

GOVERNMENT REPORT #41-7-4-68-2

TROUT LAKE AREA MGC-70-3

NORTHWEST TERRITORIES

A REPORT OF THE
MAGNETOMETER SURVEY
OF THE



TROUT LAKE AREA, MGC-70-3

NORTHWEST TERRITORIES

LONGITUDE 119° 30' - 120° 45'

LATITUDE 60° 00' - 60° 40'

FOR THE FORMER
SINCLAIR CANADA OIL COMPANY
EXPLORATION LICENSE NO. 1120
OVER

PERMIT LEASE NO. P-3565, DATED OCTOBER 10, 1963

FLOWN BY

SINCLAIR OIL AND GAS COMPANY, RESEARCH DEPARTMENT

IN MAY OF 1968

GOV # 41-7-4-68-2

AUTHOR

D. T. Wilkinson



REPORT DATE

April 1, 1970

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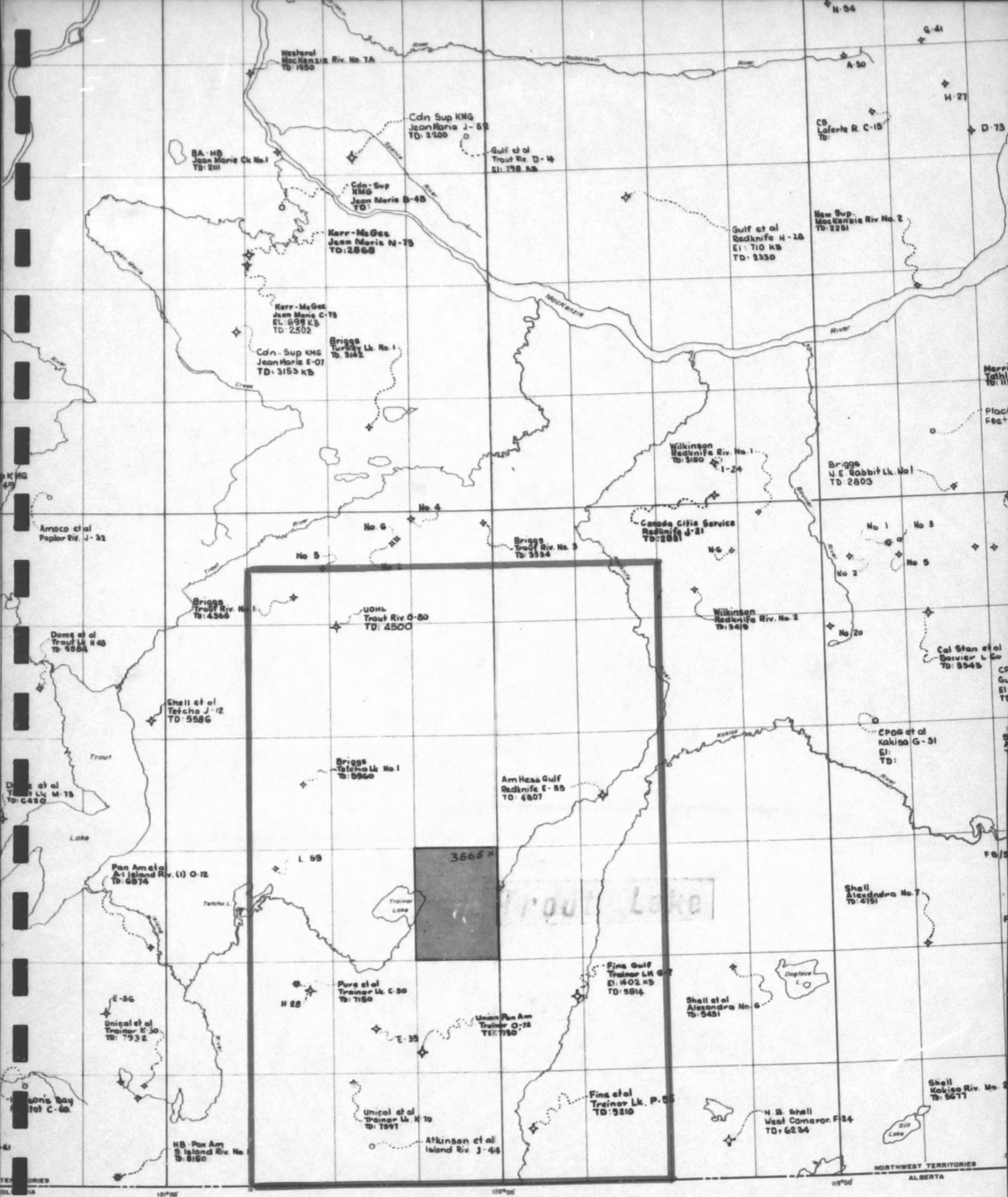
Location Map

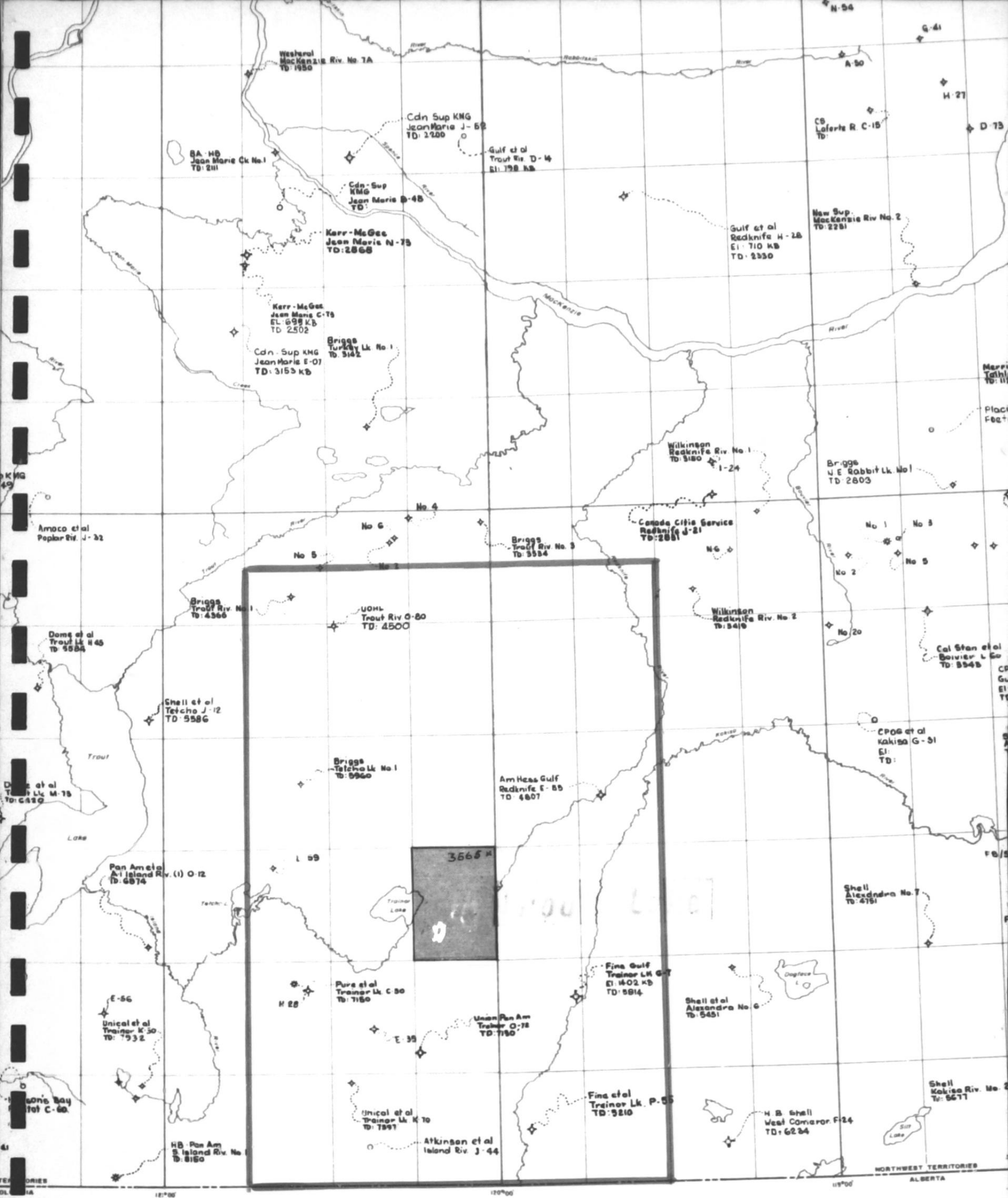
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FOREWORD

SINCLAIR OIL CORPORATION, on its own behalf, carried out an airborne Helium Magnetometer survey in the Trout Lake Area of the Northwest Territories.

The survey was flown between June 1 and September 1, 1968.

The party was headed by Dr. D. Quigley.

The technical supervision was by the Research Department of SINCLAIR OIL AND GAS COMPANY.

This report is to present the statistical data.

A B S T R A C T

A total of 4,500 miles were flown in the survey.

All the lines except one were flown in a southwest-northeast direction with an approximate spacing of one mile. One line was flown from the southeast to the northwest corner of the prospect.

Two Sinclair Helium magnetometers were used for the survey. One was located on the ground, and the second installed in the aircraft.

Sinclair's Turbo prop Otter was used to fly the survey.

Lorac equipment was used for positioning. Two ground stations were used in conjunction with a set of equipment mounted in the aircraft.

House trailers were supplied for the operators at the Lorac ground stations.

I GENERAL INFORMATION

1.1 Project Location

The project located in the Northwest Territories to the east of Trout Lake. Its southern boundary is along the northern border of Alberta and British Columbia.

1.2 Program

The program comprised 63 lines representing 4,500 miles of survey over and around a permit held by SINCLAIR CANADA OIL COMPANY.

1.3 Personnel

All personnel were supplied by SINCLAIR OIL COMPANY.

Following is a list of the personnel used:

AIR

1 Pilot

1 Co-Pilot

1 Photographer

1 Magnetometer operator

GROUND

2 Lorac operators

4 Helpers

1 Cook

1.4 Equipment

Following is a list of the equipment used:

1 Turbo Prop Otter Aircraft

2 Sinclair Helium magnetometers

2 Sets Lorac positioning equipment

2 House trailers

1 Camp

I GENERAL INFORMATION

1.1 Project Location

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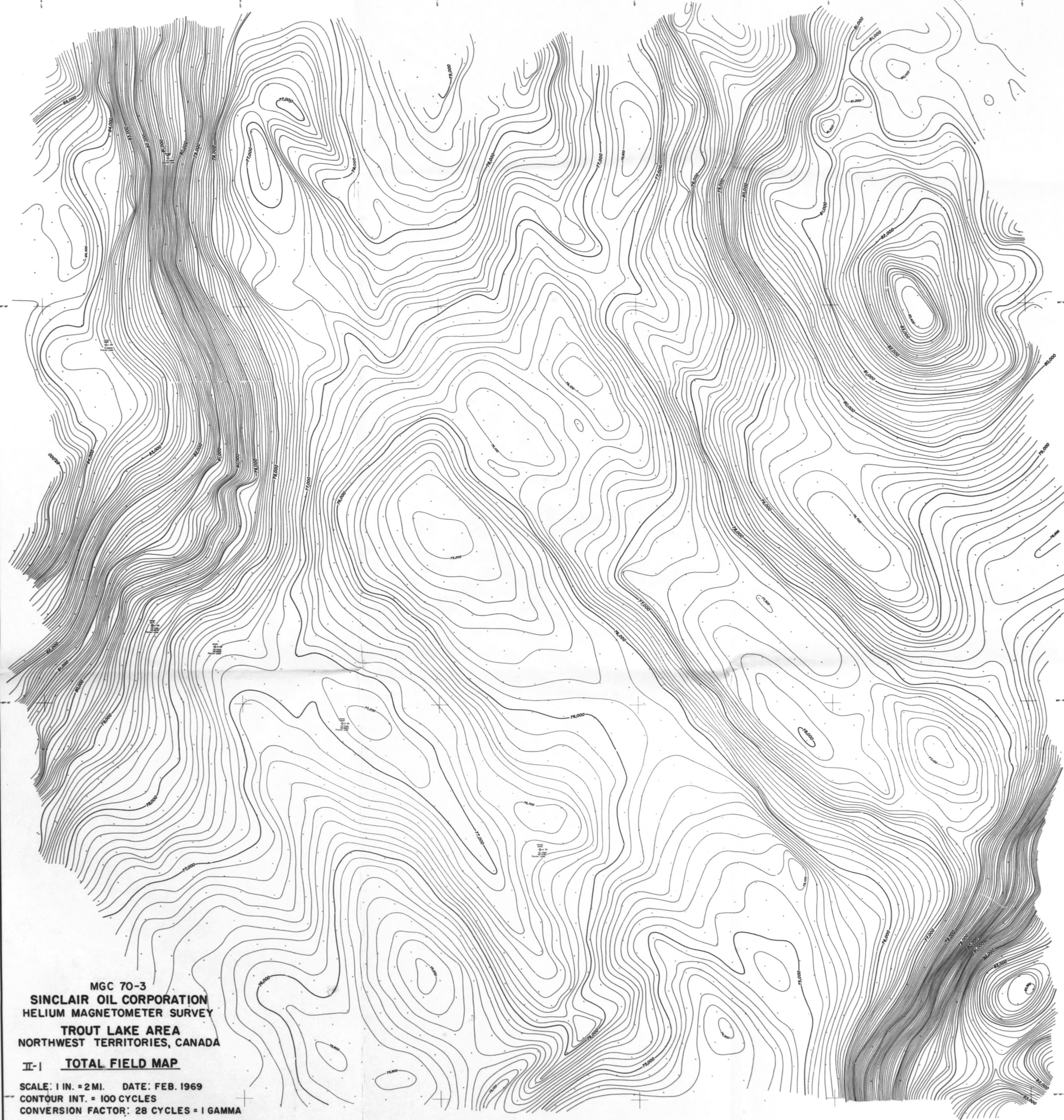
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Following is a list of the equipment used:

1 Turbo Prop Otter Aircraft
2 Sinclair Helium magnetometers
2 Sets Lorac positioning equipment
2 House trailers
1 Camp

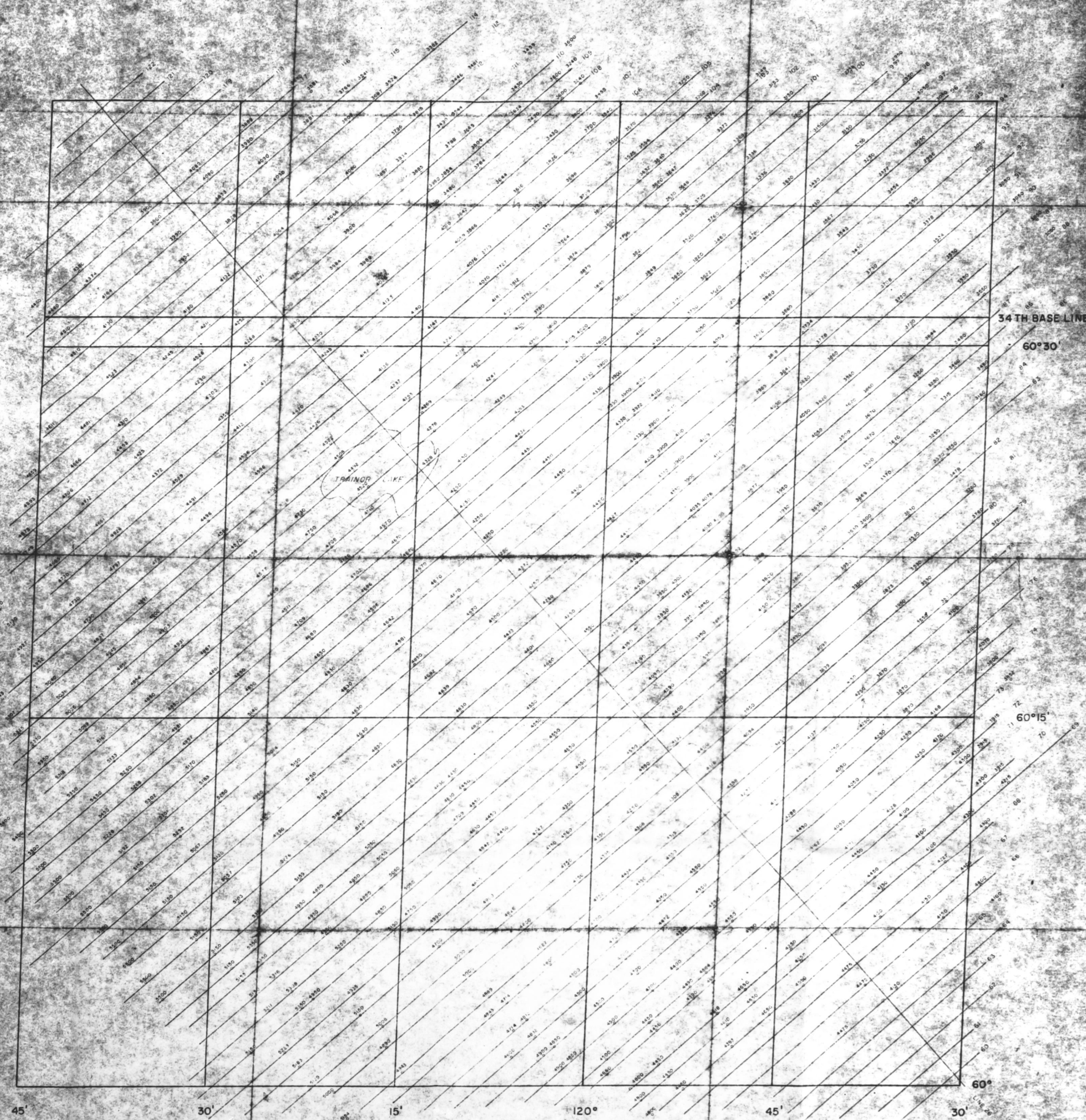
III Results

No interpretation report was written for this project. The object of the survey was the testing of new equipment while gaining information on the magnetic characteristics in this area. All pertinent data gathered during this survey and interpreted from this survey are presented on the enclosed maps.



MGC 70-3
SINCLAIR OIL CORPORATION
HELIUM MAGNETOMETER SURVEY
TROUT LAKE AREA
NORTHWEST TERRITORIES, CANADA
II-2 3RD ORDER RESIDUAL

SCALE: 1 IN. = 2 MI. DATE: FEB. 1969
CONTOUR INT. = 100 CYCLES
CONVERSION FACTOR: 28 CYCLES = 1 GAMMA

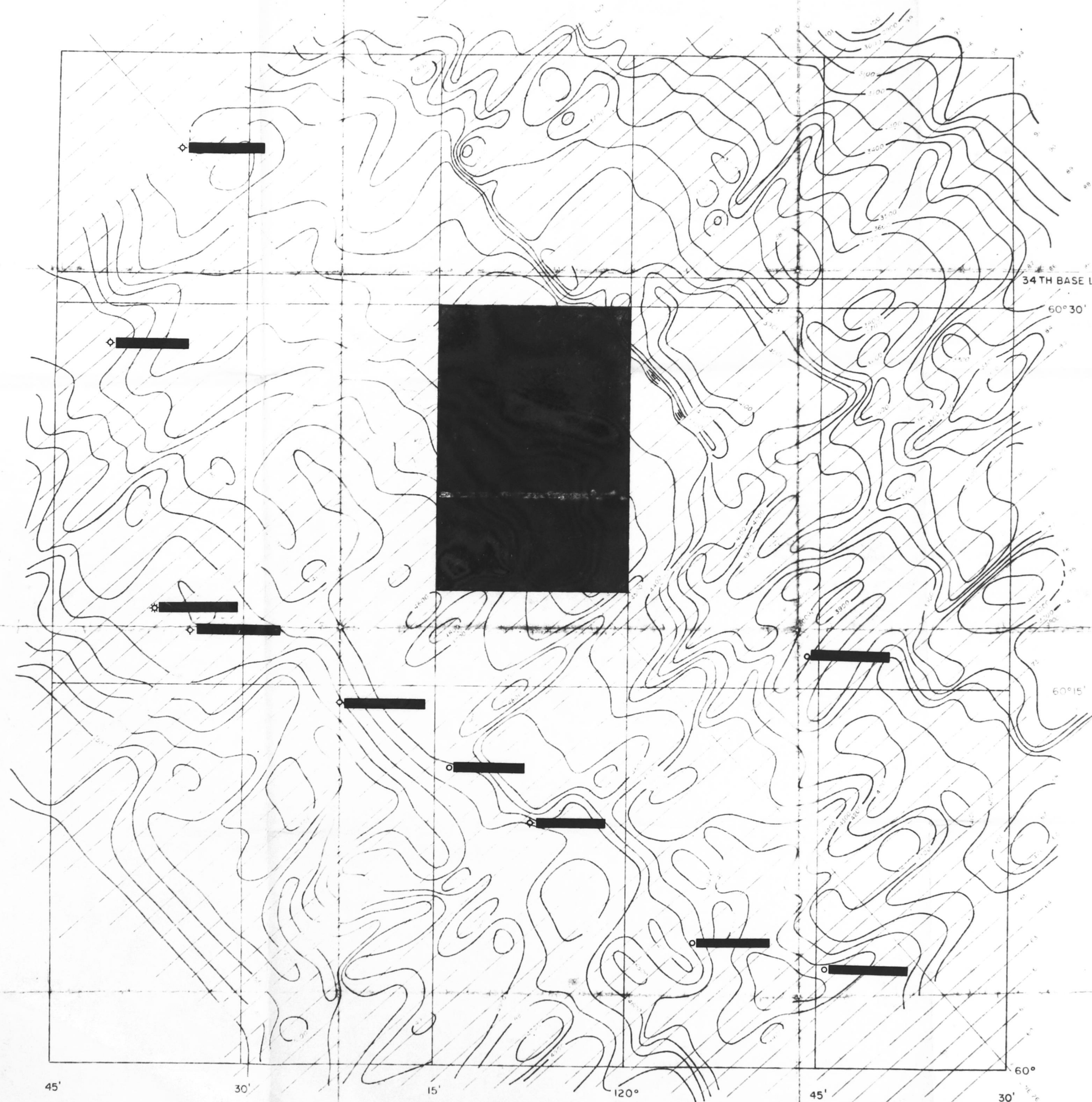


TRAINOR LAKE AREA

SCALE 1 IN = 2 MILES
VALUES (IN FEET) OF BASEMENT DEPTHS (B.S.L.) AS
DETERMINED IN THE PROFILE ANALYSIS

II-3 BASEMENT DEPTH MAP

POOR
COPY



TRAINOR LAKE AREA

SCALE 1 IN = 2 MILES
STRUCTURAL MAP OF THE PRECAMBRIAN BASEMENT
CONTOURS ARE AT 100 FEET INTERVALS, AND
INDICATE DEPTH B.S.L.

II-4 STRUCTURAL MAP
PRECAMBRIAN BASEMENT

