

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 AN ORDER POOLING ALL IN-
TERESTS IN THE SPACING UNIT DESCRIBED
AS THE W/2 OF SECTION 15, TOWNSHIP 140
NORTH, RANGE 96 WEST, DICKINSON-HEATH
POOL, STARK COUNTY, NORTH DAKOTA.

CASE NO. 1057
ORDER NO. 1133

ORDER OF THE COMMISSION

BY THE COMMISSION:

Pursuant to legal notice this cause came on for hearing at 9:30 a.m. on the 15th day of July, 1971, at Bismarck, North Dakota, before the Industrial Commission of North Dakota, hereinafter referred to as the "Commission."

NOW, on this 3rd day of Aug., 1971, 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 applicant is the owner of an interest in the oil and gas leasehold estate in the W/2 of Section 15, Township 140 North, Range 96 West, Stark County, North Dakota.
- (3) That by its order the Commission established the field boundaries for the Dickinson-Heath Pool and that Section 15, Township 140 North, Range 96 West, Stark County, North Dakota was included in such pool.
- (4) That orders of the Commission established 320 acres as the spacing for the Dickinson-Heath Pool and that such orders further authorized that spacing units should consist of any two adjacent and contiguous quarter sections within a section.
- (5) That there are separately owned interests in this spacing unit, and some of the owners thereof have not voluntarily pooled their interests for the development and operation of such spacing unit and the applicant has been unable to obtain the voluntary pooling of all interests in this spacing unit.

(6) That Section 38-08-08, North Dakota Century Code, requires the Commission to enter a pooling order when two or more separately owned tracts are embraced within a spacing unit, or when there are separately owned interests in all or a part of a spacing unit in the absence of voluntary pooling.

(7) That in order to protect correlative rights and prevent the drilling of unnecessary wells, the Commission should pool all interests in this spacing unit.

(8) That such pooling order should be effective on the date hereof.

IT IS THEREFORE ORDERED:

(1) That all of the interests in the Dickinson-Heath Pool in the W/2 of Section 15, Township 140 North, Range 96 West, Stark County, North Dakota, be, and the same are hereby pooled for the development and operation of a spacing unit, and that all interested parties participate in the proceeds from a well drilled thereon in proportion as their interests may appear.

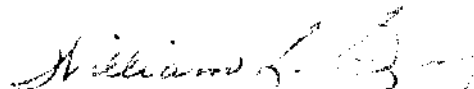
(2) That Cardinal Petroleum Company shall be the operator of this spacing unit and shall conduct operations in a manner such as to protect correlative rights of all interested parties.

(3) That this pooling order shall govern allocation of production from said spacing unit.

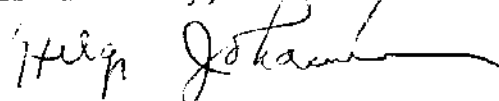
(4) That, in the event the size of spacing units in the Dickinson-Heath Pool is modified by the Commission, this order shall terminate as of the date of such modification order.

DONE, at Bismarck, North Dakota, this 3rd day of Aug., 1971.

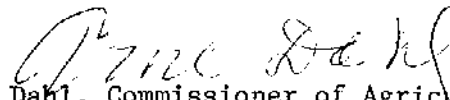
THE NORTH DAKOTA INDUSTRIAL COMMISSION



William L. Guy, Governor



Helgi Johanneson, Attorney General



Arne Dahl, Commissioner of Agriculture

STATE OF NORTH DAKOTA

SS

COUNTY OF GRAND FORKS

AFFIDAVIT OF
MAILING

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
10th day of August, 1971, I enclosed in separate envelopes true
and correct copies of the attached Order No. 1133 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: Dois D. Dallas, Box 594, Tioga, North Dakota.

all of whom filed written appearances at the hearing of the Industrial
Commission on Case No. 1057.

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

Subscribed and sworn to before
me this 10th day of August, 1971.

Clara B. Augilia
Notary Public, Grand Forks County

My commission expires July 1, 1977

STATE OF NORTH DAKOTA
COUNTY OF GRAND FORKS

SS

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

Subscribed and sworn to before
me this 10th day of August, 1971.

Clara B. Lueglin
Notary Public, Grand Forks County

My commission expires July 1, 1977

CARDINAL PETROLEUM COMPANY

ESTIMATED WELL COST

AUTHORIZATION FOR EXPENDITURE

WELL NAME KADRMAS #5-15

FIELD Dickinson

LOCATION SW NW Sec. 15-140N-96W
Stark County, North Dakota

DATE JUL 15 1971 CARD # 1057
Initiated by CARDINAL
Identified by [Signature]
AFE NO. 7871

ESTIMATED BY TAV

DRILLING COSTS

		<u>DRY HOLE</u>	<u>COMPLETED WELL</u>
Survey & Stake location		\$ <u>115.00</u>	\$ <u>115.00</u>
Permit		<u>25.00</u>	<u>25.00</u>
Make location & Roads		<u>600.00</u>	<u>600.00</u>
Pits		<u>300.00</u>	<u>300.00</u>
Moving & Rigging	<u>Contractor</u>	<u>-</u>	<u>-</u>
Footage Drilling	<u>8050' @ \$4.95</u>	<u>39,848.00</u>	<u>39,848.00</u>
Mud		<u>7,000.00</u>	<u>7,000.00</u>
Water	<u>Water in excess of \$1,500</u>	<u>4,000.00</u>	<u>4,000.00</u>
Daywork, Circulating, Logging, etc.	<u>24 hours</u>	<u>1,700.00</u>	<u>1,700.00</u>
Surface Casing	<u>600' of 8-5/8" 24#</u>	<u>2,200.00</u>	<u>2,200.00</u>
Cementing Service		<u>450.00</u>	<u>450.00</u>
Cement	<u>350 sacks</u>	<u>1,250.00</u>	<u>1,250.00</u>
Shoe, Centralizer, etc.		<u>150.00</u>	<u>150.00</u>
W.O.C. Time	<u>Contractor</u>	<u>-</u>	<u>-</u>
Coring, Service & Rig Time	<u>One 50' core</u>	<u>2,500.00</u>	<u>2,500.00</u>
DST, Service & Rig Time	<u>One DST</u>	<u>2,000.00</u>	<u>2,000.00</u>
Electrical Logging	<u>L-GR surface-ID</u> <u>FDC - minimum run</u>	<u>3,100.00</u>	<u>3,100.00</u>
Micro-Device		<u>-</u>	<u>-</u>
Plug and Abandon	<u>Contractor</u>	<u>-</u>	<u>-</u>
Cementing Service		<u>450.00</u>	<u>-</u>
Cement	<u>125 sacks</u>	<u>400.00</u>	<u>-</u>
Misc. Trucking		<u>200.00</u>	<u>200.00</u>
Geologist Service		<u>1,000.00</u>	<u>1,000.00</u>
Fill Pits and Level Loc.		<u>500.00</u>	<u>500.00</u>
Waiver of Damages		<u>600.00</u>	<u>600.00</u>
Other		<u>-</u>	<u>-</u>

TOTAL DRY HOLE COST

\$68,388.00

WELL NAME KADRMAS #5-15DRY HOLECOMPLETED
WELLCOMPLETION COSTS\$20,350.00

Casing, Oil String	<u>8050' 5$\frac{1}{2}$" 14, 15.5 & 17</u>		
Shoe, Float Collar, Scratchers, Centralizers			<u>800.00</u>
Cementing Service			<u>700.00</u>
Cement	<u>Includes Hydrazine</u>		<u>1,800.00</u>
W.O.C. Time	<u>No cost</u>		<u>-</u>
Well Head & Valves	<u>Includes stuffing box & polish rod</u>		<u>900.00</u>
Tubing	<u>8000' 2-7/8" 00</u>		<u>9,600.00</u>
Tubing Subs, Perf Nipple, etc			<u>200.00</u>
Correlation Log			<u>600.00</u>
Perforating			<u>800.00</u>
Packer			<u>400.00</u>
Load Oil	<u>Hauling only</u>		<u>200.00</u>
Acidize	<u>500 gal. cleanup acid</u>		<u>700.00</u>
Fracture	<u>If required</u>		<u>5,000.00</u>
Rig Time, Completion			<u>2,500.00</u>
Pumping Unit	<u>912 Lufkin</u>		<u>16,350.00</u>
Pumping Engine	<u>100 HP Elec.</u>		<u>1,500.00</u>
Sucker Rods	<u>8000' 1" 7/8" 3/4"</u>		<u>5,200.00</u>
Downhole Pump	<u>2$\frac{1}{2}$" tubing liner pump</u>		<u>800.00</u>
Unit Foundation	<u>Poured concrete</u>		<u>700.00</u>
Engine House	<u>None</u>		<u>-</u>
Tanks	<u>3 - 400's with walkways</u>		<u>7,400.00</u>
Heater - Treater	<u>7 x 15 Connors Horz.</u>		<u>5,900.00</u>
Treater Base	<u>Pre-stressed Conc.</u>		<u>140.00</u>
Treater Insulation & Housing	<u>Includes battery insulation</u>		<u>3,500.00</u>
Separator	<u>None</u>		<u>-</u>
Line Pipe			<u>500.00</u>
Fittings, Tank Battery & Flowlines	<u>Includes circ. pump and installation of heat cables & thermostatic controls</u>		<u>7,000.00</u>
Meters and/or Meter Run	<u>None</u>		<u>-</u>

CARDINAL PETROLEUM COMPANY - ESTIMATED WELL COST

Page -3-

WELL NAME KADRMAS #5-15

		<u>DRY HOLE</u>	<u>COMPLETED WELL</u>
<u>COMPLETION COSTS - Cont'd</u>			
Contract Labor	<u>Erect pumping unit</u>		\$ 500.00
Lease Road	<u>Grading & Scoria</u>		1,500.00
Salt Water Disposal Pit			300.00
Tank Grade, Gravel	<u>Scoria</u>		100.00
Trucking	<u>Misc.</u>		500.00
Welding			300.00
Special Tools, Bits, etc	<u>None</u>		-
Electrification			500.00
Engineering Service			300.00
Production Foreman Service			800.00
Other			300.00
TOTAL ESTIMATED COMPLETED WELL COST			<u>\$166,178.00</u>

CARDINAL PETROLEUM COMPANY
BILLINGS, MONTANA

Prepared by Donald K. Roberts

CASE NO. 1057
July 15, 1971

JUL 15 1971 1057
Entered by 2
Identified by CARDINAL
OK

MINERAL OWNERSHIP

W $\frac{1}{2}$ Section 15, Township 140 North, Range 96 West
Stark County, North Dakota

NW $\frac{1}{4}$ Section 15

Robert and Angeline Kadrmas

100.0000%

SW $\frac{1}{4}$ Section 15

Frank Veverka, Jr.	25.0000%
Joe Kralicek, Jr. and Josephine Kralicek, as joint tenants	25.0000%
White Eagle Oil Company (Helmerich & Payne)	23.4375%
San Jacinto Petroleum Corporation (Continental Oil Company)	4.6875%
Virginia C. Moseley, formerly Virginia C. Dick	2.8125%
Virginia C. Moseley, formerly Virginia C. Dick, and Edward H. Green, Trustees	1.8750%
Huston Huffman	4.6875%
North American Royalties, Inc.	12.5000%

WORKING INTEREST
W $\frac{1}{2}$ Section 15, Township 140 North, Range 96 West
Stark County, North Dakota

NW $\frac{1}{4}$ Section 15

Cardinal Petroleum Company	100.000000%
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SW $\frac{1}{4}$ Section 15

Louis W. Hill, Jr.	27.343750%
North American Royalties, Inc.	39.843750%
Continental Oil Company	4.687500%
Helmerich & Payne	23.437500%
Huston Huffman	4.687500%

W $\frac{1}{2}$ Section 15

Cardinal Petroleum Company	50.000000%
Louis W. Hill, Jr.	13.671875%
North American Royalties, Inc.	19.921875%
Continental Oil Company	2.343750%
Helmerich & Payne	11.718750%
Huston Huffman	2.343750%

A circular library stamp from the N. Dak. Geological Survey. The stamp features a clock face with numbers 1 through 24. The word "RECEIVED" is printed in large, bold, capital letters across the center. Below it, "N. Dak. Geological Survey" is written in a smaller font. The date "JUN 1971" is stamped above the word "RECEIVED". An arrow points to the number 12 on the clock face. The stamp is slightly tilted and has a textured, aged appearance.

TELEPHONE
701-223-8585

June 21, 1971

IN REPLY
REFER TO

ALL 1017

Gentlemen:

The permitted well for the spacing unit consisting of the W $\frac{1}{2}$ of Section 15, Township 140 North, Range 96 West is in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 15. An approved permit to drill this well designating the W $\frac{1}{2}$ of Section 15 as the spacing unit was obtained by Cardinal on August 3, 1970, being Permit No. 4956-33-089-00106. It is requested that Cardinal Petroleum Company be named the operator of all activities conducted in the spacing unit. It is further requested that this matter be heard at the next regular meeting of the Industrial Commission on July 15, 1971, at which time Cardinal Petroleum Company will submit evidence in support of this request.

Yours very truly,

FLECK, MATHER, STRUTZ & MAYER

RUSSELL R. MATHER

RRM. in

Continental Oil Company
Helmerick & Payne
Huston Huffman