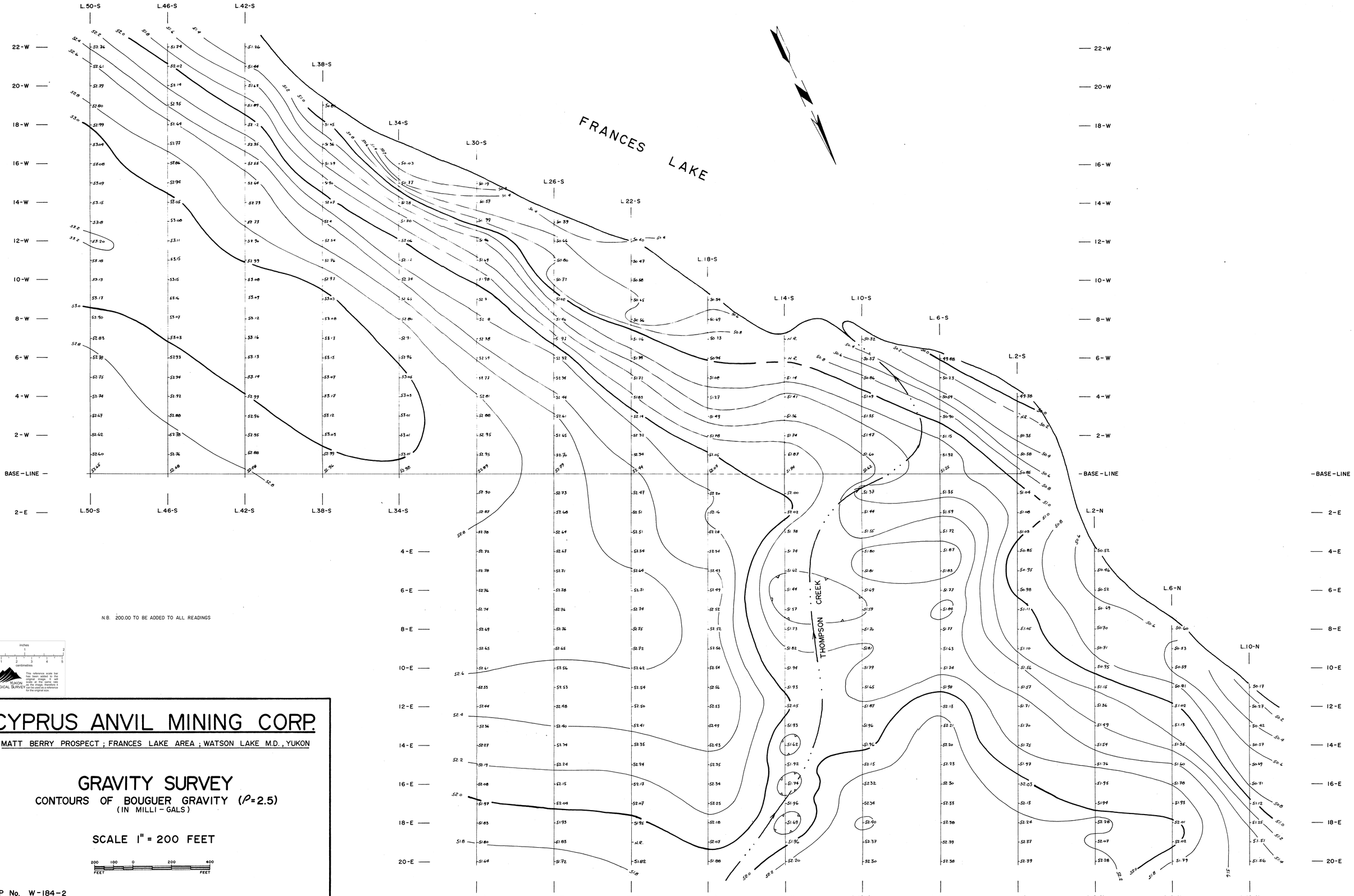

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inches
centimetres

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YUKON GEOLOGICAL SURVEY

CYPRUS ANVIL MINING CORP.

MATT BERRY PROSPECT ; FRANCES LAKE AREA ; WATSON LAKE M.D., YUKON

GRAVITY SURVEY

CONTOURS OF BOUGUER GRAVITY (ρ=2.5)
(IN MILLI-GALS)

SCALE 1" = 200 FEET

200 100 0 200 400
FEET FEET

MAP No. W-184-2
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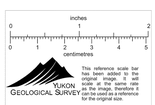
L.50-S L.46-S L.42-S L.38-S L.34-S L.30-S L.26-S L.22-S L.18-S L.14-S L.10-S L.6-S L.2-S L.2-N L.6-N L.10-N

22-W 20-W 18-W 16-W 14-W 12-W 10-W 8-W 6-W 4-W 2-W BASE-LINE 2-E 4-E 6-E 8-E 10-E 12-E 14-E 16-E 18-E 20-E

FRANCES LAKE

THOMPSON CREEK

N.B. 200.00 TO BE ADDED TO ALL READINGS



CYPRUS ANVIL MINING CORP.

MATT BERRY PROSPECT ; FRANCES LAKE AREA ; WATSON LAKE M.D., YUKON

GRAVITY SURVEY

CONTOURS OF BOUGUER GRAVITY (ρ=2.7)
(IN MILLI-GALS)

SCALE 1" = 200 FEET

200 100 0 200 400
FEET FEET

MAP No. W-184-3
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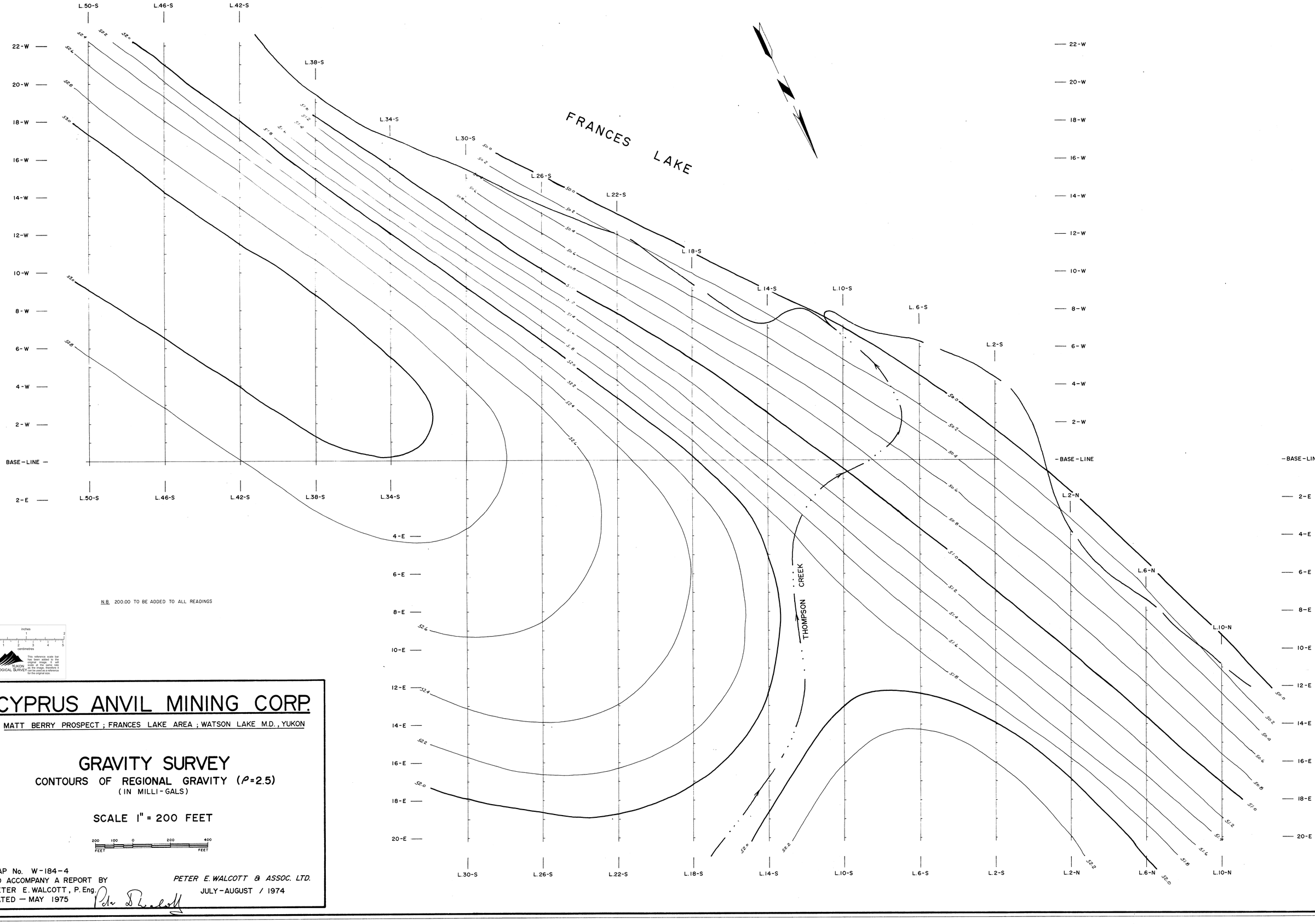

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centimetres 0 1 2 3 4 5

YUKON GEOLOGICAL SURVEY

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CYPRUS ANVIL MINING CORP.

MATT BERRY PROSPECT ; FRANCES LAKE AREA ; WATSON LAKE M.D., YUKON

GRAVITY SURVEY

CONTOURS OF REGIONAL GRAVITY (ρ=2.5)
(IN MILLI-GALS)

SCALE 1" = 200 FEET

200 100 0 200 400
FEET FEET

MAP No. W-184-4
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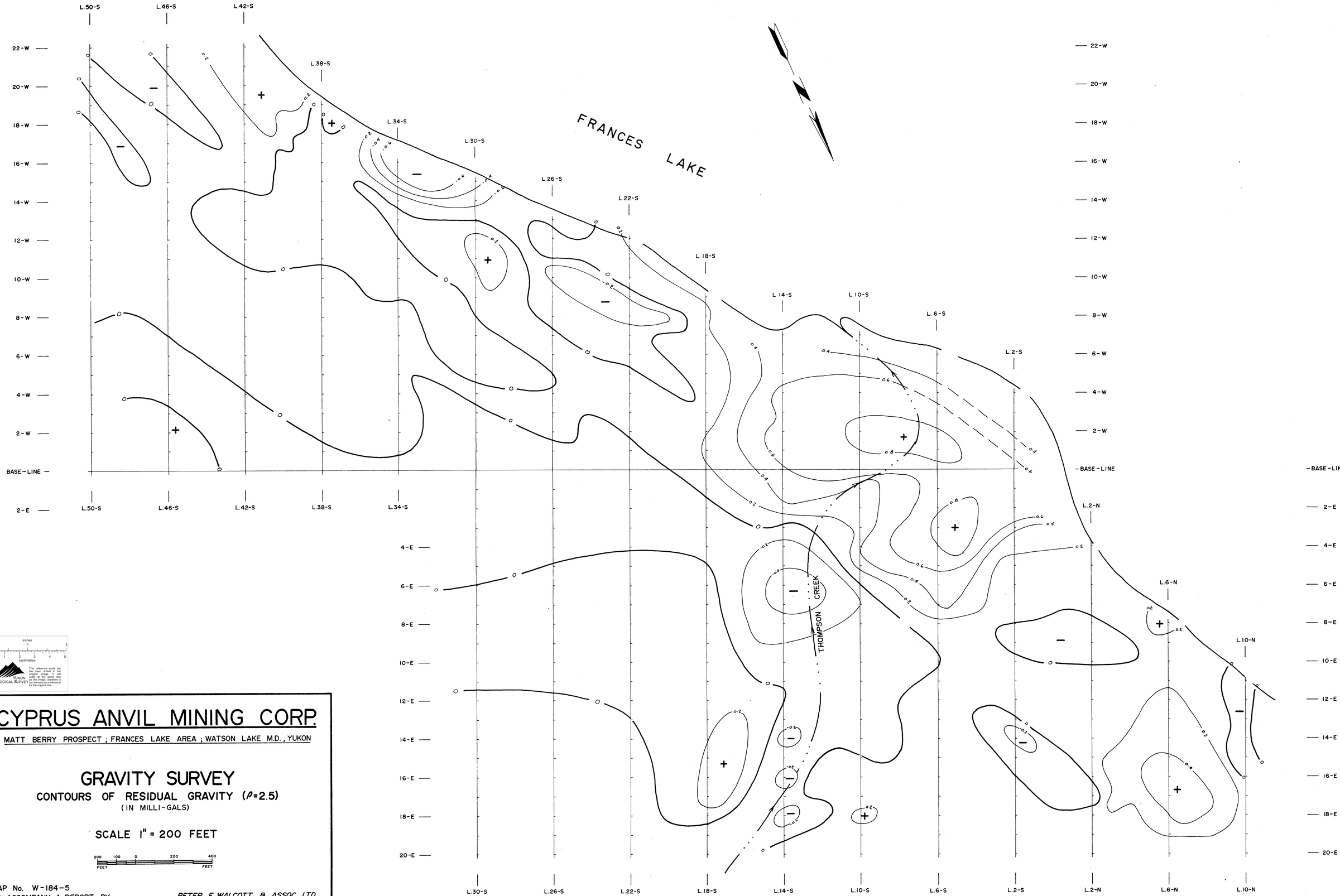

inches
centimetres

YUKON GEOLOGICAL SURVEY

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CYPRUS ANVIL MINING CORP.

MATT BERRY PROSPECT ; FRANCES LAKE AREA ; WATSON LAKE M.D., YUKON

GRAVITY SURVEY

CONTOURS OF RESIDUAL GRAVITY (ρ=2.5)

(IN MILLI-GALS)

SCALE 1" = 200 FEET

200 100 0 200 400
FEET FEET

MAP No. W-184-5
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