

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 CO.
FOR PERMISSION TO DRILL A WELL IN THE
CENTER OF THE SW/4 OF SECTION 15, T. 140N,
R. 96W, STARK COUNTY, NORTH DAKOTA, AS
AN EXCEPTION TO THE SPACING PATTERN FOR
THE DICKINSON-HEATH POOL.

CASE NO. 1059
ORDER NO. 1137

ORDER OF THE COMMISSION

BY THE COMMISSION:

Pursuant to legal notice this cause came on for hearing at 9:30 a.m. on the 9th day of September, 1971, at Bismarck, North Dakota before the State Industrial Commission, hereinafter referred to as the "Commission."

NOW, on this 8th day of Oct., 1971, the Commission, a quorum being present, having considered the testimony adduced, and the exhibits received at such hearing, and being further 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 evidence presented to the Commission bearing on the matter of well location indicates that a dry hole has been drilled in the SW NW of Section 15, Township 140 North, Range 96 West, and that there is recoverable crude oil in the Heath Reservoir underlying the spacing unit described as the W/2 of Section 15, Township 140 North, Range 96 West.

(3) That the prevention of waste and protection of correlative rights requires that another well be drilled on said spacing unit.

IT IS THEREFORE ORDERED:

(1) That Cardinal Petroleum Company be and the same is hereby granted, an exception to the spacing pattern in the Dickinson-Heath Field, allowing it to drill a well in the approximate center of the SW/4 of Section 15, 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 Oct., 1971.

THE NORTH DAKOTA INDUSTRIAL COMMISSION

William L. Guy
William L. Guy, Governor

Helgi Johanneson
Helgi Johanneson, Attorney General

Arne Dahl
Arne Dahl, Commissioner of Agriculture

STATE OF NORTH DAKOTA

SS

AFFIDAVIT OF
MAILING

COUNTY OF GRAND FORKS

I, F. E. WILBORN, being first duly sworn upon oath, depose and say: That I am over twenty-one years of age; that on the 28 day of OCT., 1971, I enclosed in separate envelopes true and correct copies of the attached Order No. 1137 of the North Dakota State Industrial Commission, and deposited the same in the United States Post Office at the University Station, University of North Dakota, Grand Forks, North Dakota, with postage thereon fully paid, directed to: DON ROBERTS, Box 1077, BILLINGS, MONT. all of whom filed written appearances at the hearing of the Industrial Commission on Case No. 1059.

F. E. Wilborn
(Signature of person mailing
Order and preparing Affidavit)

Subscribed and sworn to before
me this 28 day of Oct., 1971.

Alana B. Kuylenstierna
Notary Public, Grand Forks County

STATE OF NORTH DAKOTA
COUNTY OF GRAND FORKS

SS

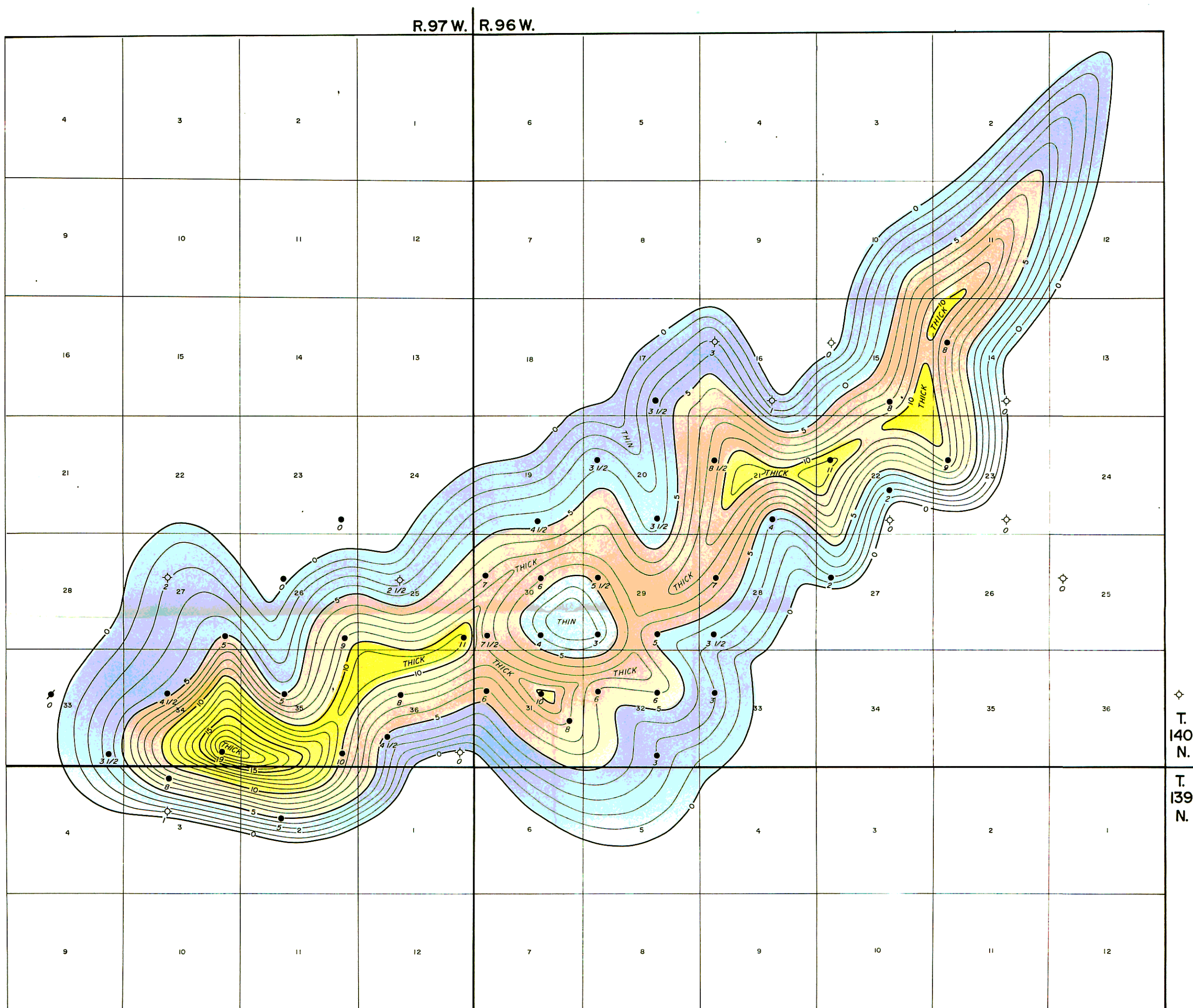
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North Dakota, Grand Forks, North Dakota, with postage thereon fully
paid, directed to: RAY HARRISON, Box 1077, BILLINGS, MONT.
all of whom filed written appearances at the hearing of the Industrial
Commission on Case No. 1059.

F. E. Wilborn
(Signature of person mailing
Order and preparing Affidavit)

Subscribed and sworn to before
me this 28 day of OCT, 1971.

Clara B. Hargrave
Notary Public, Grand Forks County



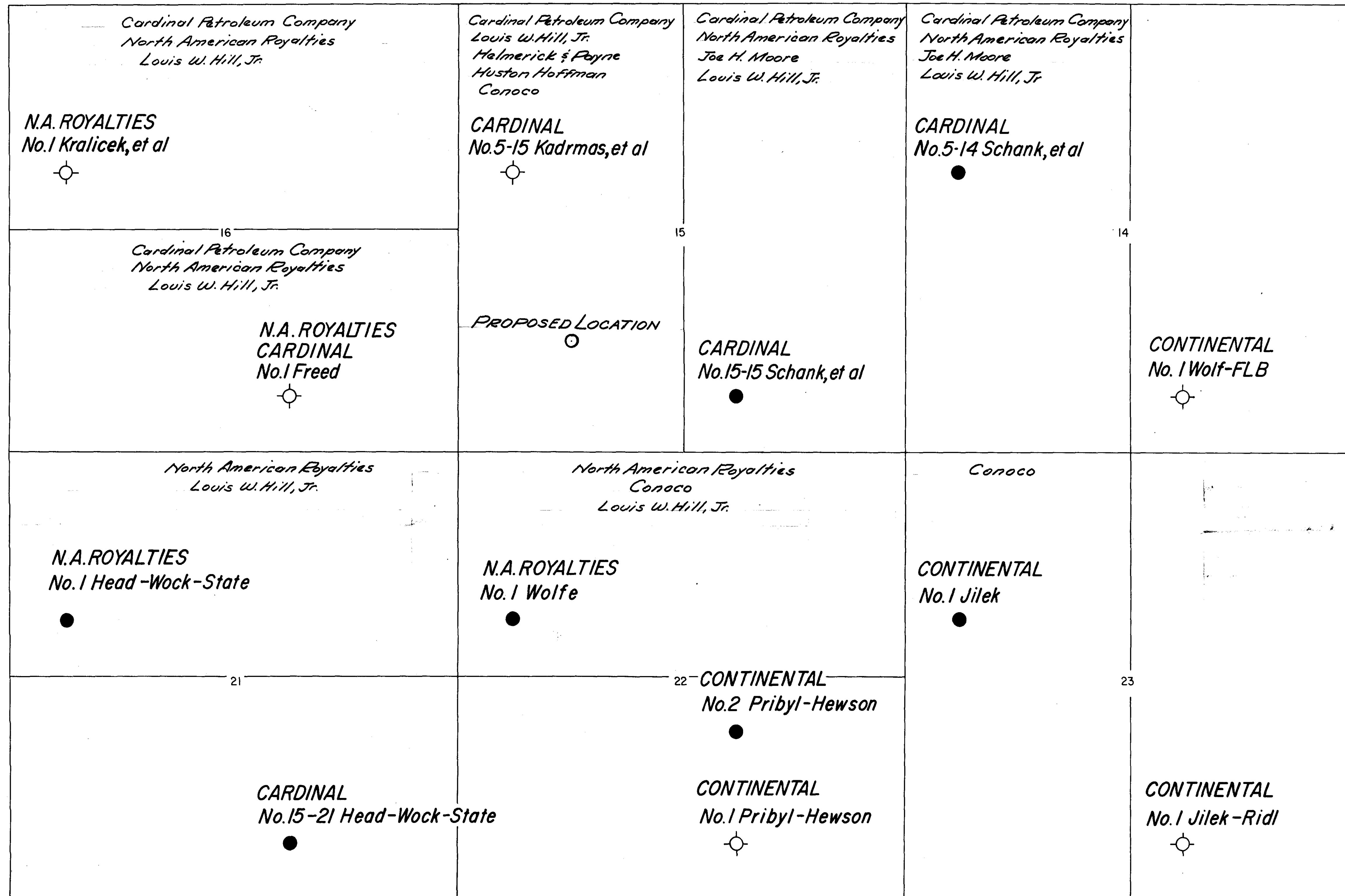
DICKINSON-WEST DICKINSON FIELDS
STARK COUNTY, NORTH DAKOTA
ISOPACH MAP
NET EFFECTIVE HEATH B SAND POROSITY
ISOPACH INTERVAL = 1 FOOT

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

CASE NO. 1059
EXHIBIT NO. 1
SEPT. 9, 1971

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
SEP 9 1971
Date _____ Co. No. 1059
Introduced by CARDINAL
Exhibit _____
Identified by MD

R 96 W



T
140
N



PORTION DICKINSON FIELD
STARK COUNTY, NORTH DAKOTA

AUGUST 9, 1971

CARDINAL PETROLEUM COMPANY

SCALE 1 INCH = 600 FEET

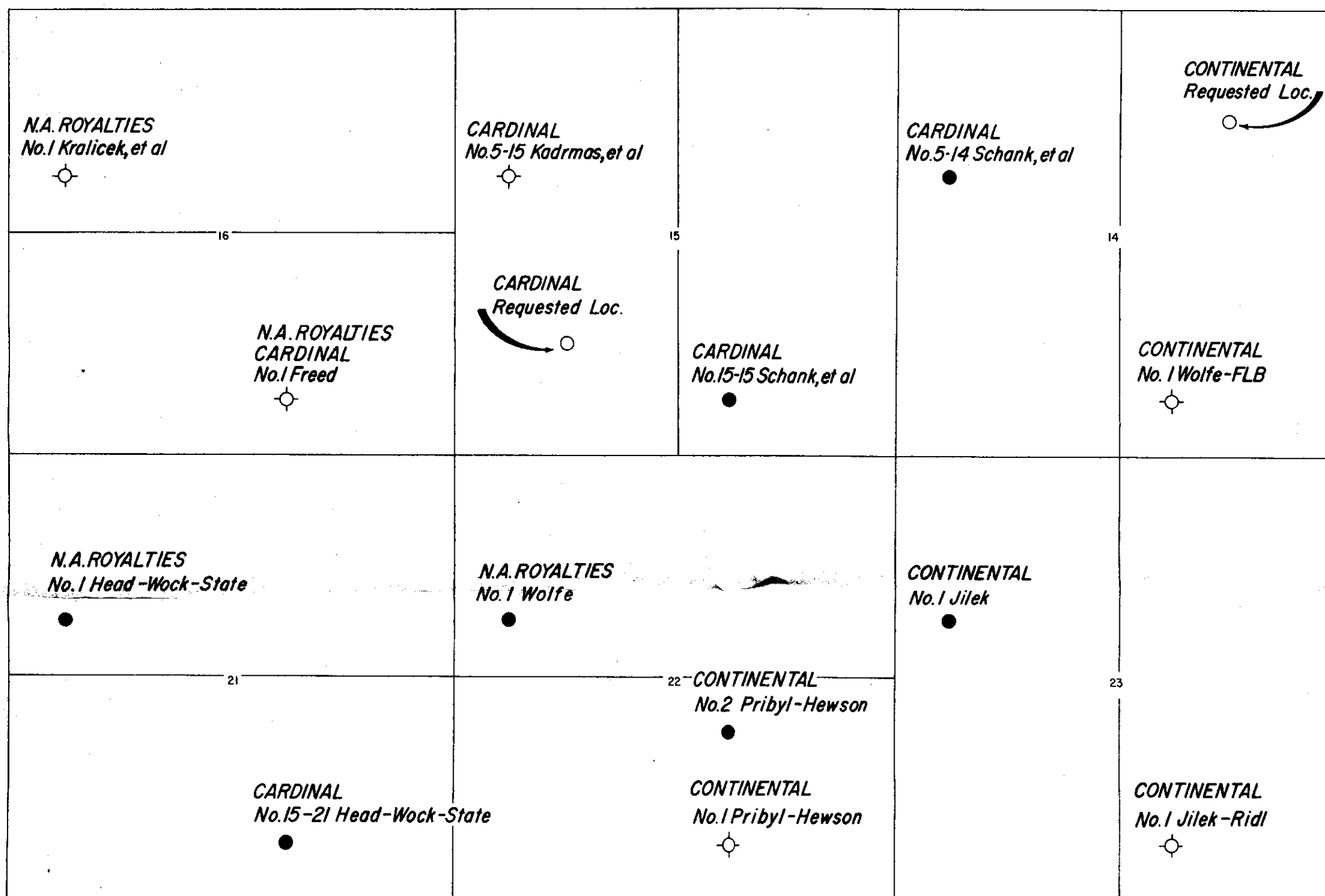
CASE 1059

[illegible]

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
SEP 9 1971
Date _____ Case No. 1059
Introduced by CARDINAL
Exhibit 2
Identified by PAK

CASE NO. 1059
EXHIBIT NO. 2
SEPT. 9, 1971

R 96 W



T
140
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INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA
SEP 9 1971 Case No. 1059
Date _____
Introduced by Cardinal
Exhibit _____
Identified by CH

PORTION DICKINSON FIELD
STARK COUNTY, NORTH DAKOTA

CARDINAL PETROLEUM COMPANY

Drawn by
RAY L. HARRISON
PETROLEUM GEOLOGIST

CASE NO. 1059
EXHIBIT NO. A
SEPT. 9, 1971

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

IN THE MATTER OF THE APPLICATION OF)
CARDINAL PETROLEUM COMPANY, A DELAWARE)
CORPORATION, FOR PERMISSION TO DRILL)
A WELL AT A LOCATION IN THE CENTER OF)
THE SW $\frac{1}{4}$ OF SECTION 15, TOWNSHIP 140)
NORTH, RANGE 96 WEST, STARK COUNTY,)
NORTH DAKOTA, AS AN EXCEPTION TO THE)
SPACING PATTERN IN THE DICKINSON-HEATH)
POOL, STARK COUNTY, NORTH DAKOTA.)

CASE 1759
A P P L I C A T I O N

COMES NOW the Applicant, Cardinal Petroleum Company, a Delaware corporation authorized to do business in the State of North Dakota, which respectfully petitions as follows:

I.

That Cardinal Petroleum Company is the owner of an oil and gas leasehold estate in the W $\frac{1}{2}$ of Section 15, Township 140 North, Range 96 West, Stark County, North Dakota, which lands are within the outline of the Dickinson-Heath Pool as established by Order of the North Dakota Industrial Commission.

II.

That pursuant to said Order, all wells drilled in the Dickinson-Heath Pool in Zone II shall be on a 320-acre spacing pattern and any wells so drilled shall be located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ NW $\frac{1}{4}$ of each section.

III.

That the W $\frac{1}{2}$ of Section 15, Township 140 North, Range 96 West, was involuntarily pooled by the North Dakota Industrial Commission on July 15, 1971, and Cardinal Petroleum Company was named as Operator of all drilling activities conducted in this drilling unit.

IV.

That a dry hole has been drilled in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of said Section 15 in conformity with the spacing pattern. The Applicant believes that the Heath sand underlies the W $\frac{1}{2}$ of Section 15, Township 140 North, Range 96 West.

V.

That attached hereto and made part hereof is a plat accurately showing to scale the property for which this exception location is sought, and showing all completed and drilling wells on the property and showing to scale adjoining surrounding properties and wells.

VI.

That, based upon the Applicant's best knowledge and geological information, a well drilled as an exception to the spacing pattern in the center of the SW $\frac{1}{4}$ of Section 15, Township 140 North, Range 96 West, would be potentially productive of oil in commercial quantities.

VII.

That the drilling of a test well at the proposed location in lieu of any other location would result in the greatest potential recovering of oil and gas and, as a result thereof, protect the correlative rights of the parties and prevent unnecessary waste.

VIII.

That copy of this Application has been mailed by certified mail, postage prepaid, to the following parties who are the lessees of adjoining properties:

Mr. Louis W. Hill, Jr.
W. 1453 First National Bank Bldg.
St. Paul, Minnesota 55101

Helmerich & Payne
Utica at Twenty-First
Tulsa, Oklahoma 74114

North American Royalties, Inc.
200 East 8th Street
Chattanooga, Tennessee 37402

Mr. Huston Huffman
1207 Petroleum Club Bldg.
Oklahoma City, Oklahoma 73102

Continental Oil Company
Pacific Western Life Bldg.
152 North Durbin
Casper, Wyoming 82601

Mr. J. Hiram Moore
314 Gulf Building
Midland, Texas 79701

WHEREFORE this Applicant respectfully requests that the matter aforesaid be set for hearing at the regular September meeting of the North Dakota Industrial Commission, or before an examiner at an earlier date, if possible, and that the Commission grant this Application for permission to drill a test well in the center of the SW $\frac{1}{4}$ of Section 15, Township 140 North, Range 96 West, Stark County, North Dakota, as an exception to the spacing pattern in the Dickinson-Heath Pool as set forth above, and for such other order and relief as the Industrial Commission of the State of North Dakota may deem just and equitable in accordance with the rules and regulations of the State of North Dakota.

DATED this 9th day of August, 1971.

CARDINAL PETROLEUM COMPANY

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

STATE OF MONTANA)
) ss.
COUNTY OF YELLOWSTONE)

RAY L. HARRISON, being first duly sworn on oath, deposes and says that he is the Vice President of Cardinal Petroleum Company, the Applicant herein named, that he has read the above and foregoing Application, knows the contents thereof and is within the knowledge of the affiant that the same is true to the best of his knowledge, information and belief, and that the accompanying plat is accurately drawn to scale and correctly reflects pertinent and required data.

Ray L. Harrison
Ray L. Harrison

Subscribed and sworn to before me this 9th day of August, 1971.

My Commission Expires:
May 1, 1972

Grace E. Brown
Grace E. Brown, Notary Public
Residing at Billings, Montana