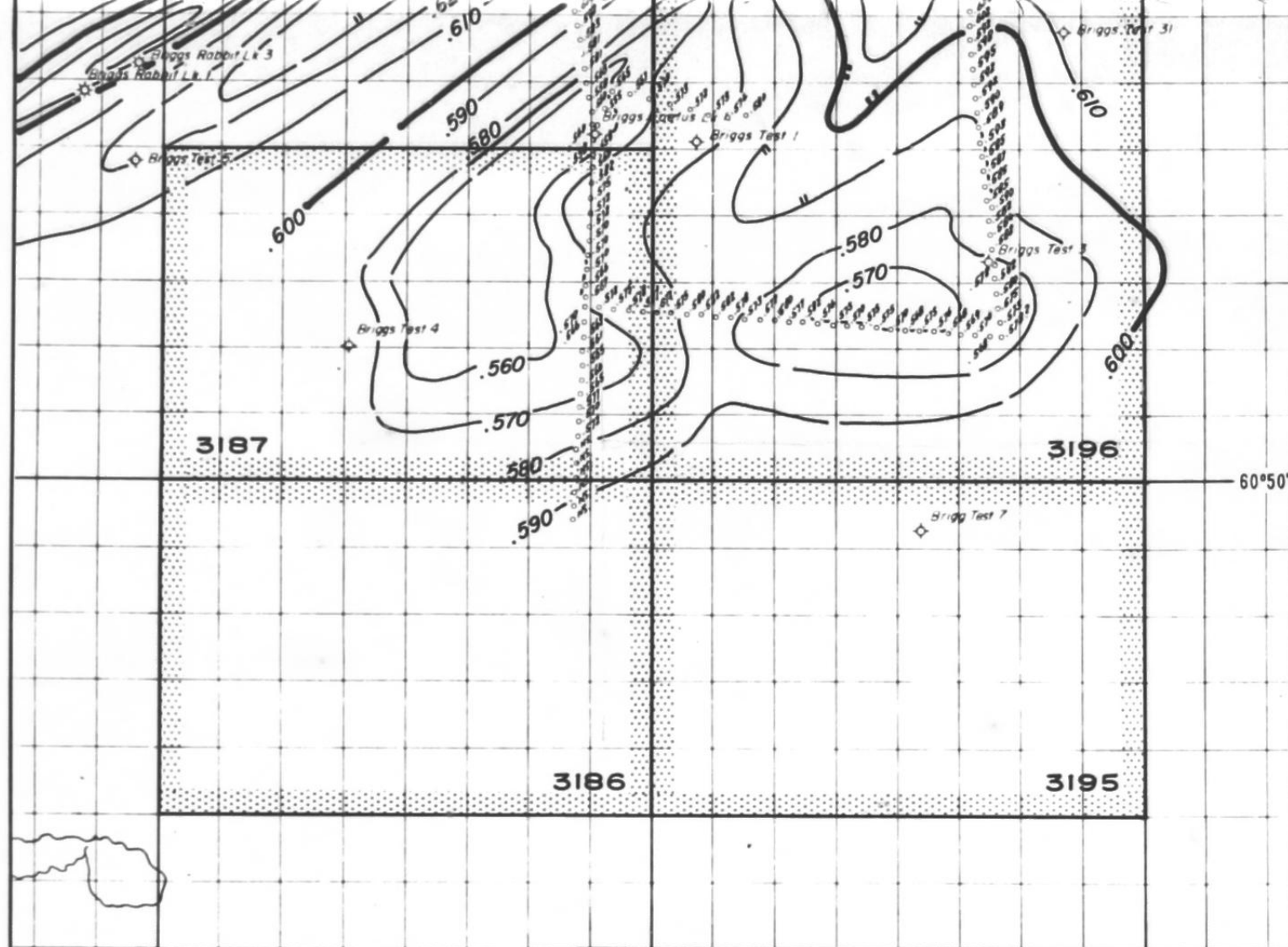


IMPERIAL OIL LIMITED

MAP OF

1 of



IMPERIAL OIL LIMITED
 MAP OF
 P.&N.G. PERMITS 3186, 3187, 3195 & 3196
 SCALE 2 MILES TO 1 INCH

SHOWING

- ☐ SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- ☒ TIME MAP - MIDDLE DEVONIAN CARBONATE DATUM - 1500' & 9000 FEET / SEC.
- ☐ C - COAL SHOWS ☐ G - GRAVEL SHOWS

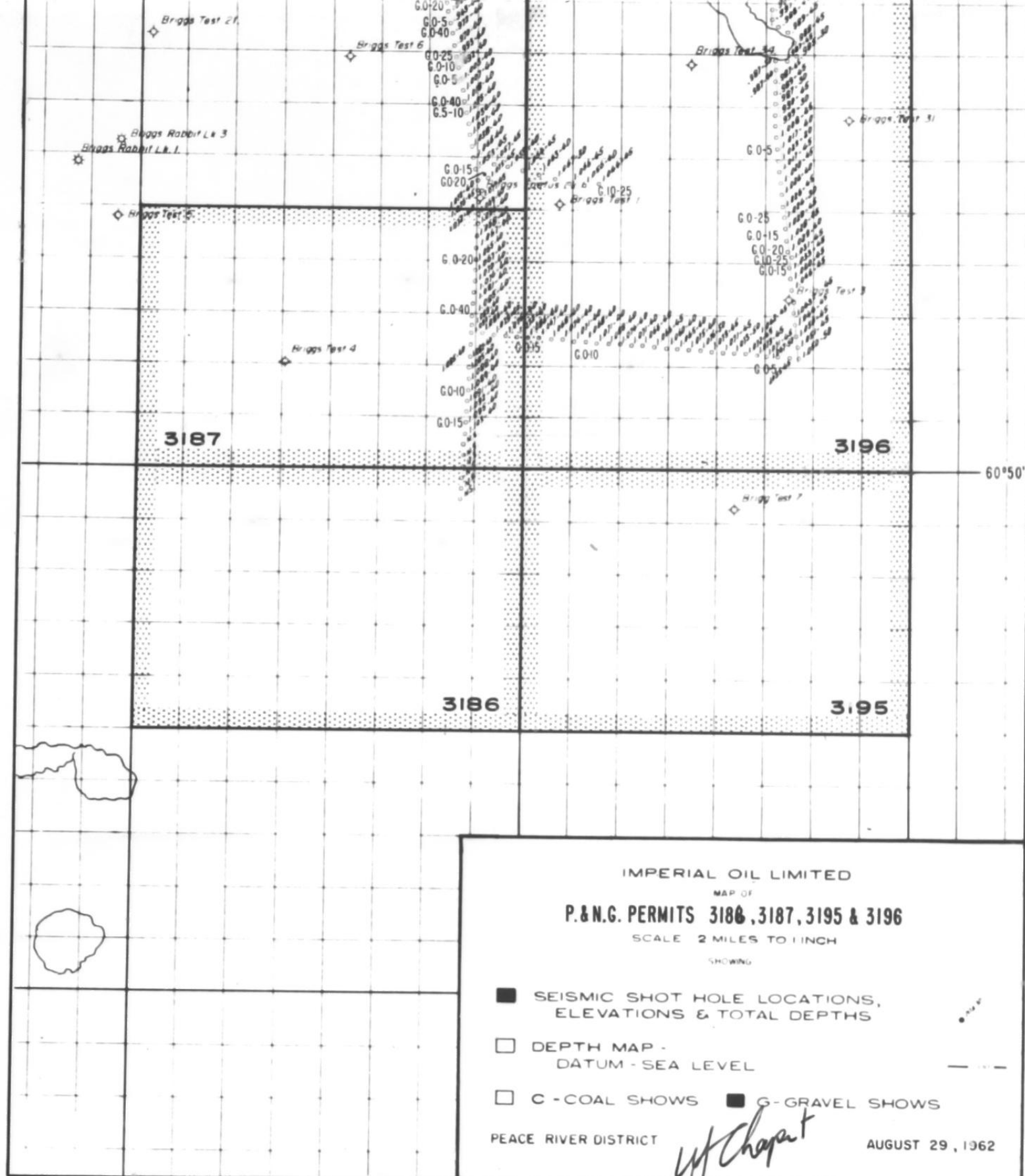
PEACE RIVER DISTRICT

AUGUST 29, 1962

W. J. Chapin

Hand - Aug 29/62 - B.K.

292



IMPERIAL OIL LIMITED

GEOLOGICAL DEPARTMENT

Report on Northwest Territories Permits 3186, 3187, 3195 & 3196Rabbit Lake AreaFor Period February 23, 1962 to February 23, 1963.Enclosures One Shot Point Map - Locations, Elevations, DepthsOne Time Map - Middle Devonian CarbonateMap Reference: 85 D/NE and 85 E/SEBy U. J. ChaputDate September 26th, 1962.

Geophysical Survey Conducted By:

Party 30

One Imperial owned and operated seismic
crew January 6, 1962 to January 23, 1962.



IMPERIAL OIL LIMITED
PRODUCING DEPARTMENT - WESTERN REGION

SEISMIC OPERATIONS - RABBIT LAKE AREA
N.W.T. Permits 3186, 3187, 3195 & 3196

January 1962

By

U. J. CHAPUT

September 26, 1962

PEACE RIVER EXPLORATION DIVISION
DAWSON CREEK, BRITISH COLUMBIA

CONTENTS

Summary	<u>Page</u>
Introduction	1
Seismograph Operations	1
 <u>Enclosures -</u>	
Seismic Shot Hole Locations & Depth Map	In Pouch
Time Maps - Middle Devonian Carbonate	In Pouch

S U M M A R Y

Report on seismic operations conducted by Imperial Oil Limited
Party 30 in the Rabbit Lake Area during January 1962. Submitted in support
of application for credit. See Affidavit of Work by Harold Wilbert Johnson
dated September 20, 1962.

INTRODUCTION

Imperial Oil Limited acquired N.W.T. Permits 3186 and 3187 by filing on February 24, 1961. Permits 3195 and 3196 were acquired by Imperial Oil Limited at the Northwest Territories Sale of February 23, 1961.

Access to these Permits was made by the Mackenzie Highway, Yellowknife Road and thence by tractor trails to the general area.

SEISMOGRAPH OPERATIONS

During January of 1962, Imperial conducted eighteen days of seismic shooting on or adjacent to the subject Permits. A standard seismic crew was used with the addition of three D-7 cats.

On Saturday, January 6, 1962, Party 30 moved into the area, set up camp, and made their initial shot at Briggs Fortus Lake. Record quality was only fair in this one hole shot and experiments were made with charges. Weather was quite cold with temperatures ranging from -18° to -40° . Terrain is mostly flat with quite heavy spruce and jackpine coverage. Very little muskeg at this point. Drilling was extremely rough with Limestone encountered from grass roots to fifty feet.

From January 7, 1962 to January 13, 1962, the crew worked within Longitude $118^{\circ} 30'$ to $118^{\circ} 45'$ and Latitude $60^{\circ} 45'$ to $61^{\circ} 00'$. Record quality was fair in limestone areas and very poor when muskeg was encountered. Varying charges and hold depths did not improve record quality to any extent. Temperatures remained mild throughout week. Terrain was mostly flat with the odd large muskeg patch. Production was cut by extremely rough trails due to large boulders on surface and very difficult drilling. Limestone outcrops,

gravel, and shattered limestone necessitated experimenting with bits. Although this was partially successful some holes collapsed due to the shattered limestone. Since three hole patterns slowed record production, two or one hole patterns were used at intervals throughout the week.

From January 14th to January 20th, the crew shot the base leg and all but three miles of the eastern shooting. Record quality was fair to poor all week due to muskeg. Low cut filters were tried again but did not improve record quality. Weather was extremely cold during the first of the week with temperatures of fifty below recorded. The latter part of the week moderated somewhat with light snow. The terrain was mostly flat with very rough trails through muskeg areas. Drilling continued to be quite difficult due to limestone, etc. To enable drillers to keep ahead, two hole patterns were used. Bulldozing was satisfactory enough to cut back to two units.

From January 21st to January 23rd, the crew completed all remaining shooting to be done in the northeastern, southwestern and central portions of the group. Record quality for this shooting was fair to good using the same techniques which produced lesser quality records elsewhere. Terrain remained flat and the weather very cold.

A total of 421 holes were shot at 155 locations to obtain 308 profiles covering some 18½ miles of line.

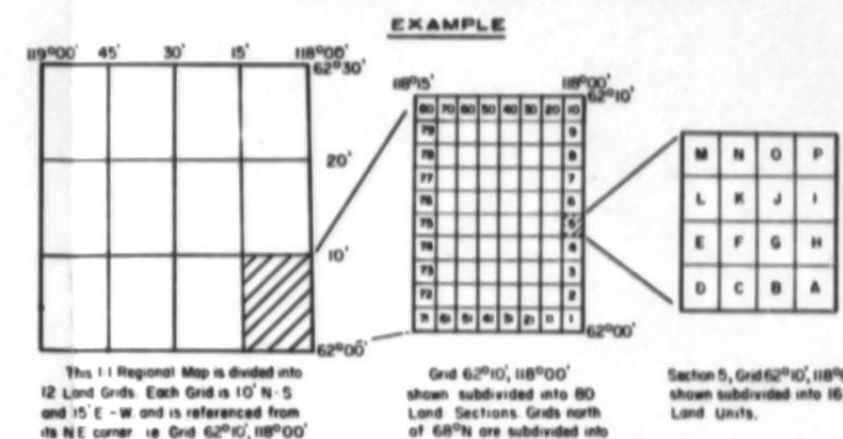
September 26, 1962.


U. J. Chaput

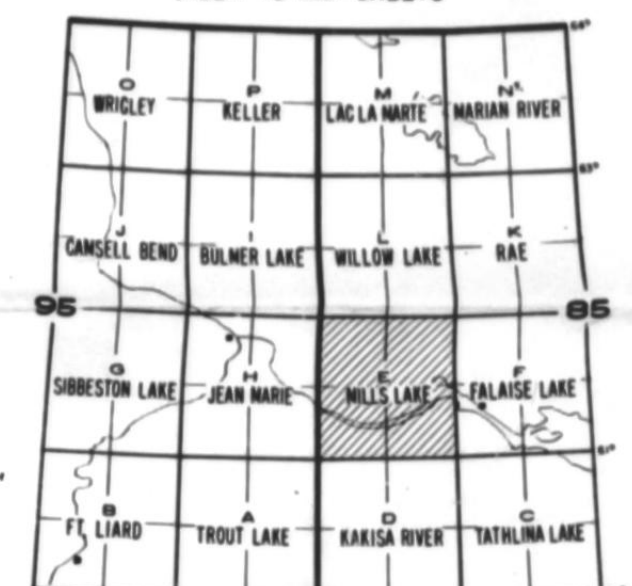
120°00' 45' 30' 15' 119°00' 45' 30' 15' 118°00' 62°00'



N.W.T. LAND REFERENCING SYSTEM
AS APPLIED TO
TERRITORIAL OIL & GAS REGULATIONS



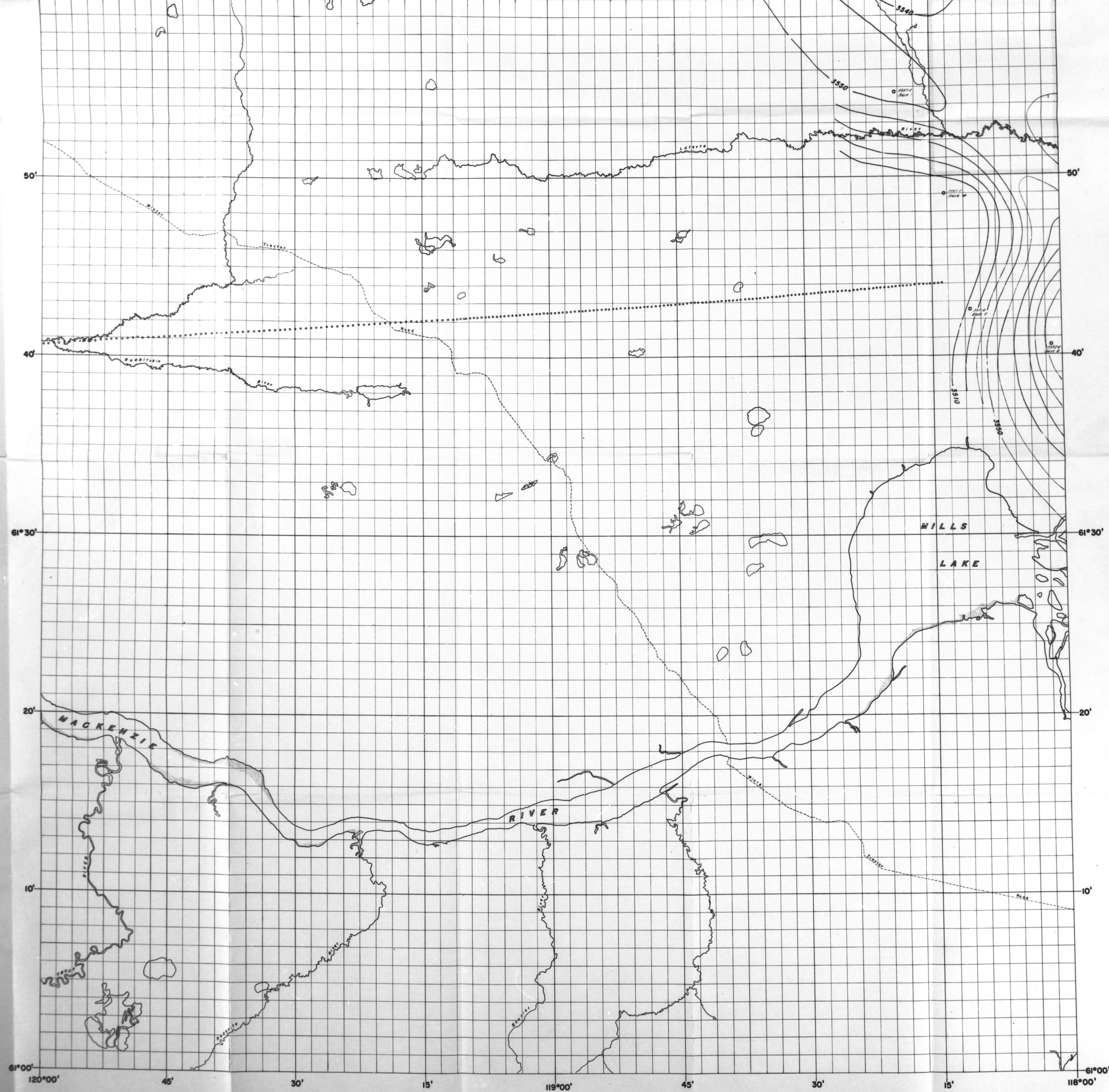
INDEX TO MAP SHEETS



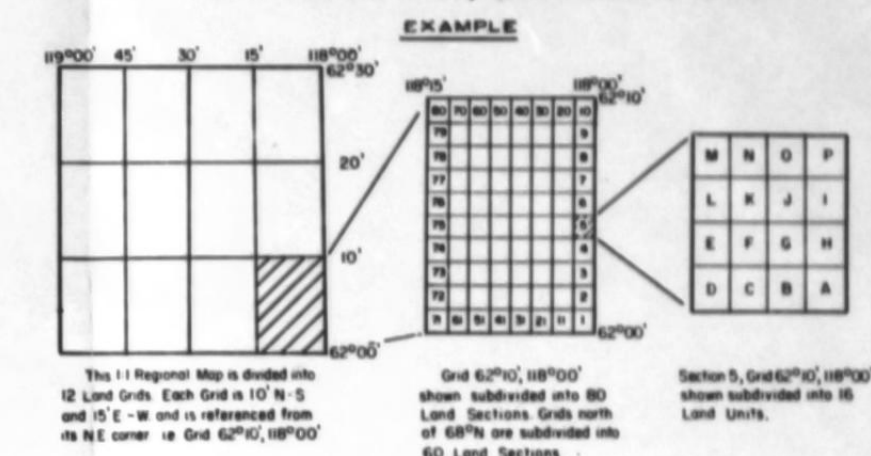
IMPERIAL OIL LIMITED
MAP OF

SCALE: 1 MILE TO 1 INCH

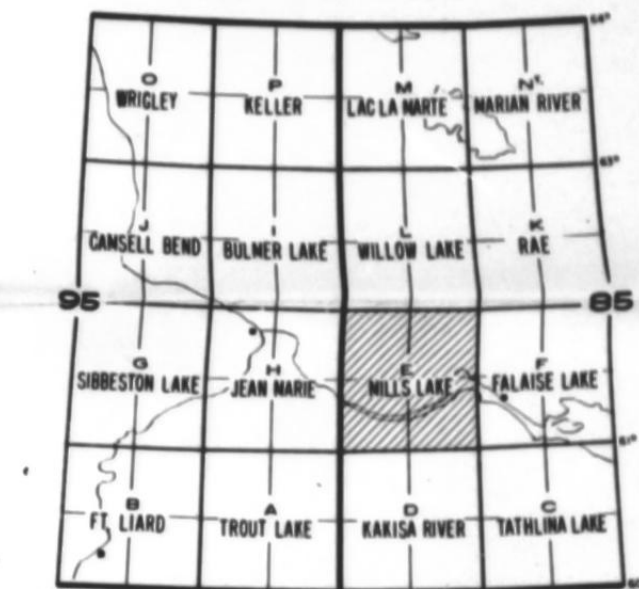
- AEROMAGNETIC CONTOURS Contour Interval - 20 gamma
- GRAVITY CONTOURS Contour Interval - 0.5 milligals
- GRAVITY STATION LOCATIONS & ELEVATIONS
- CORE DRILL LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- CORRECTED TIME VALUES
- REFRACTION PROFILES
- DEPTH MAP - CONTOURED ON



N.W.T. LAND REFERENCING SYSTEM
AS APPLIED TO
TERRITORIAL OIL & GAS REGULATIONS



INDEX TO MAP SHEETS



IMPERIAL OIL LIMITED
MAP OF

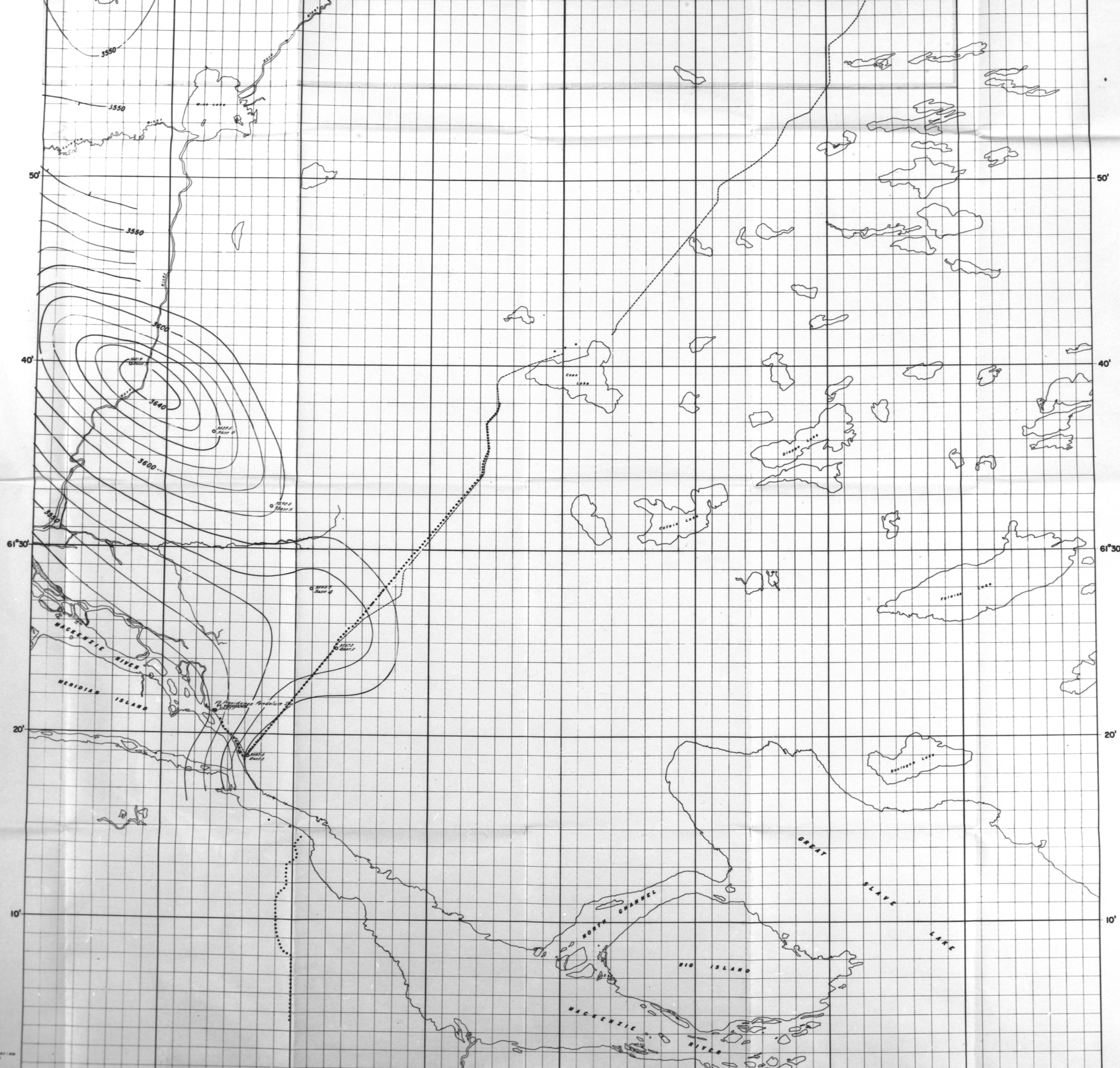
SCALE 1 MILE TO 1 INCH

- SHOWING
- AEROMAGNETIC CONTOURS Contour Interval - 20 gammas
 - GRAVITY CONTOURS Contour Interval - 0.5 milligals
 - GRAVITY STATION LOCATIONS, & ELEVATIONS
 - CORE DRILL LOCATIONS, ELEVATIONS & TOTAL DEPTHS
 - SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
 - CORRECTED TIME VALUES
 - REFRACTION PROFILES
 - DEPTH MAP - CONTOURED ON
 - C-COAL SHOWS & DEPTHS
 - G-GRAVEL SHOWS & DEPTHS
- PEACE RIVER DISTRICT

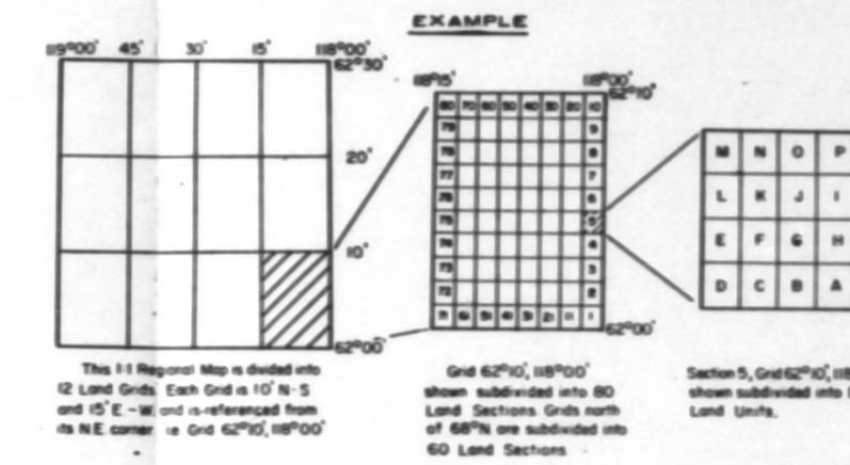
85E MILLS LAKE
2 MILES TO 1 INCH

2 OF 2
C

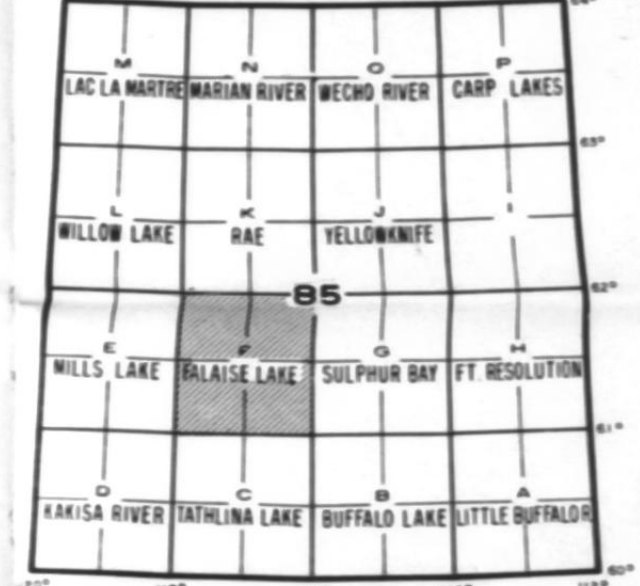
118°00' 45' 30' 15' 117°00' 45' 30' 15' 116°00' 62°00'



N.W.T. LAND REFERENCING SYSTEM AS APPLIED TO TERRITORIAL OIL & GAS REGULATIONS



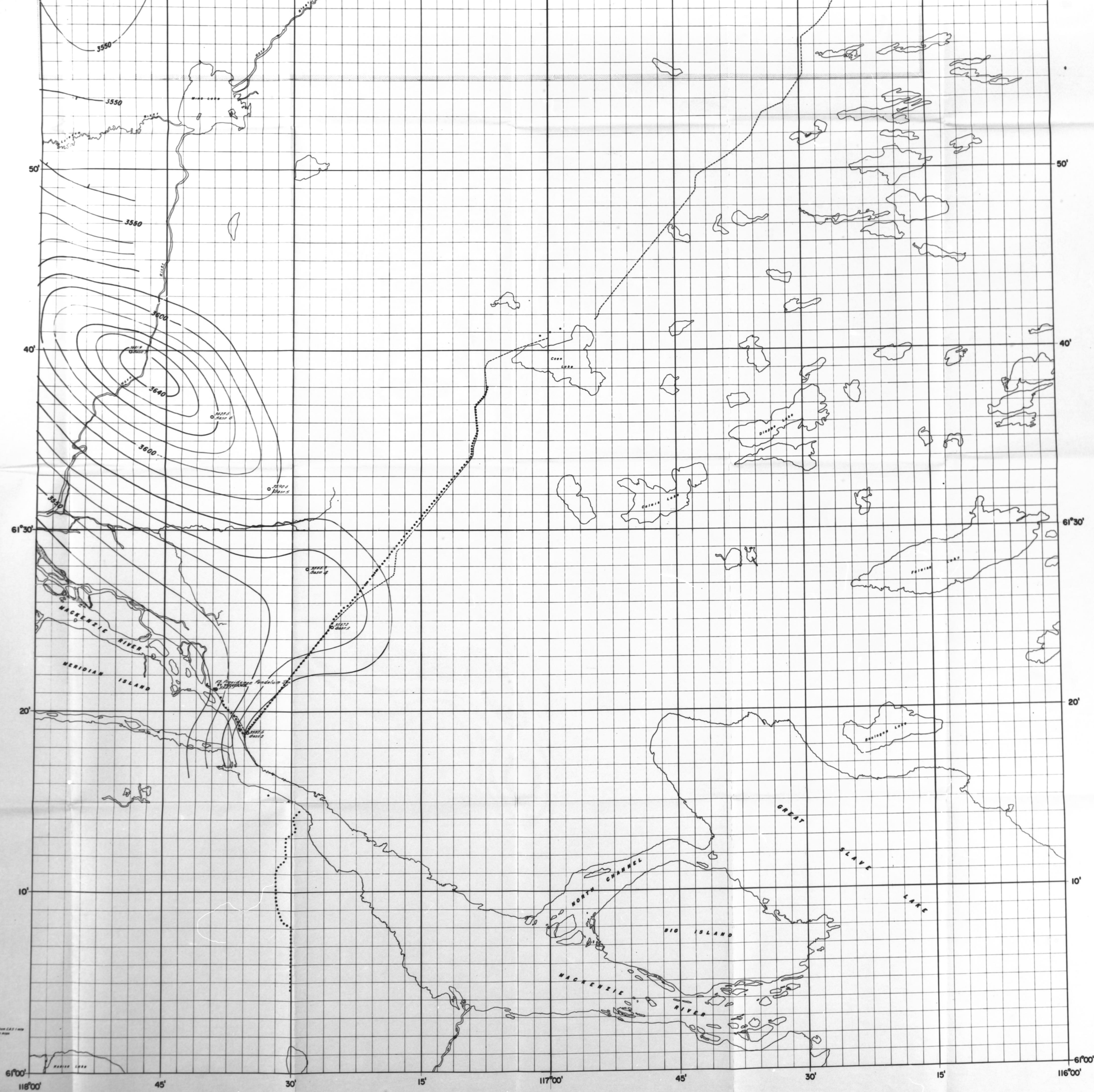
INDEX TO MAP SHEETS



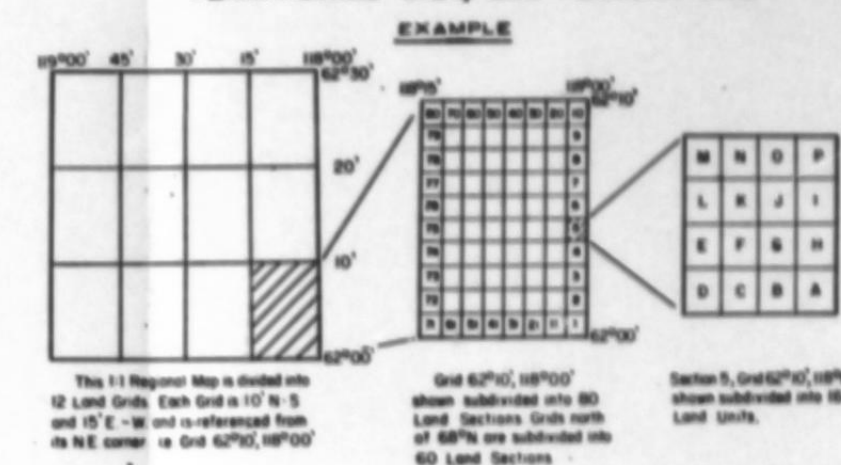
IMPERIAL OIL LIMITED MAP OF

SCALE: 1 MILE TO 1 INCH

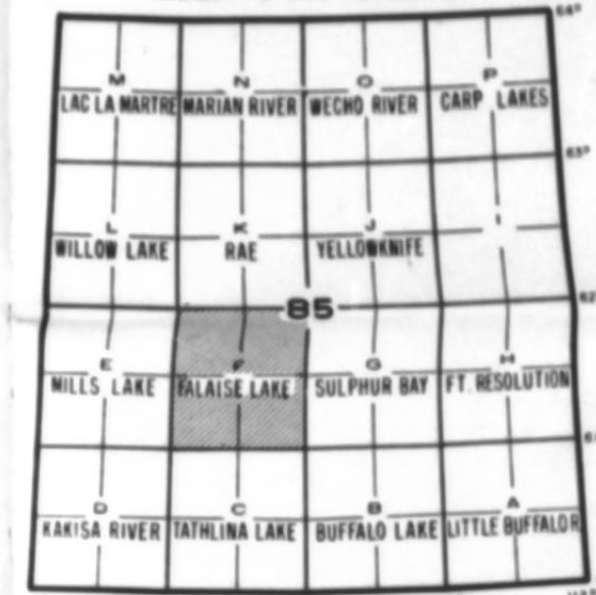
- AEROMAGNETIC CONTOURS Contour Interval - 20 gammas
- GRAVITY CONTOURS Contour Interval - 0.5 milligals
- GRAVITY STATION LOCATIONS, & ELEVATIONS
- CONE DRILL LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- CORRECTED TIME VALUES
- REFRACTION PROFILES
- DEPTH MAP - CONTOURED ON
- C-DRILL SHOTS & DEPTHS



N.W.T. LAND REFERENCING SYSTEM AS APPLIED TO TERRITORIAL OIL & GAS REGULATIONS



INDEX TO MAP SHEETS



IMPERIAL OIL LIMITED MAP OF

SCALE: 1 MILE TO 1 INCH

- AEROMAGNETIC CONTOURS Contour Interval - 20 gammas
- GRAVITY CONTOURS Contour Interval - 0.3 milligals
- GRAVITY STATION LOCATIONS, & ELEVATIONS
- CORE DRILL LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- SEISMIC SHOT HOLE LOCATIONS, ELEVATIONS & TOTAL DEPTHS
- CORRECTED TIME VALUES
- REFRACTION PROFILES
- DEPTH MAP - CONTOURED ON
- C-COAL SHOWS & DEPTHS
- G-GRAVEL SHOWS & DEPTHS

PEACE RIVER DISTRICT

85-F-FALAISE LAKE

2 of 2

CC