

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF A HEARING CALLED ON A MOTION
OF THE COMMISSION TO CONSIDER THE APPLICATION
OF CARDINAL PETROLEUM COMPANY FOR PERMISSION TO
DRILL A WELL IN THE APPROXIMATE CENTER OF THE S/2
OF THE NW/4 OF SECTION 11, TOWNSHIP 140 NORTH,
RANGE 96 WEST, STARK COUNTY, NORTH DAKOTA, AS
AN EXCEPTION TO THE SPACING PATTERN IN THE
DICKINSON FIELD.

CASE NO. 1173
ORDER NO. 1262

ORDER OF THE COMMISSION

BY THE COMMISSION:

Pursuant to legal notice this cause came on for hearing at 9:30 a.m. on the 11th day of December, 1973, at Bismarck, North Dakota, before the Industrial Commission of the State of North Dakota, hereinafter referred to as the "Commission."

NOW, on this 8th day of January, 1974, the Commission, a quorum being present, having considered the testimony adduced, and the exhibits received, at said hearing and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That Cardinal Petroleum Company is the owner of an oil and gas leasehold estate in the north half of Section 11, Township 140 North, Range 96 West, Stark County, North Dakota, which lands are adjacent to the boundary of the Dickinson-Heath Pool, and comprise a spacing unit for that pool.

(3) That geological evidence presented indicates that a well drilled at the proper location on the above described spacing unit would not produce oil in paying quantities.

(4) That Cardinal Petroleum Company believes there is recoverable crude oil in the Heath Reservoir underlying said spacing unit, and such oil can be recovered by a well drilled in the approximate center of the S/2 of the NW/4 of Section 11, Township 140 North, Range 96 West, Stark County, North Dakota.

(5) That a well drilled in the approximate center of the S/2 of the NW/4 of Section 11, Township 140 North, Range 96 West, Stark County, North Dakota,

would prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That Cardinal Petroleum Company be and the same is hereby granted permission to drill a well in the approximate center of the S/2 of the NW/4 of Section 11, Township 140 North, Range 96 West, Stark County, North Dakota.

(2) That Cardinal Petroleum Company make application to the office of the State Geologist for permit to drill said well.

DONE, at Bismarck, North Dakota, this 8th day of January, 1974.

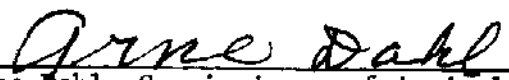
THE NORTH DAKOTA INDUSTRIAL COMMISSION



Arthur A. Link, Governor



Allen I. Olson, Attorney General



Arne Dahl, Commissioner of Agriculture



November 17, 1973

North Dakota Geological Survey
University Station
Grand Forks, North Dakota 58201

The Industrial Commission
State of North Dakota
State Capitol Building
Bismarck, North Dakota 58501

Gentlemen:

Cardinal Petroleum Company, as operator for themselves and Patrick Petroleum Corporation, requests that permission be given for the drilling of an off-pattern development well in the Dickinson field area, Stark County, North Dakota.

The requested location is the approximate center of the south half of the northwest quarter ($S\frac{1}{2}NW\frac{1}{4}$) of Section 11, 140N 96W. This location is outside the Dickinson Heath Sand Unitized area, and also outside the original spaced area of the Dickinson field, but does fall within the $\frac{1}{2}$ mile buffer zone for that field. The drilling unit for this requested location would be the North Half of Section 11.

It is requested that this application be placed on the agenda for the December 11, 1973 meeting of the Industrial Commission. At that time Cardinal will present evidence in support of the application.

Very truly yours,

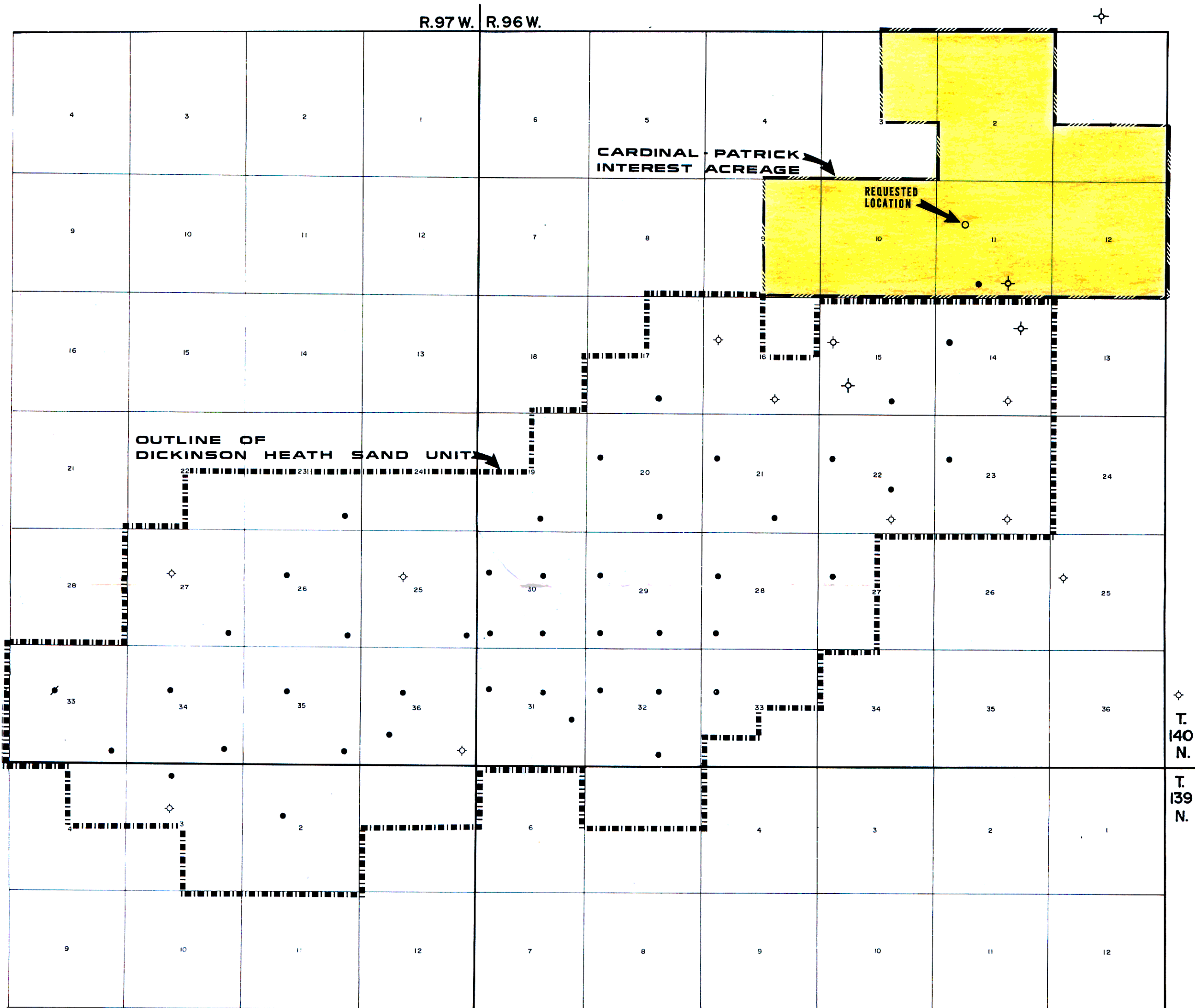
CARDINAL PETROLEUM COMPANY

By: *Ray L. Harrison*
Ray L. Harrison
Vice President

RLH/pw

CC: Mr. John Orr
Patrick Petroleum Corp.
Jackson, Michigan

Mr. Steven H. Harris
Bismarck, North Dakota



WEST DICKINSON - DICKINSON FIELDS

STARK COUNTY, NORTH DAKOTA

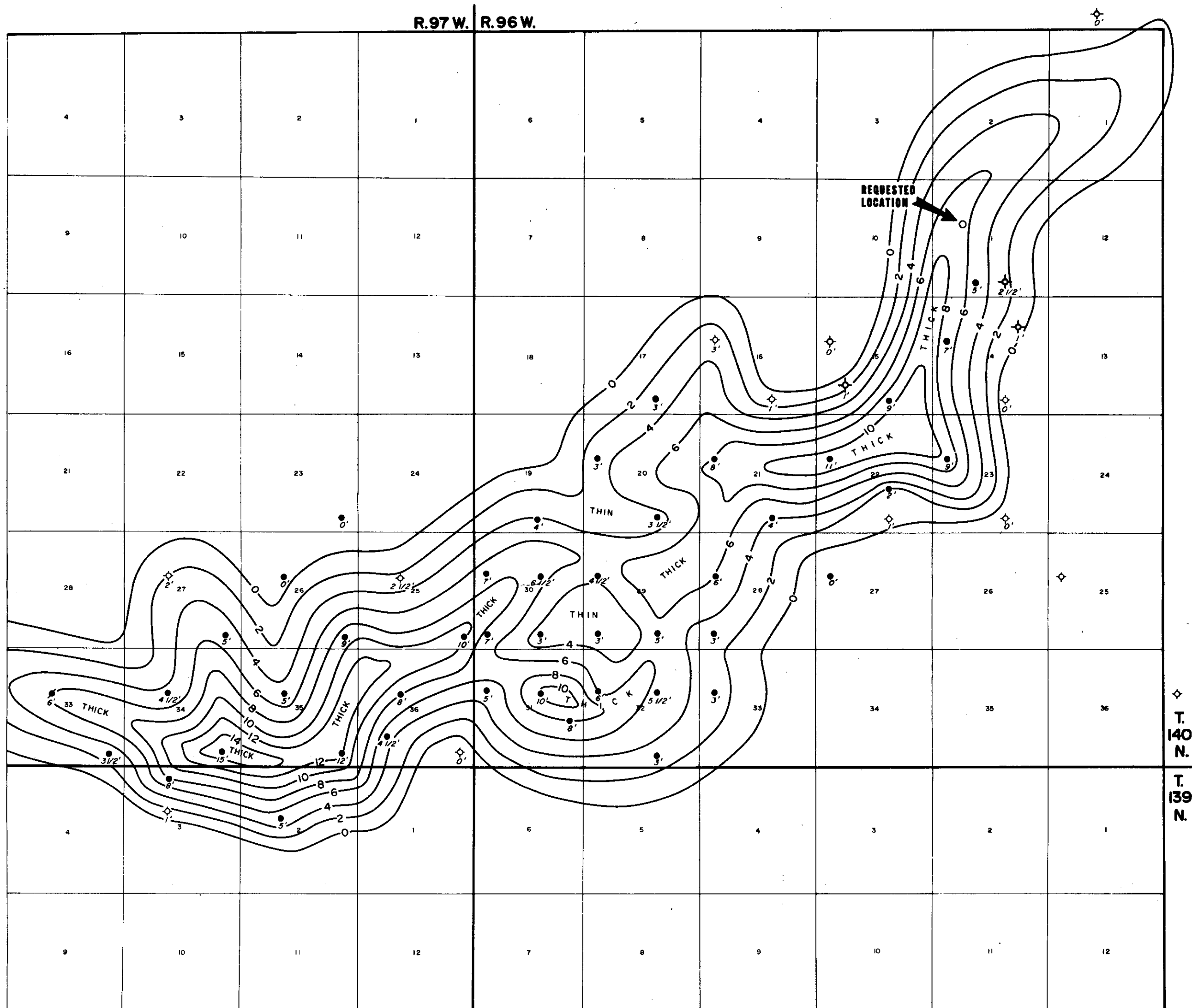


SHOWING
DICKINSON HEATH SAND UNIT OUTLINE
 (COINCIDES WITH FIELD BOUNDARIES)
AND
CARDINAL - PATRICK INTEREST ACREAGE

CARDINAL PETROLEUM COMPANY
 BILLINGS, MONTANA
 Prepared by
 RAY L. HARRISON
 GEOLOGIST

NOV 11 1973
 NOV 11 1973
 1173
 by Cardinal Petr. Co.
 #1
 Identified by Ray Harrison

EXHIBIT NO. 1
 CASE NO. 1173
 DECEMBER 11, 1973



WEST DICKINSON - DICKINSON FIELDS STARK COUNTY, NORTH DAKOTA

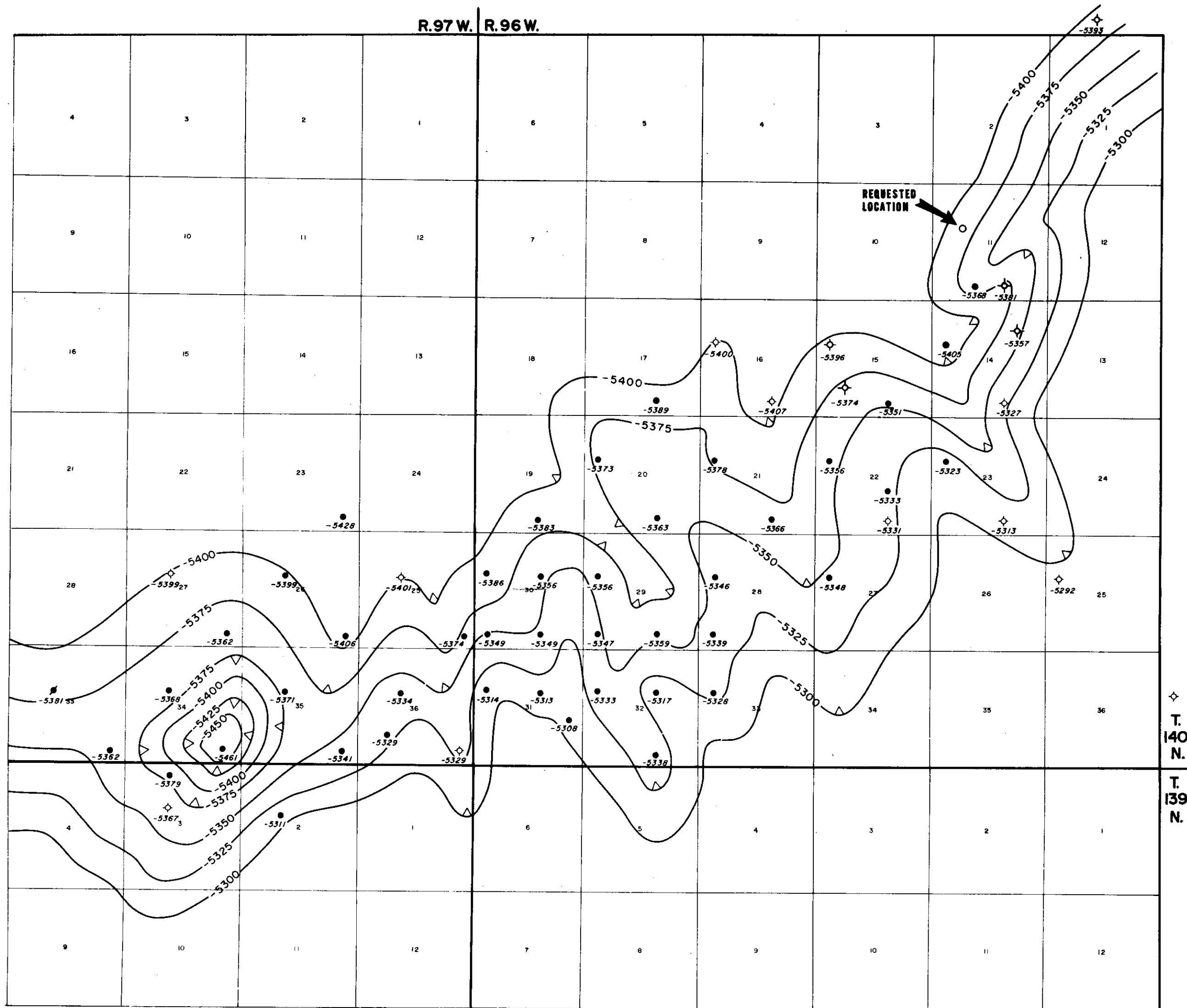


NET THICKNESS OF HEATH 'B' SAND

CONTOUR INTERVAL = 2'

CARDINAL PETROLEUM COMPANY
BILLINGS, MONTANA
Prepared by
RAY L. HARRISON
GEOLOGIST

EXHIBIT NO. 2
CASE NO. 1173
DECEMBER 11, 1973



WEST DICKINSON - DICKINSON FIELDS STARK COUNTY, NORTH DAKOTA



STRUCTURE MAP **TOP OF HEATH 'B' SAND POROSITY**

CONTOUR INTERVAL = 25'

CARDINAL PETROLEUM COMPANY
BILLINGS, MONTANA
Prepared by
RAY L. HARRISON
GEOLOGIST

EXHIBIT NO. 3
CASE NO. 1173
DECEMBER 11, 1973