

- 9 3 8 8 - P A G E -

Report on Northwest Territories Permit 2472, 2842 to
2843, 2844, 2845, 2846, 2847, 2848, 2849

Geophysical Survey Conducted by

The Imperial owned and operated seismic crew from
September 3 to September 25, 1960 (Party 56).

The Swiss Exploration crew under contract to Imperial
from January 24 to February 25, 1960 (Party 30).



- TABLE OF CONTENTS -

**Report on Northwest Territories Permits 2472, 2842 to
2848, 2862, 2863, 2923 to 2926**

Providence Area

Map References: 85 E, 85 F & 95 H

1. Introduction	Page 1
2. Seismograph Operations - Party 56	Page 2
3. Seismograph Operations - Party 30	Page 3
4. 6 Maps in accompanying envelope:	
(a) 3 shot hole locations maps	
(b) 3 contour maps - Middle Devonian Carbonate - <i>Removed</i>	

- PROGRESS REPORT -

INTRODUCTION

The terrain in the general Ft. Providence area is mainly flat with patches of muskeg and small lakes. Road cuts are quite rough due to large boulders on the surface. The area is covered with scrub brush, Jackpine and Poplar. Heavier timber was encountered as the crews proceeded west in the hills and along the Rabbitkin River.

SEISMOGRAPH OPERATIONS - PARTY 56

On September 1, 1959, a conventional truck mounted seismic crew owned and operated by Imperial Oil Limited, referred to as Party 56, using standard technique, moved into the general Ft. Providence area.

Shooting commenced along the new highway running northeast from Ft. Providence to Yellowknife. Drilling was rough at the south near the river where boulders and gravel were encountered, changing to boulders and clay with better drilling as the crew moved north. Shale depth varied from 120 feet at the south to as shallow as 25 feet further north.

The weather was predominantly wet during the first week, however the soil did not get too sloppy and soft so as to hamper the crew's operations.

Shooting continued along the highway northeast from Ft. Providence. Drilling was again a problem with hard boulders and gravel being encountered. The rains ended during the second week. Several hours of drilling time was lost winching on and off locations, but it was seldom serious.

Shooting was completed to Mile 31½ on September 18, 1959. Drilling remained much the same except that shale was no longer encountered. Many ditch bridges were required across muskeg areas. A charter trip was made by the ferry September 18 and one drill was moved across the river; the remainder of the vehicles were moved the next day by the scheduled ferry. A boat and motor were rented to move the personnel back and forth across the river between the camp and work site.

Three miles of line were shot from Mile 78½, southward along the highway. Drilling again slowed operations being a bigger problem than on the south side of the river. Locations on much of the line were very wet and soft. A very hard shale was found around 20 feet making drill penetration very slow.

During the last week of operations shooting was completed to Mile 66 on the highway, south of the river. Record quality remained quite good although frequency varied greatly.

Drilling operations were again slowed. Shale was logged at about 20 feet at the north end of the line, coming up to

SEISMOGRAPH OPERATIONS (Cont'd)

12 feet in the middle and was not at all present at the 50 foot depth at the south end of the line. This shale was very hard to drill and was associated with some extremely hard layers above. At the south end on the line boulders and gravel were encountered. To speed up coverage, hole depths were reduced to 40 feet then to 30 feet in the middle of the line as 30 feet seemed optimum shooting depth.

The crew completed their assignment on September 25, 1959 and returned to Dawson Creek, B.C.

SEISMOGRAPH OPERATIONS - PARTY 30

On January 14, 1960 a conventional truck mounted seismic crew, under contract to Imperial Oil Limited, referred to as Party 30, and using standard technique, commenced seismic operations in the area of 61°50' north latitude and 118°00' west longitude.

The terrain was relatively flat and characterized by muskeg and small lakes. Extremely rough drilling was encountered at first because of boulders all the way down to a depth of 50 feet. Shale was later encountered and drilling improved somewhat. No usable records were produced during the week because of instrument breakdowns.

From January 17 to January 23, 1960, the crew worked in Latitude 61°50' and Longitude 118°00' to 118°45'. Drilling remained very hard all week with hard shale and sandstone encountered. Some sand and gravel was found near the surface. Record quality obtained this week was fair to good.

The week of January 24 to January 30, 1960 was extremely cold with recorded temperatures of 60° below zero. In spite of this all equipment continued to operate and there were no serious breakdowns. Water became a problem and long hauls were necessary. Generally the record quality was good all week.

The crew worked in Latitude 61°50' Longitude 119°15' to 120°15' from January 31 to February 6, 1960. Drilling improved considerably and was mostly in clay with very few boulders. Record quality during the week was fair to good with some very poor records being obtained through the low lying areas.

Party 30 worked westward between longitude 120°45' and 121°00' from February 14 to February 20, 1960 and were in the area of Latitude 61°40' and Longitude 120°00' to 120°30' from February 21 to February 25, 1960. The crew completed their assignment on February 25, 1960.

August 16, 1960.

G. B. Darling



85-F FALAISE L. Seismic SURFACE ELEVATIONS

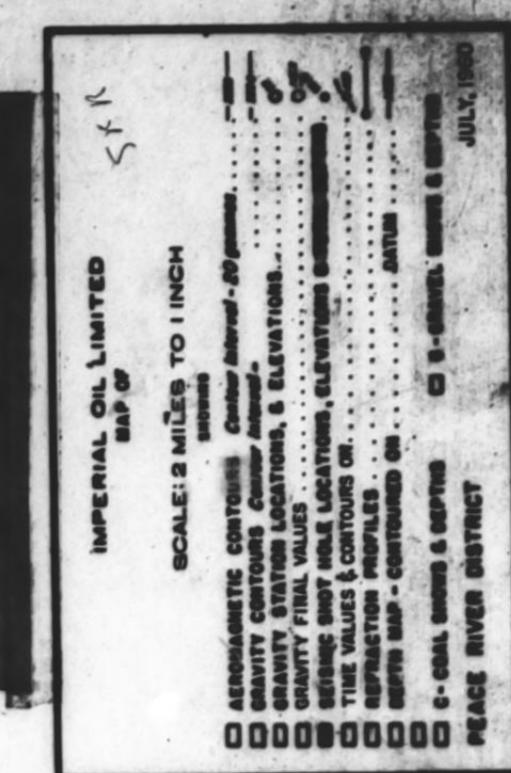
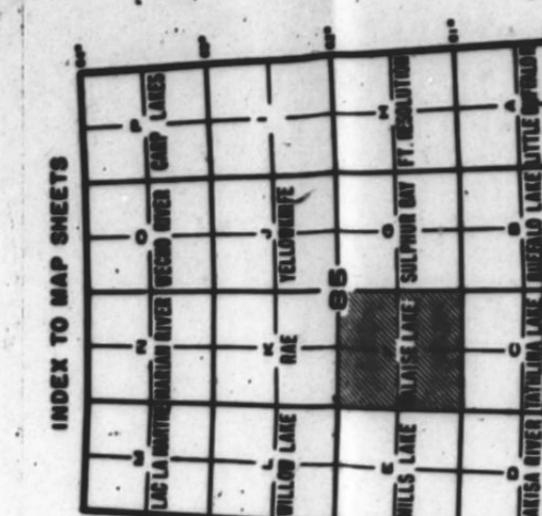
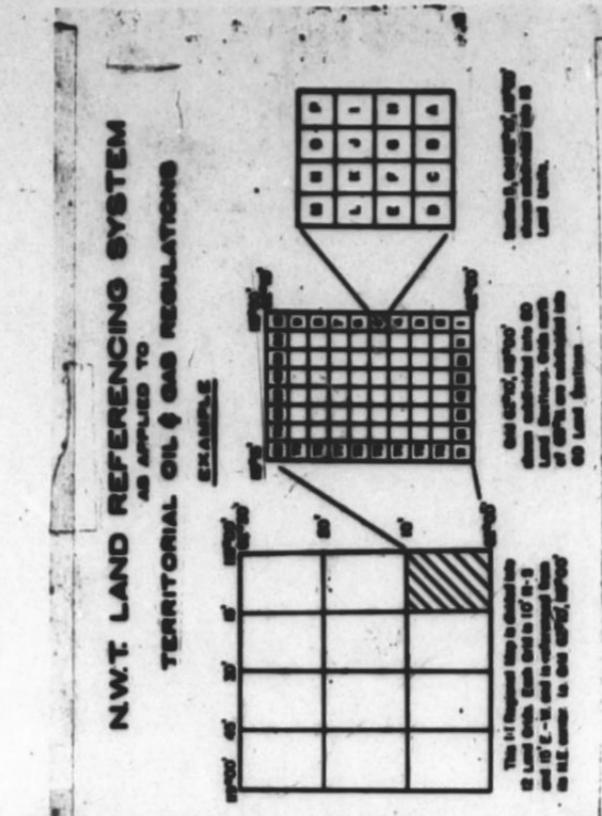
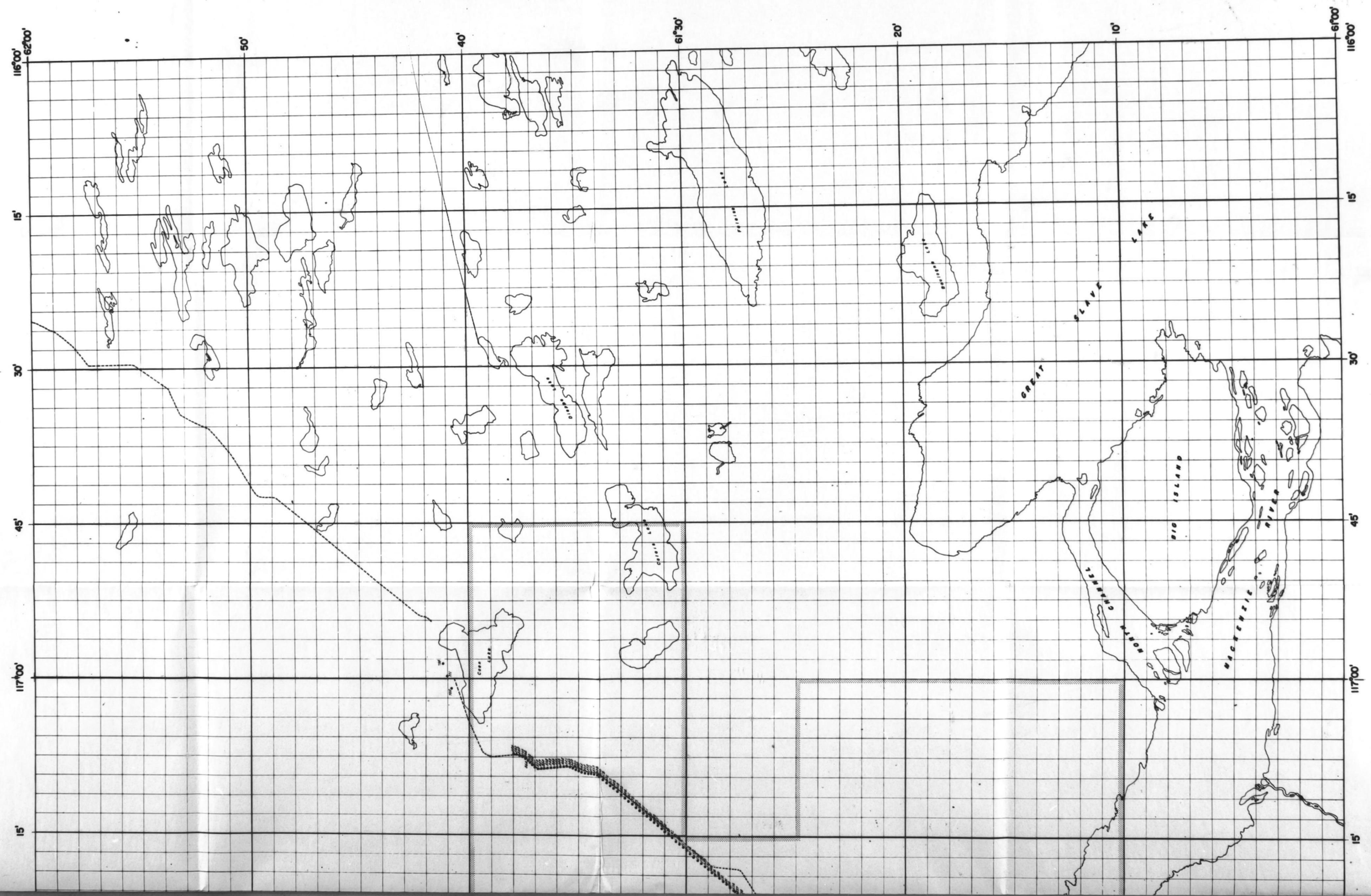
85-F FALAISE L. Seismic SURFACE ELEVATIONS



30 x

West Canadian Graphic Industries Ltd.

MURKIN, L. S. - 1994 - *Journal of American Studies* 28(1): 1-68



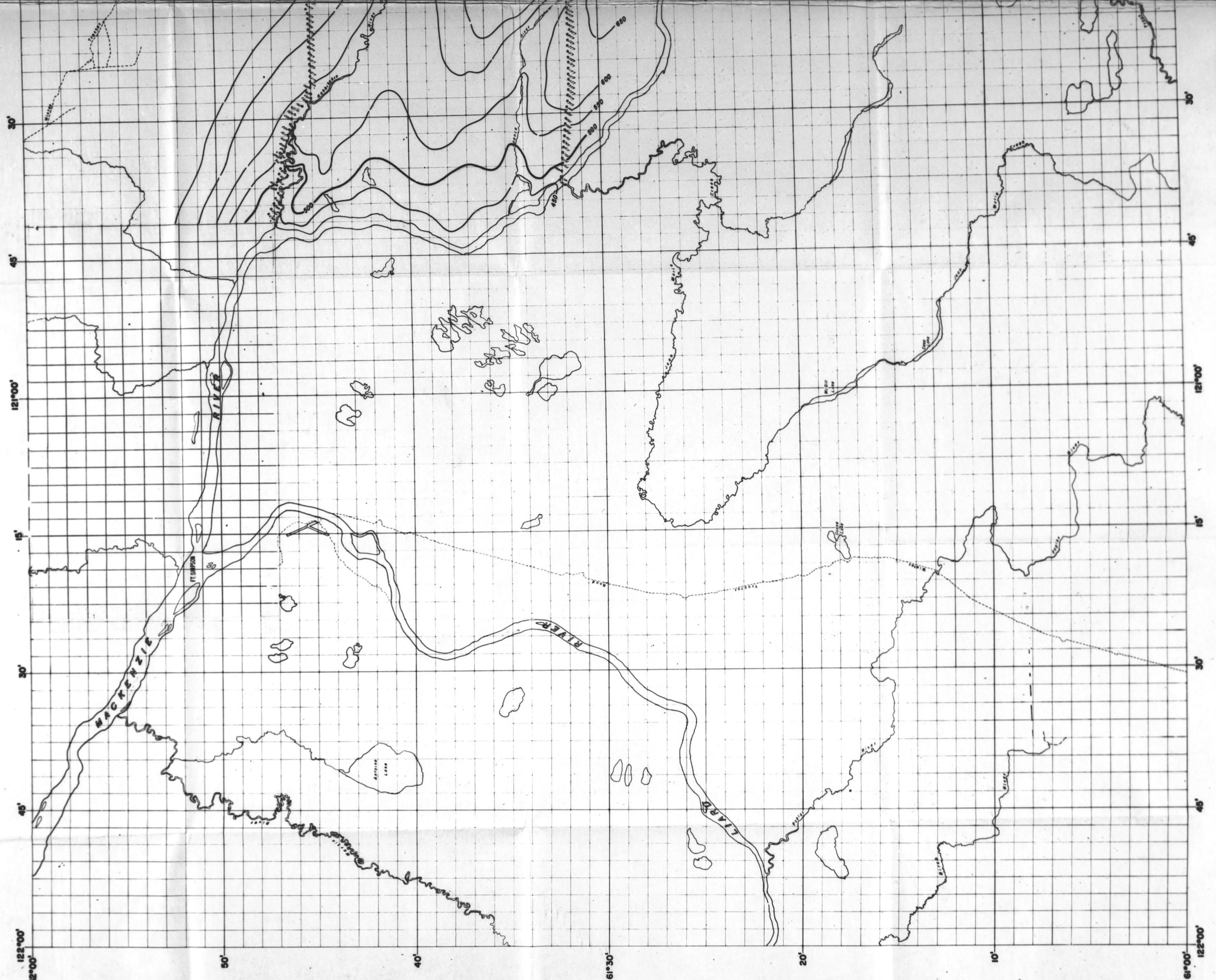
85-F-FALAISE LAKE

100

1

30x

West Canadian Graphic Industries

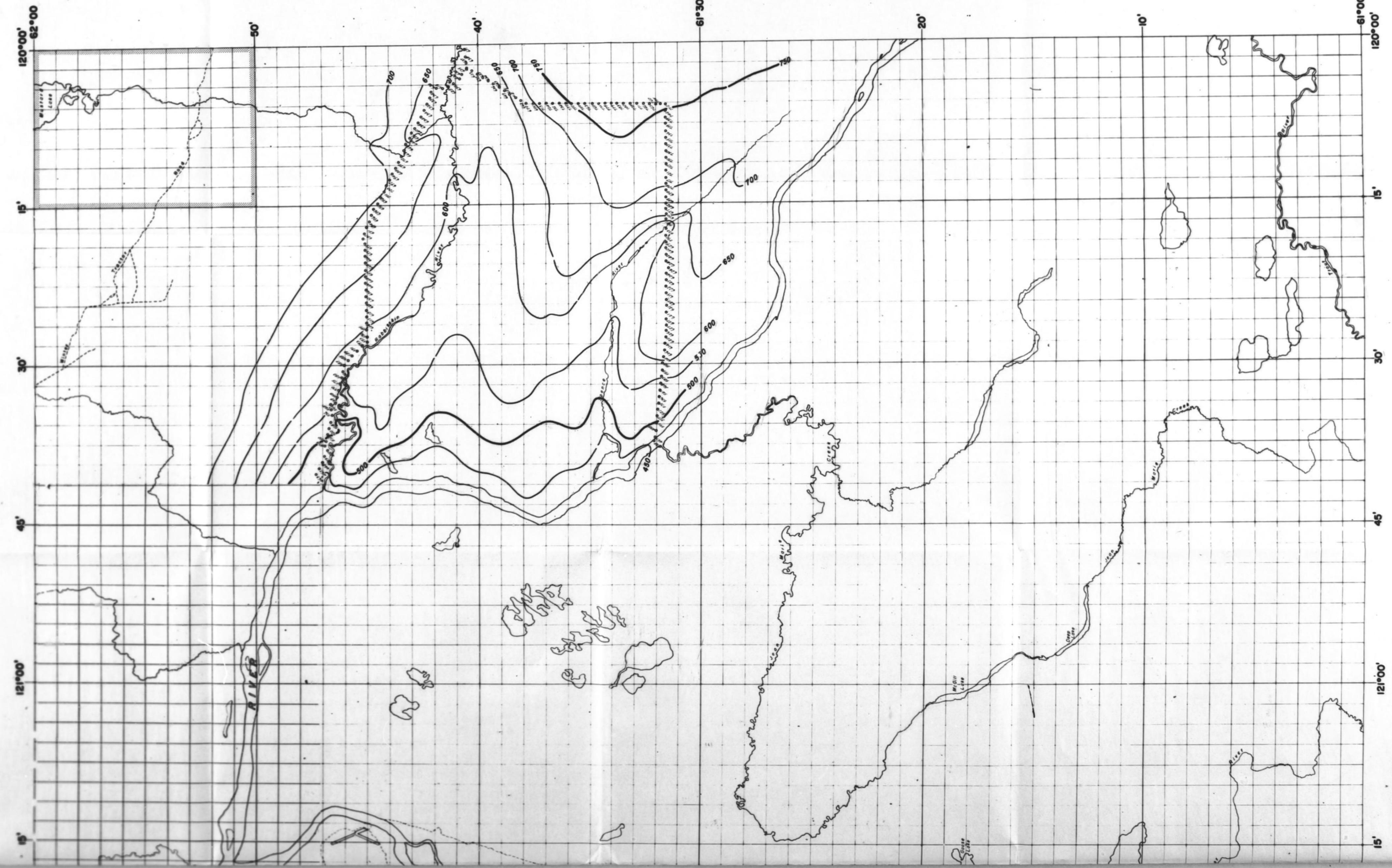


2:1 JEAN MARIE GEODISC - SURFACE ELEVATIONS

30x

West Canadian Graphic Industries Ltd.

**IMPERIAL OIL LIMITED
EXPLORATION DEPARTMENT PEACE RIVER DISTRICT
SURFACE ELEVATIONS**



INDEX TO MAP SHEETS

**IMPERIAL OIL LIMITED
MAP OF**

SCALE: 2 MILES TO 1 INCH

LEGEND

AEROMAGNETIC CONTOURS - Center interval - 200
 GRAVITY CONTOURS - Center interval.
 GRAVITY STATION LOCATIONS & ELEVATIONS.
 GRAVITY FINAL VALUES
 SIGHTING SHOT HOLE LOCATIONS, ELEVATIONS
 TIME VALUES & CONTOURS OF
 REFRACTION PROFILES
 DEPTH MAP - CONTOURED ON
 C - COAL SHOOTS & DEPTHS
 G - GRAVEL SHOOTS & DEPTHS
PEACE RIVER DISTRICT

S.P.R.

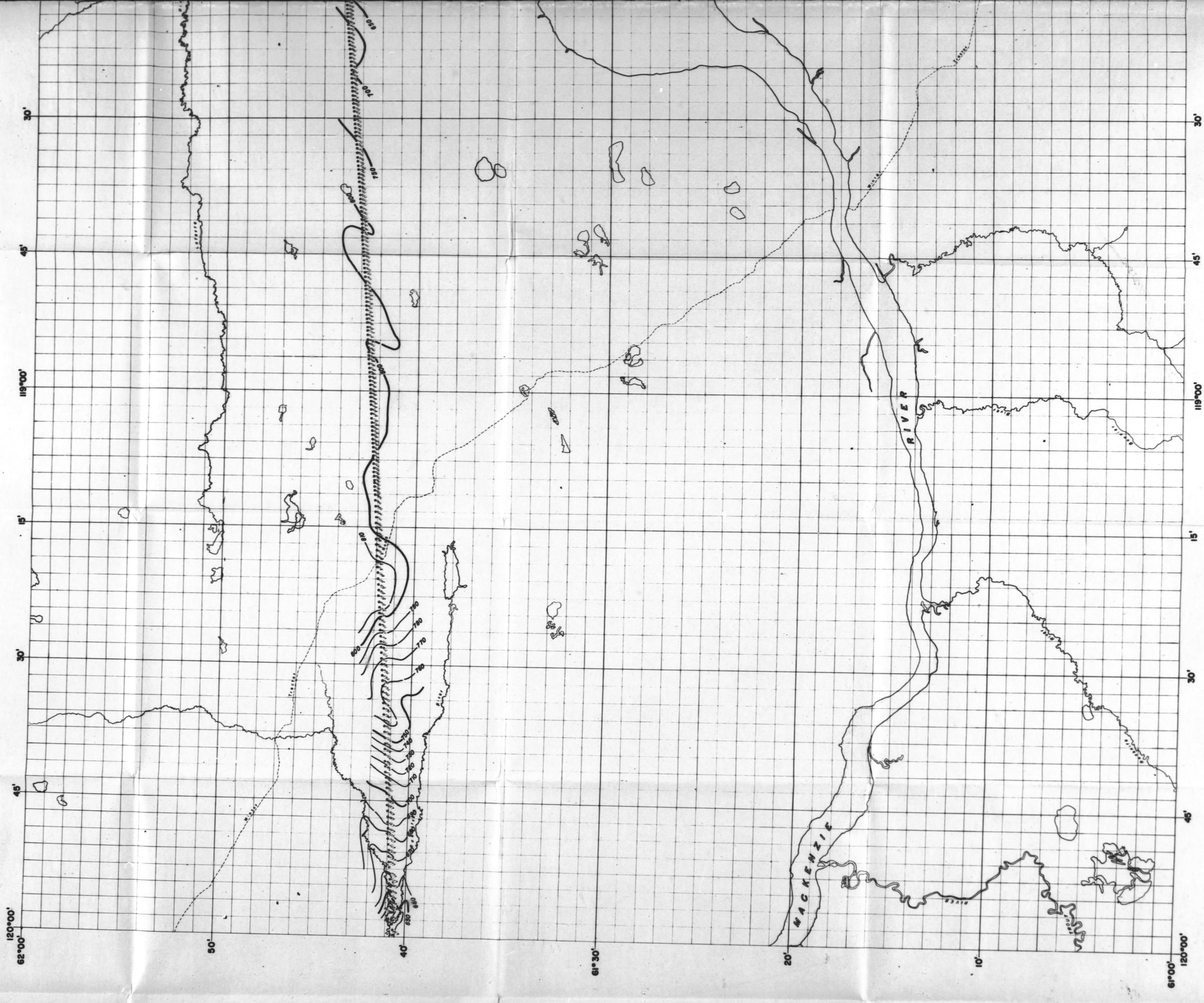
JULY, 1960

95H JEAN MARIE

Copy to whom, to, B. Darling
7-6-4-23.
CC
6349

A black and white photograph of a wooden ruler with markings every quarter inch. The numbers 6 through 35 are visible, with '6' on the left and '35' on the right. The ruler is positioned horizontally across the bottom of the frame.

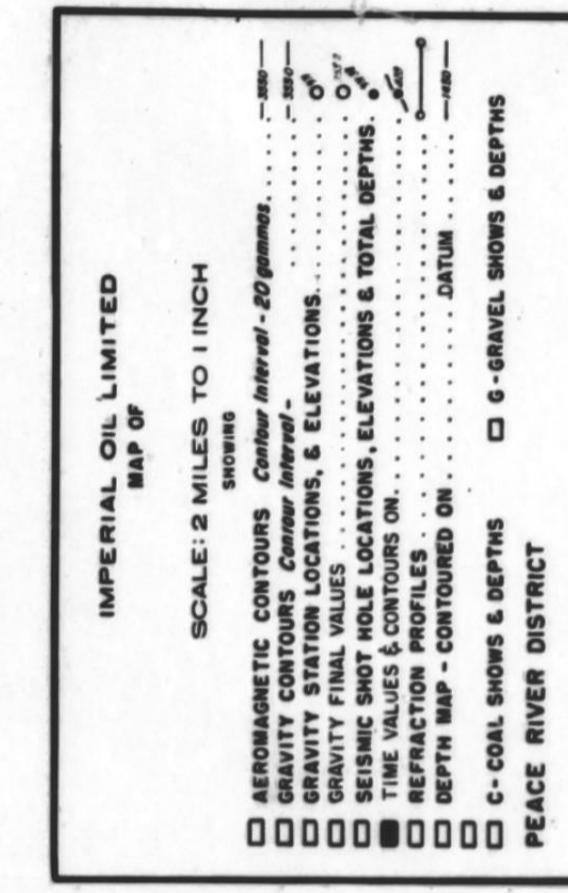
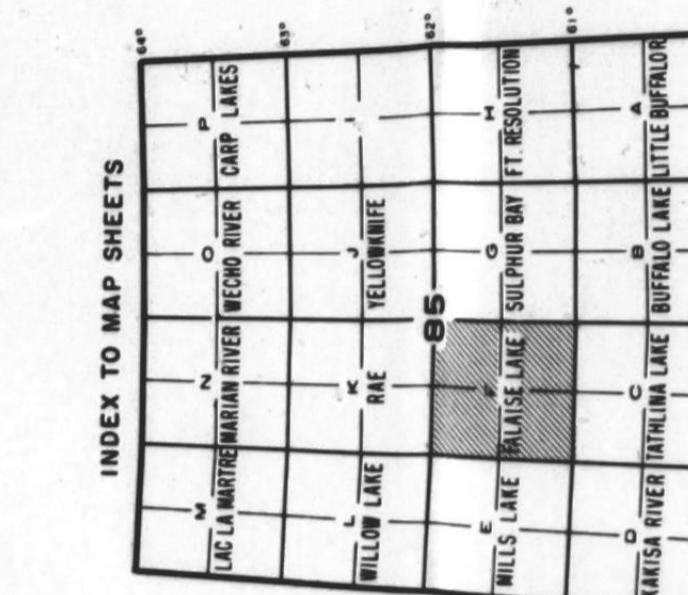
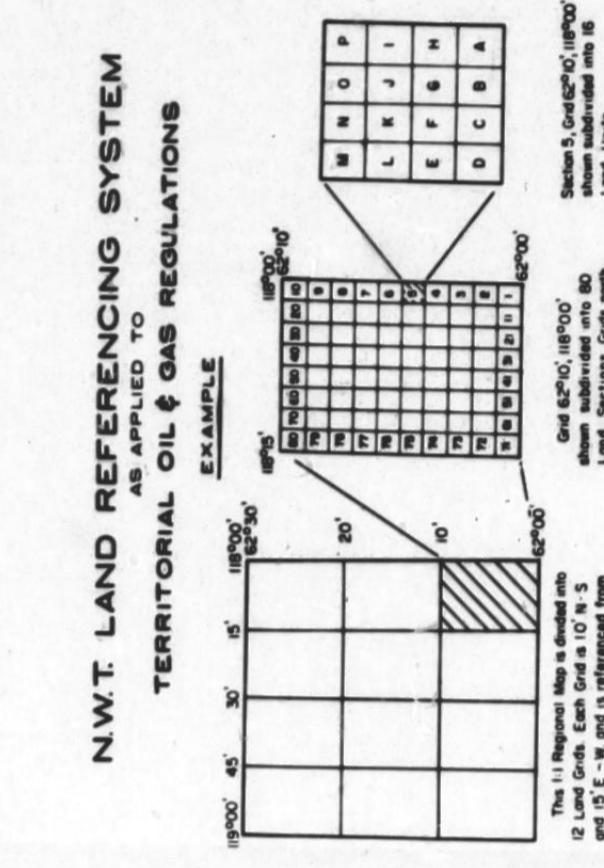
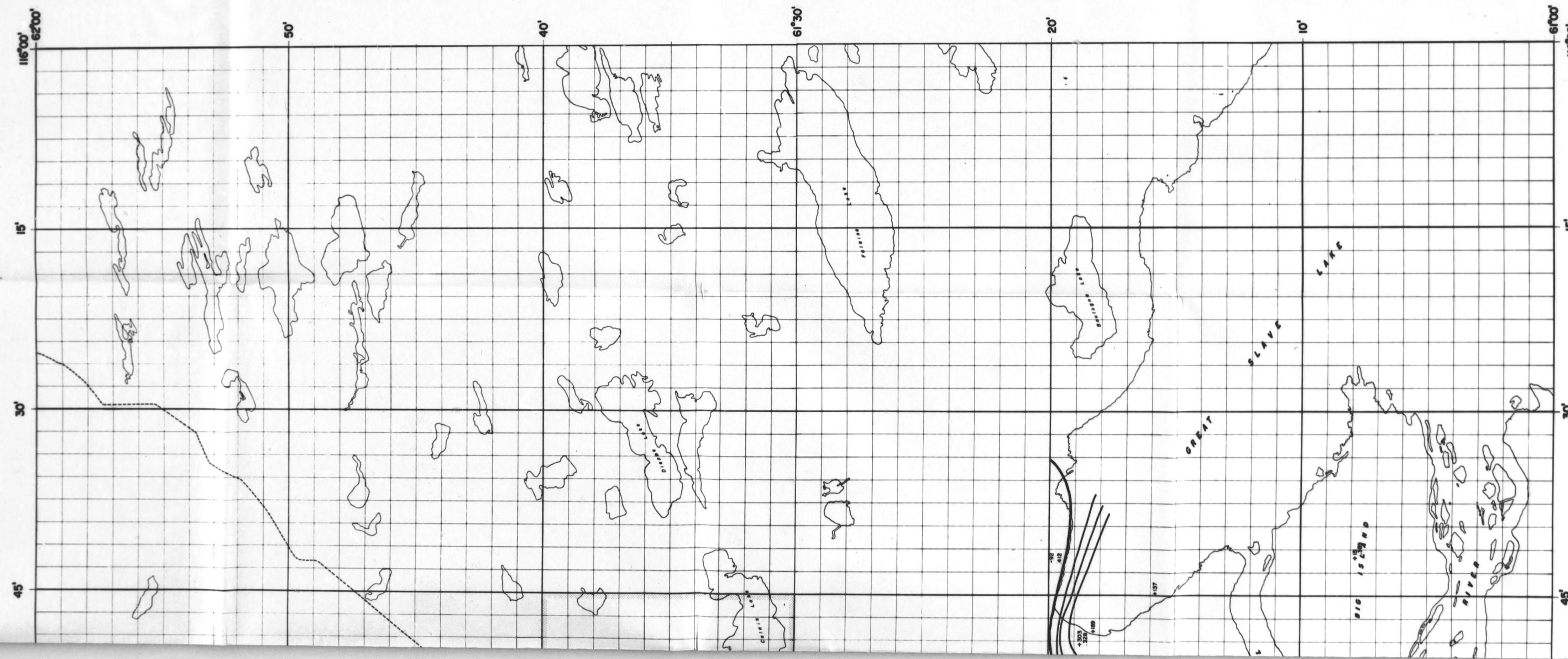
30 x





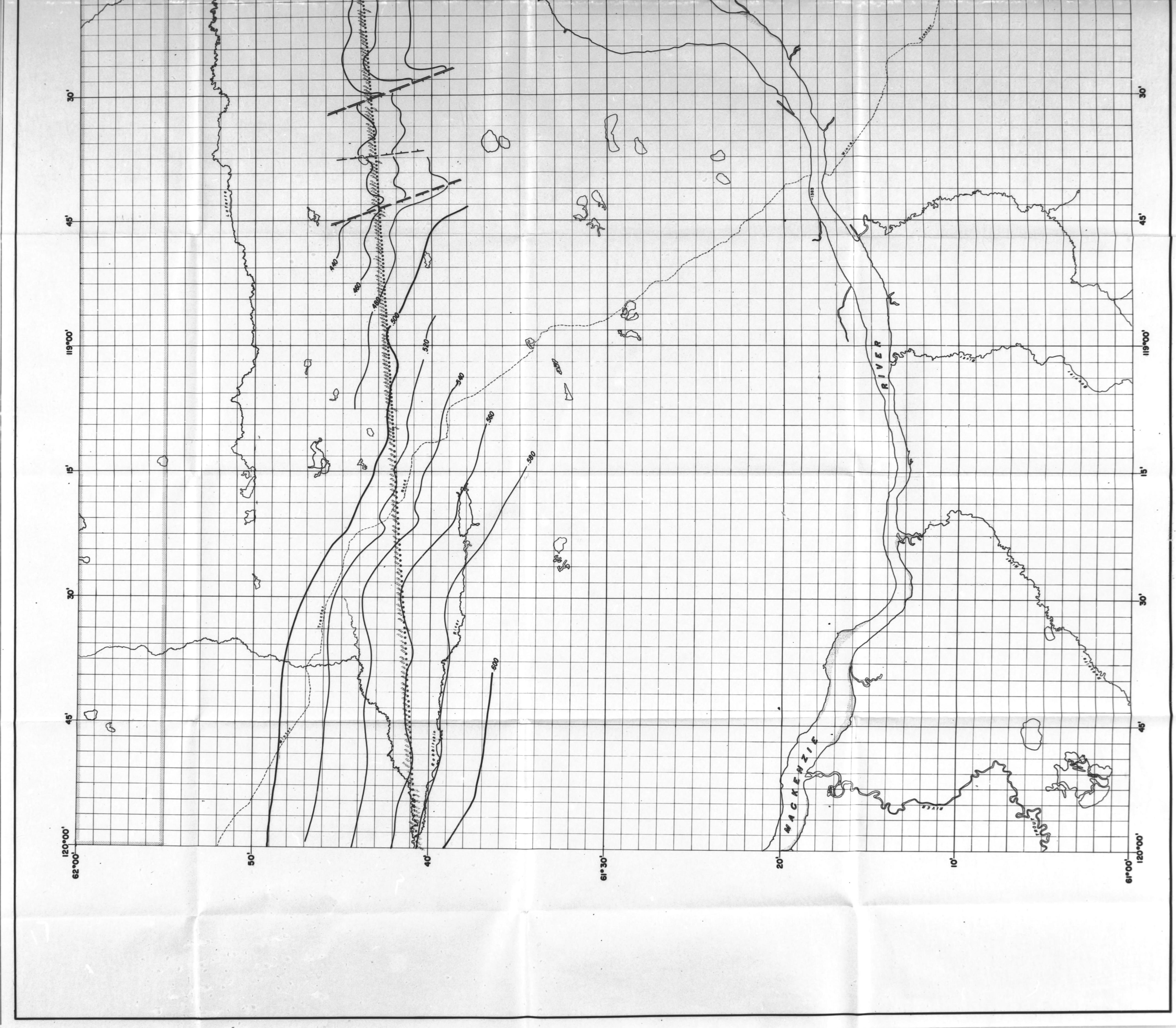
IMPERIAL OIL LIMITED

EXPLORATION DEPARTMENT PEACE RIVER DISTRICT

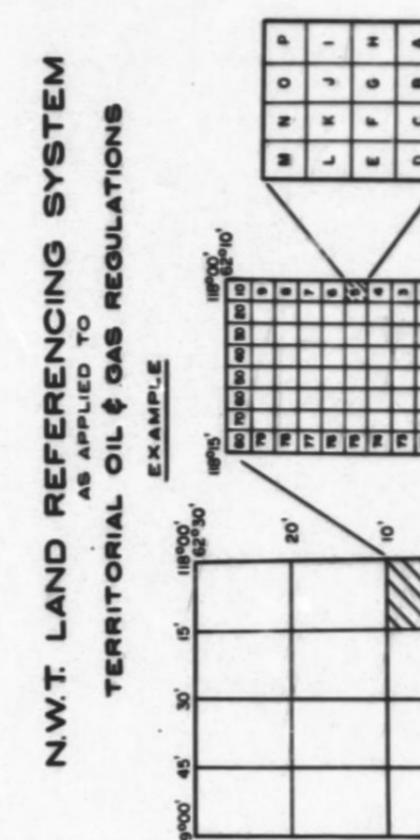
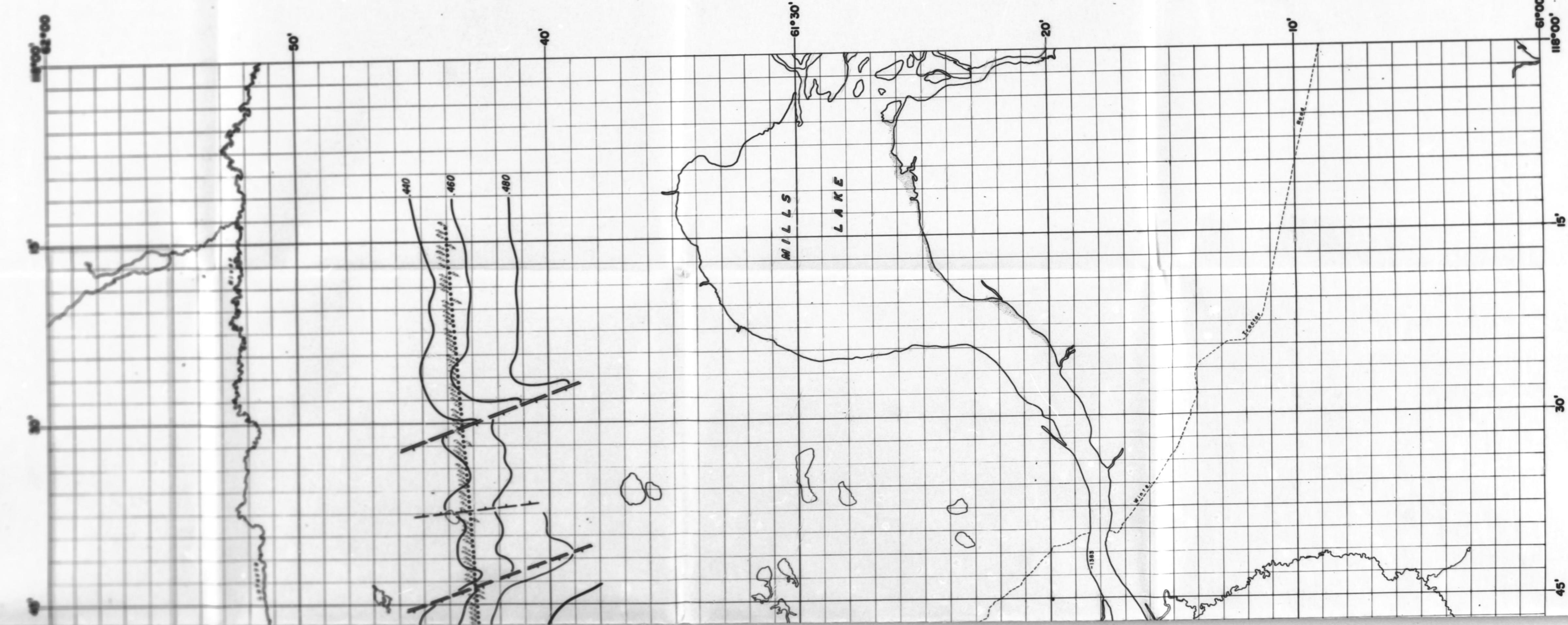


85-F-FALAISE LAKE

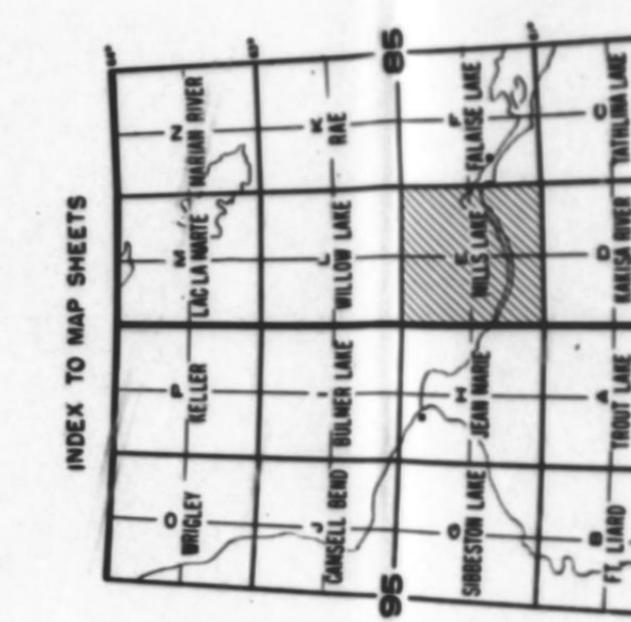
30x



SANTINI, G. L. UNITED



Grid 62°10', 118°00'
shown subdivided into 80
Land Sections. Grids north



200

SCALE: 2 MILES TO 1 INCH

SHOWS

- AEROMAGNETIC CONTOURS Contour interval - 20 μ gal
- GRAVITY CONTOURS Contour interval -
- GRAVITY STATION LOCATIONS, & ELEVATIONS
- GRAVITY FINAL VALUES
- SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- TIME VALUES & CONTOURS ON
- REFRACTION PROFILES
- DEPTH MAP - CONTOURED ON
- C- COAL SHOWS & DEPTHS
- G- GRAVEL SHOWS & DEPTHS

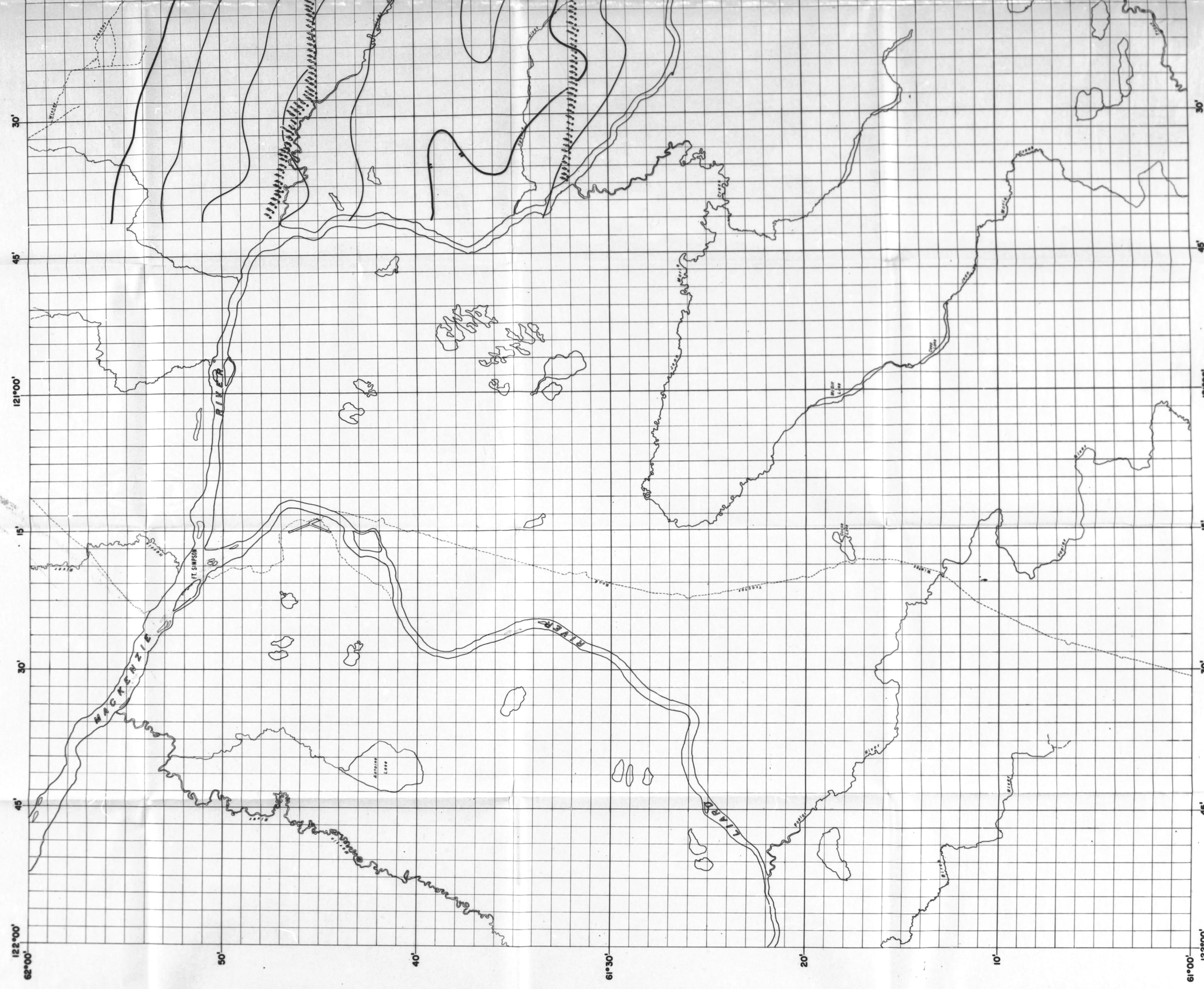
PEACE RIVER DISTRICT

6028

A metric ruler is shown horizontally, with markings every millimeter. The numbers are printed in a bold, black, sans-serif font. The ruler starts at 2 cm and ends at 35 cm. The numbers are: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35.

30 x

West Canadian Graphic Industries



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

30x

West Canadian Graphic Industries Ltd.

IMPERIAL OIL LIMITED
EXPLORATION DEPARTMENT PEACE RIVER DISTRICT

