Case 248 -Amerada Petr. Corp. - ex. to well spacing in Knowles Pool, etc.

Case No.

248

Application, Transcript, Small Exhibits, Etc.

LEGAL NOTICE
January 9, 1951
NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following case and notice to the public:

CASE 248

In the matter of the application of Amerada Petroleum Corporation for an exception to the spacing of wells in the Knowles Pool and authority for applicant to drill a well in the center of the NE¼NW¼ of Section 2, Township 17 south, Range 38 east, Lea County, New Mexico, and to determine the allowable for said well and the acreage attributable thereto as the proration unit therefor.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 3, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

SEAL

R. R. SPURRIER,
Secretary

LEGAL NOTICE
January 9, 1951
NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

STATE OF NEW MEXICO TO:

All interested parties:

The Oil Conservation Commission of the State of New Mexico hereby gives public notice that hearings will be held by the Commission pursuant to Rule 503 of the Rules and Regulations of this Commission on the dates hereinafter set forth for the purpose of setting the allowable production of the oil and gas for the State of New Mexico for the proration period following the date of each hearing. All such hearings shall be held in the office of the Oil Conservation Commission at Santa Fe, New Mexico, commencing at 10:00 A. M. and shall be on the following dates:

January 25, 1951
February 20, 1951
March 20, 1951
April 24, 1951
May 22, 1951
June 21, 1951
July 24, 1951
August 21, 1951
September 20, 1951
October 23, 1951
November 20, 1951
December 20, 1951

DATED this 2nd day of January, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

SEAL

R. R. SPURRIER,
Secretary

LEGAL NOTICE
January 9, 1951
NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

CASE 249

In the matter of the application of Amerada Petroleum Corporation for a temporary order establishing proration units and uniform spacing of wells for the Bagley-Siluro-Devonian pool, comprising SE¼ Sec. 34; S½ Sec. 35; SW¼ Sec. 36, all in Township 11 south, Range 33 east, and W½ Sec. 1; all Sec. 2; E½ Sec. 3; E½ Sec. 10; all Sec. 11; W½ Sec. 12, all in Township 12 south, Range 33 east, Lea County, New Mexico.

CASE 250

In the matter of the application of Tidewater Associated Oil Company for the inclusion of its State "S" No. 3 well, located in the N½N½ Section 15, Township 21 south, Range 37 east, Lea County, New Mexico, within a recognized pool upon the basis of evidence to be submitted.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 5, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

SEAL

R. R. SPURRIER,
Secretary

LEGAL NOTICE
January 9, 1951
NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

The United States of America
c/o The United States
Geological Survey
P. O. Box 997
Roswell, New Mexico;
W. E. Mathers
Caprock, New Mexico;
Susie Lee Mathers
Caprock, New Mexico

and all other parties having an interest in the matter.

CASE 251

In the matter of the application of Amerada Petroleum Corporation for the pooling of separately owned royalty or mineral interest in the E½ of the NE¼ of Section 3, in Township 12 south, Range 33 east, within a proposed proration unit in the Bagley-Siluro-Devonian pool, in Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 5, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

SEAL

R. R. SPURRIER,
Secretary

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
CONSERVATION COMMISSION

State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following case and notice to the public:

CASE 218

In the matter of the application of Amerada Petroleum Corporation for an exception to the spacing of wells in the Knowles Pool and authority for applicant to drill a well in the center of the NE¼ NW¼ of Section 2, Township 17 south, Range 38 east, Lea County, New Mexico, and to determine the allowable for said well and the acreage attributable thereto as the proration unit therefor.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 3, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
(SEAL) R. R. SPURRIER,
Secretary.

Pub.: Jan. 9, 1951.

Affidavit of Publication

State of New Mexico }
County of Santa Fe } *ss.*

I, Will Harrison, being first duly sworn, declare and say that I am the (Business Manager) (Editor) of the Santa Fe New Mexican, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper once each week for one time consecutive weeks, and on the same day of each week in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement, for one time weeks consecutively, the first publication being on the 9th day of January, 19 51, and the last publication on the day of , 19 ; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.

Will Harrison
Editor-Manager

Subscribed and sworn to before me this 9th day of January, A.D., 1951

Anna K. Ormsbee
Notary Public

My Commission expires
June 14, 1953

PUBLISHER'S BILL

34 lines, one time at $ 3.40

lines, times, $

Tax $

Total . . . . . $

Received payment,

By

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea

I, Robert L. Summers
Publisher

Of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a supplement thereof for a period of One time weeks.

beginning with the issue dated January 9, 1951

and ending with the issue dated January 9, 1951

Robert L. Summers
Publisher.

Sworn and subscribed to before me this 13 day of January, 1953.

Betty Bird
Notary Public.

My commission expires January 25, 1953
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
January 9, 1951
NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:
All named parties in the following case and notice to the public:

CASE 248

In the matter of the application of Amorada Petroleum Corporation for an exception to the spacing of wells in the Knowles Pool and authority for applicant to drill a well in the center of the NE¼NW¼ of Section 2, Township 17 south, Range 38 east, Lea County, New Mexico, and to determine the allowable for said well and the acreage attributable thereto as the proration unit therefor.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 3, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION
COMMISSION

SEAL

R. R. SPURRIER,
Secretary

File
Case 248

Box 1424
Hobbs, New Mexico

January 22,1951

Mr. R. R. Spurrier, Secretary
Oil Conservation Commission
Santa Fe, New Mexico

Dear Sir:

The undersigned royalty owners to the NW/4 of Section 2, T. 17 S., R. 38 E., Lea County, New Mexico, wish to respectively ask your attention to our position in the matter of Case 248, to be heard at public hearing January 25, 1951.

It is our contention that the 80 acres attributable to a well drilled in the NE/4 NW/4 of Section 2, as proposed by Amerada Petroleum Corporation, should consist of the N/2 of the NW/4 of this tract. As the Amerada, Cooper #1 well in the NW/4 NW/4 of Section 2 encountered the Devonian formation above the water level for the field, the 40 acres at this location should be included in the proration unit, even though the well was not completed as a producer.

We would strongly object to any other proration unit for the proposed well than as stated above. We will appreciate your consideration in this matter.

Very truly yours,

Luther Cooper

Mrs. Inez R. Rhees Box 1427 Hobbs

J. Hiram Moore Box 1424 Hobbs,

Charles R. Turner Box 1516
Hobbs, N.M.

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following case and notice to the public:

Case 248

In the matter of the application of Amerada Petroleum Corporation for an exception to the spacing of wells in the Knowles Pool and authority for applicant to drill a well in the center of the NE¼NW¼ of Section 2, Township 17 south, Range 38 east, Lea County, New Mexico, and to determine the allowable for said well and the acreage attributable thereto as the proration unit therefor.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 3, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier

R. R. SPURRIER, SECRETARY

GEORGE L. REESE, JR.
DON G. McCORMICK
THOMAS E. LUSK

EUGENE C. PAINE

REESE, McCORMICK AND LUSK
ATTORNEYS AT LAW
BUJAC BUILDING
CARLSBAD, NEW MEXICO

TELEPHONES
1150
1151

27 January, 1951

Mr. R. R. Spurrier
Oil Conservation Commission
Santa Fe, New Mexico

Dear Dick:

After the hearing on 25 January, George Graham and I discussed the orders to be drafted and I agreed that I would draft Orders in Cases No. 248 and 250. Enclosed is proposed order in Case No. 250 relating to extension of the Brunson Pool. I checked the previous orders extending the Brunson Pool, and so far as I could determine only the SW/4 of Section 15 has heretofore been in the pool. Therefore, the order as drafted and enclosed adds the ~~SE/4~~ and the N/2 of Section 15, Township 21 South, Range 37 East to the pool. 5/2 15 e/f in Case 250

In regard to Case No. 248, which is the application of Amerada Petroleum Corporation for an exception to the spacing order in the Knowles Pool, I have drafted two alternative orders. One of these orders provides for an allowable of 1/2 of the normal 80 acre allowable, while the other provides for an allowable of 5/8ths of the normal 80 acre allowable.

You will note that in neither order do we recognize the principle that an allowable may be predicated on the drainage of oil from lands outside the proration unit. As I recall the evidence about 12 acres of the reservoir was supposed to underlie the NW/4 NW/4 and 40 acres to underlie the NE/4 NW/4 of Section 2-17-38. Therefore, I think it would be reasonable if we should allow the well to produce 5/8ths of the normal 80 acre unit allowable.

It is my personal recommendation that you adopt the Order providing for the 5/8ths of the normal allowable. However, if you feel inclined to permit only 1/2 of the normal allowable, I feel that the action of the Commission would not be subject to attack.

Very truly yours,

Don G. McCormick

DON G. McCORMICK

CC: Hon. George Graham
Mr. Guy Shepard, Commissioner
Gov. Edwin L. Mechem

DGM:mjt

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN EXCEPTION TO THE SPACING OF PATTERN HERETOFORE ESTABLISHED IN THE KNOWLES POOL.

CASE NO. 248
ORDER NO. R-52

O R D E R

This case came on for hearing on 26 January, 1951, at Santa Fe, New Mexico, and the Commission having heard the evidence and the argument of counsel, and being duly advised finds:

1. It has jurisdiction of this case ~~of~~ of the parties interested therein, due notice of this hearing having been given.

2. Pursuant to Orders R-23 and R-40, heretofore entered, an 80 acre spacing pattern has been established for the Knowles Pool and proration units established therein. One of said proration units so established embraces the N/2 NW/4, Section 2, Township 17 South, Range 38 East, Lea County, New Mexico.

3. Amerada Petroleum Corporation has heretofore drilled and plugged on 16 October, 1950, a dry hole drilled to the Devonian formation and located in the center of the NW/4 NW/4 of Section 2, Township 17 South, Range 38 East.

4. The structure of the Knowles Pool is such that a well drilled in the center of the NE/4 NW/4 of said section would likely be productive of oil from the common reservoir.

5. In order to meet changed conditions, preclude inequities, and preserve correlative rights, applicants should be granted an exception from Orders R-23 and R-40, so as to permit the drilling of a well in the NE/4 NW/4 of said Section 2, and if said well is productive, applicants should be granted an ~~allowable equal to 1/2 of the allowable which may be set from time to time for a normal proration unit of 80 acres in said pool.~~ normal 40 acre unit allowable with approval adjusted

IT IS, THEREFORE, ORDERED:

1. Amerada Petroleum Corporation is hereby granted permission to drill a well to the Devonian formation in the center of the NE/4 NW/4 of Section 2, Township 17 South, Range 38 East.

2. If said well be completed as a producing well, it shall have ~~an allowable equal to 1/2 of the allowable which may be established from time to time for a normal 80 acre proration unit~~ a normal 40 acre unit in the Knowles Pool.

3. This Order should be considered as an exception to Orders R-23 and R-48, but shall not otherwise affect said Orders.

DONE at Santa Fe, New Mexico, this 1 day of January, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

By _____

By _____

By _____

February 6, 1951

Mr. Booth Kellough
Amerada Petroleum Corporation
Tulsa, Oklahoma

Dear Mr. Kellough:

We are enclosing signed copy of Order No. R-52 in the matter of the application of Amerada for an exception to the spacing pattern heretofore established in the Knowles pool (Case No. 248).

Very truly yours,

Secretary and Director

bpw

OIL CONSERVATION COMMISSION HEARING
SANTA FE, NEW MEXICO - JANUARY 25, 1951

NAME	ADDRESS	REPRESENTING
A.M. Swarthout	Lovington, N.M.	W.E. Mathers, Caprock, N.M.
Glenn Staley	Hobbs N.M.	N.M. Oil & Gas Eng Com.
LEWIS H. BOND, JR.	FT. WORTH, TEXAS	STANOLIND OIL & GAS CO.
Bob DEWEY	MIDLAND, TEXAS	HUMBLE OIL & REFG. CO.
E.E. TUCKER	Midland, Texas	Tide Water Assoc Oil Co
J. B Holloway	Houston	" " " "
R.E. LeBlond	Midland Tex	" " " "
[illegible]	Roswell N.M.	Henry Dow & Knight
Booth Kellough	Tulsa Okla	Amerada Pet Corp
Harry J Page	Tulsa, Okla	Amerada Pet Corp
[illegible]	Dorit-J	"
John A Seeder	Midland Tex	Amerada Pet Corp
Robert E Murphy	Roswell, N.M.	Magnolia Pet Co
[illegible]	Tulsa Okla	Mid Continent Pet Corp
G.C. Bryant	Houston Texas	The Ohio Oil Co.
[illegible]	Midland, Texas	
J.C. EDWARDS	HOUSTON TEXAS	THE TEXAS CO.
~~[illegible]~~	~~Midland~~	~~Magnolia Pet. Co.~~
M.T. Smith	Midland Tex	Shell Oil Co.
Wm B. King	Salt Lake City, Utah	Phillips Petroleum Co
Frank D. Gardner	Midland, Tex.	Sinclair Oil & Gas
M.H. SOYSTER	HOBBS N. MEX	U.S.G.S
FOSTER MORRELL	ROSWELL N. MEX	U.S.G.S.
Betty Fretwell	Santa Fe	Oil Commission
[illegible]	Artesia NM	NM Bur of Mines
George Graham	Santa Fe.	Oil Cons.
Ben McCormick	Carlsbad	"

OCC
Sta Fe. Jan 25, 1951

Name -	Address	Representing
John D. Blum	Amarillo, Tex	Phillips Pet. Co.
R. A. Hamblet	" "	" " "
Tom B. King	Salt Lake City, Utah	" "
M. T. Smith	Midland Tex	Shell Oil Co.
~~Frank D. Gardner~~	" "	Sinclair O. & G. Co.
W. L. Ambrose	" "	Cities Service Oil Co.
Shep Allen	Corpus Christi, Tex	Cities Service Oil Co
J. Don WIET	MIDLAND, TEX	~~Tex. Pac.~~ Coal & Oil Co
R. L. "Bob" Denton	"	Magnolia Pet. Co
W. Ed McKellar Jr	Dallas	" " "
L. S. Salmikov	N Y	Standard Oil Co
C. E. REISTLE JR.	HOUSTON	HUMBLE OIL & REF. CO
J W House	Midland	Humble Oil
WARREN L. TAYLOR	Jal, N.M.	El Paso Nat'l Gas
William Randolph	Hobbs, N.M.	Continental Oil Co
A. R. Porter, Jr	" "	Oil Commission
Elvis A. Utt	Santa Fe	" "
Justin Newman	Artesia, N.M.	" "
Roy Yarbrough	Artesia	" "
E. E. Merkel, Jr.	Ft. Worth, Texas	Gulf Oil Corp
T. E. L. Batts	" "	Gulf Oil Corporation
R. Stephenson	Hobbs	Gulf Oil Corp.
R. S. Blymyer	"	Gulf OCC
Jack M. Campbell	Roswell	Texas-Pacific Coal & Oil Co.
Harry E. Lawrence Jr	"	New Mex Oil & Gas Assn
John C. Major	Amarillo	Oil Conservation Comm of Texas
C. V. Millikan	Tulsa	Amerada Petroleum Corp
R. S. Christie	Ft Worth	

Ex G

KNOWLES POOL - LEA COUNTY, NEW MEXICO

WELL & NO.	TOP DEVONIAN	TOP DEVONIAN PAY	DEVONIAN CAP	D E V O N I A N C O M P L E T I O N	
HAMILTON	12451 (-8744)	12467 (-8760)	16'	TD 12656 (-8949)	PB 12600 (-8893)
EAVES #1	12336 (-8624)	12357 (-8645)	21'	TD 12575 (-8863)	PB 12573 (-8861)
ROSE #1	12542 (-8837)	12568 (-8863	26'	TD 12607 (-8902)	No PB
EAVES #1-A	12477 (-8765)	12481 (-8769)	4'	TD 12585 (-8873)	No PB
EAVES #2	12616 (-8898)	12628 (-8910)	12'	TD 12706 (-8988)	ON DST
COOPER #1	12597 (-8885)	12602 (-8890)	5'	TD 12620 (-8908)	No PB

5-1/2" Csg. @ 12518, PB 12600 (-8893)
Trt. open hole 12518-12600 with 2000 gal. acid
IP: F 935 BO 24 hrs. thru 1/2" ch., GOR 180-1
Grav. 46.9 Corr.
Spud: 10-4-48 Compl: 5-4-49

7-5/8" Csg. @ 12574
Perf. 12550-573
Trt. 2000 gal. acid thru perf. 12550-573
Perf. 12532-550
Trt. with 2000 gal. acid thru perf. 12532-573
IP: F 883 BO 24 hrs. thru 3/4" ch. GOR 148-1
Grav. 47.9 Corr.
Spud: 5-27-49 Compl: 10-29-49

Trt. open hole 12596-12607 with 2500 gals. acid (5-1/2" Csg. @ 12596)
Perf. Csg. 12560-12596
Trt. with 500 gals. acid
IP: F thru perf. & open hole 532 BOPD thru 1/2" ch. (Based on 16 hr test) GOR 132-1, Grav. 47.1 Corr.
Spud: 12-26-48 Compl: 10-3-49

5-1/2" Csg. @ 12556
Trt. open hole 12556-12585 with 500 gal. acid
IP: F 1501 BO 24 hrs. thru 1/2" ch., GOR 175-1,
Grav. 48.0 Corr.
Spud: 11-16-49 Compl: 4-19-50

Spud: 7-15-50 Compl: 1-24-51 DST 12640- 706
Op 4 hours- Rec 7462 salt Water N. S

5-1/2" Csg. @ 12598
Trt. open hole 12598-12620 with 1000 gal. acid
Perf. 5-1/2" csg/ 12593-598 and open hole 12598-12617 - Trt. perf. & Open hole with 2000 gals. acid - Spud: 4-23-50 Compl: 10-16-50
D & A Swab 24 Bbl O plus 269 Bbl water- 24 Hrs.

FIELD -(WATER MINUS 8908)

STATE OF NEW MEXICO
OFFICE OF STATE GEOLOGIST
SANTA FE, NEW MEXICO

February 16, 1951

C

To: Oil Conservation Commission
Hobbs
Artesia
Aztec

Case 248 (part)

O

P

We are enclosing herewith copy of transcript of hearing, January 25, 1951.

Y

Oil Conservation Commission

Secretary and Director

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 248
ORDER no. R-52

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN EXCEPTION TO THE SPACING PATTERN HERETOFORE ESTABLISHED IN THE KNOWLES POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This case came on for hearing on 25 January, 1951, at Santa Fe, New Mexico, and the Commission having heard the evidence and the argument of counsel, and being duly advised finds:

1. It has jurisdiction of this case and of the parties interested therein, due notice of this hearing having been given.

2. Pursuant to Orders R-23 and R-40, heretofore entered, an 80-acre spacing pattern has been established for the Knowles pool and proration units established therein. One of said proration units so established embraces the N/2 NW/4 section 2, T.17 S, R. 38 E, Lea County, New Mexico.

3. Amerada Petroleum Corporation has heretofore drilled and plugged on 16 October, 1950 a dry hole drilled to the Devonian formation and located in the center of the NW/4 NW/4 section 2, T.17 S, R. 38 E.

4. The structure of the Knowles pool is such that a well drilled in the center of the NE/4 NW/4 of said section would likely be productive of oil from the common reservoir.

5. In order to meet changed conditions, preclude inequities, and preserve correlative rights, applicants should be granted an exception from Orders R-23 and R-40 so as to permit the drilling of a well in the NE/4 NW/4 of said section 2, and if said well is productive applicants should be granted a normal 40 acre unit allowable with deep pool adaptation.

IT IS THEREFORE ORDERED:

1. Amerada Petroleum Corporat on is hereby granted permission to drill a well to the Devonian formation in the center of the NE/4 NW/4 section 2 T 17 S R 38 E.

2. If said well be completed as a producing well it shall have a normal 40-acre unit allowable with deep pool adaptation.

Case No 248
Order No R 52 - 2

3. This order should be considered as an exception to Orders R-23 and R-40, but shall not otherwise affect said orders.

DONE at Santa Fe New Mexico this 29 day of January 1951

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L Mechem

EDWIN L. MECHEM Chairman

Guy Shepard

GUY SHEPARD, Member

R. R. Spurrier

R. R. SPURRIER, Secretary

BK:MGH 12-28-50 (8)

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR THE ESTABLISHMENT OF PRORATION UNITS AND UNIFORM SPACING OF WELLS IN THE KNOWLES POOL IN LEA COUNTY, NEW MEXICO

CASE NO. 204

A P P L I C A T I O N

COMES NOW Amerada Petroleum Corporation and alleges and states:

1. That this Commission has heretofore entered its order establishing 80-acre proration units and uniform spacing of wells in the Knowles Pool, Lea County, New Mexico, wherein the N/2 NW/4 of Section 2, T-17-S, R-38-E, Lea County, New Mexico, constituted a single proration unit with the authorized well location to be in the center of the NW/4 NW/4 of said Section 2.

2. That Applicant has heretofore drilled, plugged and abandoned on October 16, 1950, a dry hole drilled to the Devonian formation in said pool at the location prescribed by the spacing order referred to.

3. That in order to prevent waste and protect the correlative rights of all parties in the Knowles Pool and so that all royalty owners may recover their just and equitable share of the oil and gas in said common reservoir, Applicant should be given an exception to said spacing order authorizing it to drill a well into said common source of supply located in the center of NE/4 NW/4 Section 2, T-17-S, R-38-E, and the allowable for said well and the acreage attributable thereto as the proration unit therefor be determined by the Commission.

4. Applicant believes and therefore alleges that a well drilled in the Knowles Pool at the location herein requested will produce oil and gas in commercial quantities.

WHEREFORE, Applicant respectfully requests that this application be set for hearing and that notice be given as required by law, and that upon the conclusion of said hearing the Commission enter its order granting an exception to the spacing order referred to above and authorizing Applicant to drill a well to the producing formation of the Knowles Pool in the center of NE/4 NW/4 Section 2, T-17-S, R-38-E, and determining the allowable for said well and the acreage attributable thereto as the proration unit as may be just and proper for the prevention of waste and the protection of the correlative rights of all interested parties, and for such further relief to which Applicant may be entitled.

Dated this 29th day of December, 1950.

Seth & Montgomery

By _____

Harry D. Page and Booth Kellough

By _____

Attorneys for
AMERADA PETROLEUM CORPORATION

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF HEARING
January 25, 1951

ORIGINAL

E. E. GREESIN
COURT REPORTER
UNITED STATES COURT HOUSE
TELEPHONE 3-0672
ALBUQUERQUE, NEW MEXICO

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

- - - - - - - - -

PROCEEDINGS

The following matters came on for consideration before the Oil Conservation Commission of the State of New Mexico, pursuant to legal notice at a hearing held on January 25, 1951, at 10:00 a.m. at Santa Fe, New Mexico.

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO TO:

All interested parties:

The Oil Conservation Commission of the State of New Mexico hereby gives public notice that hearings will be held by the Commission pursuant to Rule 503 of the Rules and Regulations of this Commission on the dates hereinafter set forth for the purpose of setting the allowable production of the oil and gas for the State of New Mexico for the proration period following the date of each hearing. All such hearings shall be held in the office of the Oil Conservation Commission at Santa Fe, New Mexico, commencing at 10:00 A.M. and shall be on the following dates:

January 25, 1951
February 20, 1951
March 20, 1951
April 24, 1951
May 22, 1951
June 21, 1951
July 24, 1951
August 21, 1951
September 20, 1951
October 23, 1951
November 20, 1951
December 20, 1951

DATED this 2nd day of January 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the capitol.

STATE OF NEW MEXICO TO:

All named parties in the following case and notice to the public:

CASE 248

In the matter of the application of Amerada Petroleum Corporation for an exception to the spacing of wells in the Knowles Pool

and authority for applicant to drill a well in the center of the NE¼NW¼ of Section 2, Township 17 south, Range 38 east, Lea County, New Mexico, and to determine the allowable for said well and the acreage attributable thereto as the proration unit therefor.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 3, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

Case 249

In the matter of the application of Amerada Petroleum Corporation for a temporary order establishing proration units and

uniform spacing of wells for the Bagley Silure-Devonian pool, comprising SE¼ Sec. 34: S½ Sec. 35; SW¼ Sec. 36, all in Township 11; W½ Sec. 12, all in Township 12 south, Range 33 east, Lea County, New Mexico.

Case 250

In the matter of the application of Tidewater Associated Oil Company for the inclusion of its State "S" No. 3 well, located in the N½N½ Section 15, Township 21 south, Range 37 east, Lea County, New Mexico, within a recognized pool upon the basis of evidence to be submitted.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 5, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

SEAL

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

The United States of America
c/o The United States Geological Survey
P. O. Box 997
Roswell, New Mexico;
W. E. Mathers
Caprock, New Mexico;
Susie Lee Mathers
Caprock, New Mexico
and all other parties having an
interest in the matter.

Case 251

In the matter of the application of Amerada Petroleum Corporation for the pooling of separately owned royalty or mineral interest in the E½ of the NE¼ of Section 3, in Township 12 south, Range 33 east, within a proposed proration unit in the Bagley-Silure-Devonian pool, in Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on January 5, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held January 25, 1951, beginning at 10:00 o'clock on that day in the City of Santa Fe, New Mexico, in the Capitol.

STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

Case 252

In the matter of application of Magnolia Petroleum Company, for an order approving the proposed Four Lakes Unit Agreement embracing approximately 3200 acres of state-owned lands described as:

Township 10 south, Range 34 east, N.M.P.M.

S/2 Section 10; S/2 Section 11:
All, Sections 14, 15, 22 and 23,
in the Four Lakes Area, Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, on January 25, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

BEFORE:
Hon. Edmund R. Meachem, Governor
Hon. Guy Shepard, Land Commissioner
Hon. R. R. Spurrier, Secretary

REGISTER:

A. M. Swarthout
Lovington, New Mexico
W. e. Mathers

Glenn Staley
Hobbs, New Mexico
New Mexico Oil Conservation Commission

Lewis H. Bond, Jr.
Ft Worth , Texas
Stanolind Oil & Gas Co.

Bob Dewey
Midland, Texas
Humble Oil & Refining Company

E. E. Tucker
Midland, Texas
Tide Water Association Oil Company

J. B. Holloway
Houston, Texas
Tide Water Association Oil Company

R. E. LeBlond
Midland, Texas
Tide Water Association Oil Company

Clarence E. Hinkle
Roswell, New Mexico
Herrey, Dow and Hinkle

Booth Kellough
Tulsa, Oklahoma
Amerada Petroleum Corporation

Harry I. Page
Tulsa, Oklahoma
Amerada Petroleum Corporation

J. O. Seth
Santa Fe, New Mexico
Amerada Petroleum Corporation

John A. Veeder
Midland, Texas
Amerada Petroleum Corporation

Robert E. Murphy
Roswell, New Mexico
Magnolia Petroleum Company

J. H. Crocker
Tulsa, Oklahoma
MidContinental Petroleum Corporation

G. R. Bryant
Houston, Texas
The Texas Company

Wm. E. Bates
Midland, Texas
The Texas Company
J. C. Edwards
Houston, Texas
The Texas Company

M. T. Smith
Midland, Texas
Shell Oil Company

Wm. B. King
Salt Lake City, Utah
Phillips Petroleum Company

Frank D. Gardner
Midland, Texas
Sinclair Oil & Gas

M. H. Soyster
Hobbs, New Mexico
U. S. G. S.

Foster Morrell
Roswell, New Mexico
U. S. G. S.

Betty Wistrand
Santa Fe, New Mexico
Oil Commission

E. E. Kinney
Artesia, New Mexico
New Mexico Bureau of Mines

George Graham
Santa Fe, New Mexico
Oil Conservation Commission

Dan McCormick
Carlsbad, New Mexico
Oil Conservation Commission

John D. Munn
Amarillo, Texas
Phillips Petroleum Co.

W. B. Hamilton
Amarillo, Texas
Phillips Petroleum Co.

W. L. Ambrose
Midland, Texas
Cities Service Oil Company

M. T. Smith
Midland, Texas
Shell Oil Company

Shep Allen
Corpus Christi, Texas
Cities Oil Service Company

J. Don Wiet
Midland, Texas
Phillips Petroleum Company

R. L. "Bob" Denton
Midland, Texas
Magnolia Petroleum Company

W. Ed McKellar, Jr.
Dallas, Texas
Magnolia Petroleum Company

I. S. Salnikov
New York
Standard Oil Company

C. E. Reistle, Jr.
Houston, Texas
Humble Oil & Refining Company

J. W. House,
Midland, Texas
Humble Oil Company

Warren L. Taylor
Jal, New Mexico
El Paso Natural Gas

William Randolph
Hobbs, New Mexico
Continental Oil Company

A. L. Porter, Jr.
Hobbs, New Mexico
Oil Conservation Commission

Elvis A. Utz
Santa Fe, New Mexico
Oil Conservation Commission

Justin Newman
Artesia, New Mexico
Oil Conservation Commission

Roy Yarbrough
Hobbs, New Mexico
Oil Conservation Commission

E. E. Merkt, Jr.
Ft Worth, Texas
Gulf Oil Corporation

R.El Batts
Ft Worth, Texas
Gulf Oil Corporation

R. G. McPherson
Hobbs, New Mexico
Gulf Oil Corporation

R. S. Blymn
Hobbs, New Mexico
N. M. Oil Conservation Commission

Jack M. Campbell
Roswell, New Mexico
Texas-Pacific Coal & Oil Company

Charles E. Lovelace, Jr.
Roswell, New Mexico
N. M. Oil & Gas Association

John C. Major
Amarillo, Texas
Oil Development of Texas

C. V. Millikan
Tulsa, Oklahoma
Amerada Petroleum Corporation

R. S. Christie
Ft Worth, Texas
Amerada Petroleum Corporation

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MR. SHEPARD: The meeting will come to order. At this time, I want to introduce our new member and chairman, the Governor of New Mexico, Governor Meachem. (Applause)

GOVERNOR MEACHEM: While this is an official meeting of the Oil Conservation Commission, primarily for me it is an educational program. I am here to find out all that I can about it. That is the primary purpose. I hope to be able to attend all the meetings possible of the Oil Conservation Commission, and to assist in every way that I can in its functions; and to see that the program is carried out to the fullest extent. I will appreciate any assistance or any help any of you can give. Thank you.

MR. SHEPARD: Thank you, Governor. I am sure he is one to be here with us at all times, and we will have a full commission and probably can expedite matters. At this time, I am going to just have a little informal meeting here. John Kelly, do you have anything to say on behalf of the industry?

MR. KELLY: Yes. Governor Meachem, our new chairman, our old commissioner, the oldest one now on our commission, Commissioner Shepard, and Mr. Spurrier: We, of the industry, Governor, would like to offer you aid in the problems that come up to confront the industry and the State. We have been rather proud of the

industry and the Commission working together over the last sixteen years. The Commission was organized in 1935 and will be sixteen years old this year. During that time only one decision of this Commission has ever gotten to the District Court and has been questioned. We feel that shows close co-operation between the industry and the Commission. We are also rather proud of our slogan in the industry, Petroleum is Progress. We hope during the next two years, with your guidance and assistance, the petroleum industry will be more progressive.

MR. SHEPARD: Thank you, John. At this time, we will take up the allowable. Mr. McCormick.

MR. McCORMICK: Mr. Utz and Mr. Kinney be sworn. (Utz and Kinney sworn).

ELVIS UTZ,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By Mr. McCormick:

Q. Will you state your name and official position.

A. Elvis A. Utz, Engineer with the Oil Conservation Commission.

Q. Have you made a study of the demand for oil of the State of New Mexico for February 1951?

A. Yes, sir, I have.

Q. Do you have the estimate of the market demand that the Bureau of Mines has made?

A. Yes, I have. It is 138,000 barrels for the month of February.

Q. That is per day?

A. Per day.

Q. And how does it compare with the estimate, the previous estimate?

A. It is the same as last month's estimate.

Q. How has it been running for the past several months? Has there been any deviation?

A. Yes, it has gone down. I can tell you precisely. It was 14 - I have the stuff here backwards - in October it was 155,000; November 150,000; and for December 142,000; last month 138,000; this month 138,000.

Q. I will ask you if you have received and compiled the nominations of purchasers.

A. Yes, sir, I have.

Q. What are the total nominations?

A. The total nominations are 134,081 barrels per day.

Q. And how does that compare with the nominations for the previous month?

A. There is an increase of 1,450 barrels, or 1 per cent.

Q. In your opinion, what would be the reasonable market demand for oil for the entire state for February 1951?

A. In my opinion, 144,883 barrels per day.

Q. And how much of this demand can be met by the unallocated

pools of northwestern New Mexico?

A. Approximately 144,083.

Q. No, I don't believe you understand me. How much demand can be met by the unallocated pools of northwestern New Mexico?

A. Approximately 800 barrels per day.

Q. And how much of southeastern New Mexico?

A. 144,083.

Q. Is the potential producing capacity of oil wells in the southeastern counties of the state greater than that figure you just gave?

A. Yes, it is, I believe.

Q. In order to prevent waste, is it necessary in your opinion for the pools of southeastern New Mexico to be limited?

A. Yes, sir, I do.

Q. In your opinion, can the pools of southeastern New Mexico produce 144,083 barrels without committing waste?

A. Yes, they can.

Q. And what do you recommend then as the allowable production of oil per day for the pools of southeastern New Mexico?

A. 144,083 barrels per day are a normal unit allowable of 48.

Q. How should this production be distributed, in your opinion?

A. According to the present rules and regulations of the Commission.

MR. MC CORMICK: Does anyone else - do you have anything else you would like to tell the Commission?

A. Nothing other than since the purchasers have been asked to get their nominations in early, I would like to compliment them. This month I only had to make one phone call. They are coming in much better.

MR. McCORMICK: Are there any questions anyone has concerning the allowable?

Mr. UTZ: Also, if anyone is interested in any charts of last year's production, nominations, Bureau of Mines estimates, etc., I would be glad to show them my charts or mail them some.

(Witness excused)

ED KINNEY,

HAVING BEEN FIRST DULY SWORN, TESTIFIED AS FOLLOWS:

DIRECT EXAMINATION

By Mr. McCormick:

Q. Your name is Ed Kinney?

A. Yes, sir.

Q. What official position do you hold?

A. Petroleum Engineer, New Mexico Bureau of Mines.

Q. Have you, for the past several months, been making a continuing study of market demand for oil in the State of New Mexico?

A. I have.

Q. Just tell the Commission what the present situation is and market demand and also advise them about storage.

A. The market demand in the state of New Mexico continues in

excess of supply, and withdrawals from storage continue, in the last five weeks at an increasing rate.

Q. Do you have any recommendation to make about the normal unit allowable for the month of February?

A. It would be my recommendation that the allowable be raised to 50 barrels to help try to take up a little of the slack between supply and demand.

Q. And would you elaborate on that as to why you think it would be advisable?

A. Because of the heavy withdrawals from storage. There ultimately would be an end to the amount that can be taken out of storage.

Q. Do you have any figure on the amount of withdrawals from storage in the last year?

A. I don't have any figures, but around 1,000,000 barrels have gone out of storage in the last year.

MR. McCORMICK: Does anyone have any questions of Mr. Kinney? Does the Commission have any questions? That will be all, that concludes the allowable hearing.

MR. SHEPARD: Does anyone have anything to say? Mr. Stoley?

MR. STOLEY: No, sir.

MR. SHEPARD: Mr. Morrell?

Mr. MORRELL: No, sir.

MR. SHEPARD: We will take up the next case. By special

request, we will take up Case 252. Are you ready, Mr. Hinkle?

(Mr. Graham reads notice of publication in Case 252)

MR. HINKLE: Governor Meachem and all members of the Commission: For the purpose of the record, my name is Clarence Hinkle of Hervey, Dow and Hinkle, Roswell, representing the Magnolia Petroleum Company. This matter before the Commission is upon the application of the Magnolia Petroleum Company for the approval of the proposed unit agreement to be known as the Four Lakes Unit Agreement, comprising 32 hundred acres of land in northern Lea County. Sections 10, 11, 14, 15, 22, and 23 of Township 10S, Range 34E. All of this land is state land and I might say that this is the first unit agreement that we know of that comprises all state land. We have filed with the application for approval of the unit agreement, a copy of the proposed form agreement. It follows substantially the same form of unit agreement heretofore used and approved by the Commission in other cases. As I say, this is the first one where only the state has been involved. Consequently, we have deleted from that form, you might say, all provisions with regard to the joint control of operations by the United States and by the State; and also many of the provisions that relate to patented or privately-owned lands inasmuch as no fee lands are involved. We have also filed with the application as Exhibit "A" a plot which reflects the results of the seismograph of

this area. Because of this geological feature of the proposed area covered substantially all of it, we believe the unit agreement approval would give effective control of the whole structure in the event production is obtained. And it would be in the interest of conservation and the prevention of waste. It is proposed under the unit agreement that the unit operator start a test well for oil and gas and drill it to a depth of 12,500 feet or a depth sufficient to test the Devonian formation. In the application, I notice there is an error in that we state the well will be started on or before February 1st, 1951. That should be February 10, 1951 and I would like to have permission to amend that by interlineation at this time. I have here Mr. Robert E. Murphy, geologist for the Magnolia and I would like to call him and introduce his testimony in support of the application.

ROBERT E. MURPHY,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By Mr. Hinkle:

Q. Your name is Robert E. Murphy.

A. It is.

Q. Where do you live, Mr. Murphy?

A. Roswell, New Mexico.

Q. By whom are you employed?

A. Magnolia Petroleum Company.

Q. Are you familiar with the application for approval of the Four Lakes Unit Agreement?

A. Yes, sir, I am.

Q. Are you also familiar with the proposed form of unit agreement which has also been filed?

A. I am.

Q. Are you a graduate geologist or engineer?

A. Yes, sir.

Q. From what school?

A. From the University of Colorado and a graduate of geology.

Q. In what year?

A. I graduated in 1930 and spent three additional years in graduate work, left school in 1933.

Q. And by whom were you employed after you left school?

A. I was employed eight years by the Soil Conservation Service as engineer and regional geologist in New Mexico, and two years by the Army Engineers in the Eighth Service Command as engineer and geologist, and seven years as petroleum geologist in New Mexico by Magnolia.

Q. Are you familiar with the oil development in New Mexico? Especially in southeastern New Mexico, Lea County?

A. Yes, sir, I believe I am.

Q. And did you prepare the plat which is attached to the application of Exhibit "A" showing the result of the seismographic survey which was made of the proposed unit area?

A. Yes, sir.

Q. State whether or not, in your opinion, the proposed unit area will cover all or substantially all of the structure or geological feature involved.

A. In accordance with our subsurface geological and geophysical information, we believe the area as outlined in the unit agreement plat is sufficient to cover the oil possibilities that might be present in that particular structure.

Q. State whether or not, in the event production is obtained there, in your opinion, it would give effective control of the structure, or field, the unit.

A. I believe it would. As outlined, it would give the most economic and effective control of the accumulation of fluids on that particular structure.

Q. The application in this case states in effect that the unit operator will commence operations and a test well for oil and gas on or before February 10, 1951 and drill to a depth of 12,500 feet or a depth sufficient to cut the devonian formation expected to be encountered at about that depth. State whether or not in your opinion, a well projected to that depth will tend to test and prove all the formation, including the devonian?

A. Yes, sir. In accordance with our geological information, I believe 12,500 feet is sufficient to test the presently known Devonian forasity in that area.

Q. Mr. Murphy, having read the proposed unit agreement and familiar with the circumstances, state whether or not this agreement would be in the interest of the Conservation and prevention of waste?

A. I believe that it will. I think the operation of these - of the drilling units will be conducted in accordance with the best production practices that are now being used and it will be done in the most economic manner.

MR. HINKLE: That is all I have unless the Commission has some questions.

By Mr. McCormick:

Q. What about this 80-acre tract that is unleased at the present time? How does that fit into the unit agreement?

MR. HINKLE: That will probably be put up for sale. Mr. Hannett could answer that.

MR. HANNETT: It would be the February 10th sale.

MR. HINKLE: We have no control over that and anybody that purchases it in the sale will probably be invited to come into the unit. Whether they would or not, we can't answer that question.

MR. GRAHAM: You will offer to take it?

MR. HINKLE: That's right.

Q. Have all the other owners of leases joined in this application?

MR. HINKLE: They have not. An invitation has been extended to all listed on Exhibit B of the proposed application, which I think comprises the entire ownership within the area. There are two or three individuals in there that own individual forty-acre tracts and it would appear at the present time that there is going to be difficulty to get those and, one or two of them, but I think that when this is presented to the Commission for final approval, we will have a substantial percentage of the entire unit.

MR. McCORMICK: I will ask if any of these companies have joined in the unit besides Magnolia.

MR. HINKLE: They haven't actually signed but there are several who indicated their willingness to join.

MR. McCORMICK: What would be the situation if a total of 320 acres in the middle of the unit didn't come in? What would be the situation on conservation then?

MR. HINKLE: I don't believe you will have that situation. The substantial owners have already agreed to it. There might be a little acreage toward the center, strategically located, that we couldn't possibly get in. But that is the case in almost every unit suggested. I don't know of but one instance where we had 100% participation in these units. You will always find a few that will buck up. But I think it can be operated in such a manner that it will not hurt materially from a conservation standpoint.

MR. McCORMICK: Do you have any plan for spacing at this time?

MR. HINKLE: NO.

MR. SPURRIER: Where will the well be located?

A. It was to be indicated on one of those plats. I believe in the southwest of 22 there in the corner, no, 14 or 15.

MR. SPURRIER: Southwest of 15?

A. Let me have a pencil.

MR. HINKLE: Here is one of the plats. Better look at that.

A. Southeast of southeast (marks on plat).

MR. HINKLE: It would be in, substantially, the center of the unit area, would it not?

A. Yes, sir.

MR. McCORMICK: That is all I have.

A. It is on a Midcontinent lease as I remember it.

MR. McCORMICK: Have they joined with you?

A. Yes, sir, they have consented.

MR. HINKLE: Do you know what percentage Midcontinent and Magnolia have?

A. The Land Department have that percentage.

MR. HINKLE: The Magnolia and Midcontinent are the largest owners in the area and both have agreed to this and several others have indicated their willingness to join. But we do not anticipate we will be able to get them 100%.

MR. SPURRIER: Most unit agreements run from 15,000 acres on up. I wonder why this is so small?

MR. HINKLE: Because we have confined it to the structure as they see it. This is a result of a seismographic survey and had the structure been larger than it is as it appears to be, of course, they would have tried to unitize the entire structure. But, in order to afford effective control for operations, we have necessarily to confine it to what they think is the geological feature involved.

MR. SHEPARD: Anyone else have anything? If not, you will be excused, Mr. Murphy. Thank you, Mr. Hinkle. We will take up the next case, 247. Mr. Graham, please read the notice.

(Mr. Graham reads the notice of publication)

MR. SETH: If the Commission please, I filed a motion to continue that until the February hearing. We are having difficulties. We have a lot of individual Indian allotments. We are having trouble getting them signed up. We would like a little more time so that we can present the unit agreement with practically unanimous agreement on the part of everybody interested.

MR. SHEPARD: Without objection, it will be continued until the February hearing. We will take up Case 248.

(Mr. Graham reads the notice of publication)

MR. KELLOUGH: My name is Booth Kellough and I am

attorney for the Amerada Petroleum Company of Tulsa, Oklahoma. This is an application by Amerada for an exception to the eighty-acre spacing order previously entered in the Knowles Pool so as to authorize the location of the well in the center of the northeast of the northwest of Section 2, 17 South, 38 East. Now, the eighty-acre unit as created by the spacing order, comprised the N½ of the NW of Section 2, and Amerada drilled a dry hole to the Devonian in the center of the NW of Section 2. That is referred to as the Cooper well. We are now requesting an order authorizing Amerada to drill a well in the center of the east half of that unit. Or in other words, in the center of the northeast of the northwest of Section 2. We are also asking that the Commission determine the acreage attributable to that well and also fix the allowable. Here is a letter handed to me by Mr. Spurrier addressed to him dated January 22, 1951, signed by Luther Cooper, Mrs. I. R. R., J. H. Moore, Charles R. Turner. It reads as follows: "Dear Sir: The undersigned royalty owners to the NW of Section 2, Township 17, South, Range 38 East, Lea County, New Mexico, wish to respectfully ask your attention to our position in the matter in Case 248 to be held in public hearing January 25, 1951. It is our contention that the 80 acres attributable to a well drilled in the NE, NW of Section 2 as proposed by Amerada Petroleum Corporation should consist of the north half of the NW of this tract as the Amerada Cooper No. 1 well on the

NWNW of Section 2, encountered the Devonian formation, above the water level for the field. The forty acres in this location should be included in the proration unit even though the well wasn't completed as a producer. We would strongly object to any other proration unit for the proposed well than as stated above. We will appreciate your consideration in this matter."

JOHN VEEDER,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By Mr. Kellough:

Q. Will you please state your name?

A. John Veeder.

Q. Where do you live, Mr. Veeder?

A. Midland, Texas.

Q. What is your profession?

A. I am a geologist.

Q. Do you have a degree in geology?

A. Yes, sir.

Q. By whom are you employed?

A. Amerada Petroleum Corporation.

Q. In what capacity?

A. District Geologist.

Q. And how long have you been employed as a geologist for Amerada?

A. Thirteen years.

Q. Now you have previously testified at prior hearings in this case in your capacity as a geologist and on geological matters, is that correct?

A. Yes, sir, I have.

Q. I hand you what has been marked Exhibit A and ask you to state to the Commission what it is.

A. Exhibit A is a structure map drawn on top of the Devonian pay in the Knowles field.

Q. Now, this has been prepared by you or pursuant to your direction and control, is that right?

A. That is right.

Q. Now, referring to Exhibit A, what do the contour lines represent?

A. The contour lines represent the structural position of the top of the Devonian pay. As I stated before, they are in a 50 feet interval.

Q. Now, the numbers below each of the wells as shown in this exhibit indicate what?

A. That is the subsea datum of the Devonian pay.

Q. How did you determine the top of the Devonian pay to prepare this map?

A. That was determined by analysis of samples and cores.

Q. This map shows the location of the Cooper dry hole, doesn't it?

A. That's right.

Q. That is the center of the NWNW, Section 2?

A. That is right.

Q. Now, will you please take your pencil and mark on Exhibit A the location of the proposed well requested by this application?

A. The proposed well would be located in the center of the NE, of the NW¼ of Section 2.

Q. Now, there appears to be a dotted line running diagonal through the NW of Section 2. What does that dotted line represent?

A. That would be the most southerly portion that you could drill a well and anticipate a commercial devonian producer.

Q. Now, you have marked that "Productive Limit." Does that line designate, in your opinion, the productive limit of the recoverable oil at that particular part of the pool?

A. Yes, sir.

MR. KELLOUGH: We offer in evidence Exhibit A.

MR. SHEPARD: It will be accepted.

Q. Now, Mr. Veeder, I hand you exhibits marked B through F, inclusive, and ask you to state what those exhibits are.

A. These are Schlumberger electric logs on the four oil wells and the one dry hole, the Amerada #1 Cooper in the Knowles Pool. Those are Schlumbergers on all the wells on the Knowles Field, is that right?

A. That is right.

MR. KELLOUGH: We offer Exhibits B through F, inclusive, in evidence.

MR. SHEPARD: They will be accepted.

Q. Mr. Veeder, I hand you what has been marked Exhibit G and ask you to state to the Commission what that is.

A. Exhibit G is a data sheet of the wells in the Knowles Pool.

Q. Now, this Exhibit G shows the name and the number of each well.

A. That's right.

Q. Reading across the top exhibit. Next it shows the depth of the top of the devonian, is that right?

A. That's right.

Q. Now, then in that connection, there appears two sets of figures. The left-hand column would be the depth at which the devonian was encountered, from the surface.

Q. Now, the right-hand column under the heading "Top Devonian" with a minus in front of it indicates what?

A. Would be the subsea datum of the same depth.

Q. You mean by that the depth below sea level?

A. That is right.

Q. The next column entitled "Top of Devonian Pay?"

A. That is right.

Q. You also have two similar sets of figures, is that right?

A. That would be the same, the depth to which - the depth of which - the devonian pay is encountered and the figures in parentheses are the subsea datum of that depth. The next heading is entitled "Devonian Cap."

Q . Explain what you mean by that column.

A. The devonian cap would be that part of the devonian which would be impervious and would be the section from the top of the devonian to the top of the devonian pay.

Q. Now, the next column you have is entitled "Devonian Completion." What data have you listed under that heading?

A/ We have shown the total depth, the pluggedback depth -

Q. Just a minute, Mr. Veeder, the first column you have then listed TD, and also there appears to be the letters "PB." I understand "TD" means the total depth and "PB" means plugged-back depth.

A. That is right.

Q. The next column is what?

A. The next column would be the producing history of the well, that would be the casing, plugback, perforations, open hole, acid treatment, gas-oil ratio, and gravity.

Q. And also you show the dates of spudding and the date of completion?

A. That is right.

Q. This exhibit contains all that information on all the wells

in the Knowles Devonian pool, is that right?

A. That is right.

MR. KELLOUGH: We offer in evidence Exhibit G.

MR. SHEPARD: It will be accepted.

Q. In your opinion, will a well located in the center of the NENW of Section 2, being the proposed location requested in this application, produce oil and in commercial quantities?

A. I believe it will, yes sir.

Q. Now, in your opinion, would a well located in the center of the SE of the NW, to the south, be productive of oil?

A. No, sir.

MR. KELLOUGH: That is all the questions I have from Mr. Veeder. We have another witness I can call at this time and after both have testified, if anybody has any examination, they can examine them; if you wish to, you may examine Mr. Veeder now.

MR. SHEPARD: Does anyone have any questions of Mr. Veeder?

MR. McCORMICK: I will, later.

MR. SHEPARD: You may be excused now and you can call your next witness.

MR. KELLOUGH: My only thought is that it might simplify the answers of both the geologist and the engineer, if after examination, the questions be proposed for either one.

R. S. CHRISTIE,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By Mr. Kellough

Q. Will you please state your name?

A. R. S. Christie.

Q. Where do you live, Mr. Christie?

A. I'm from Fort Worth, Texas.

Q. What is your profession?

A. I'm a petroleum engineer.

Q. You are a graduate petroleum engineer?

A. Yes, sir.

Q. By whom employed?

A. Amerada Petroleum Corporation.

Q. And in what capacity?

A. Division petroleum engineer.

Q. And how long have you been employed as a petroleum engineer for the Amerada Petroleum Corporation?

A. Approximately eighteen years.

Q. You have previously testified before this Commission on this case in your capacity as a petroleum engineer. Mr. Christie. referring to Exhibit "A", would you please designate the proration unit involved in this application which was established by a prior spacing order.

A. The original proration unit was the north half of the north

west quarter of Section 2.

Q. Now, in your opinion, Mr. Christie, what acreage should be attributable to the proposed well requested in this application? By that, I don't mean at this time the number of acres, but please designate on the map what, in your opinion, should be the acreage which should constitute the proration unit for this well?

A. In my opinion, only the productive limits of the unit should be included. This would be that area north and east of the dotted line shown on Exhibit A.

Q. I hand you Exhibit A. Would you please take a pencil and mark on Exhibit A the location of the proposed proration unit you recommend.

A. You want me to draw a line around it?

Q. Yes, draw a line around it. Now, the line which you have drawn runs along the north line of Section 2 and then down the east side of Section 2 until it encounters the dotted line marked "Production Limits," then it progresses northwesterly along the dotted line marked "Production Limits" to the point of beginning, so as to constitute what might be described as a pie-shaped unit, is that right?

A. Yes, sir.

Q. Have you calculated the number of acres within that proposed proration unit?

A. Yes, sir, I have.

Q. What is the toal number of acres included within that unit?

A. The calculations are 59.5 acres.

Q. Now, how much of the 59.5 acres is included within the NE of the NW of Section 2?

A. 36.1 acres.

Q. And how much is included within the NW of NW of Section 2?

A. 15.5 acres.

Q. And how much is included within the SE, NW of Section 2?

A. 7.9 acres.

Q. In your opinion, Mr. Christie, will the proposed well requested drain all the recoverable oil from that unit?

A. Yes, sir, I think it would.

Q. What is your opinion as to the allowable which should be fixed for this well?

A. Based on the productive area included in the unit in question, the allowable should be a direct relationship on an acreage basis. For simplicity of calculation, it would be 60/80th of the top allowable for an eighty-acre unit.

Q. In other words, in your opinion, it should be that proration of the top unit allowable which the acreage within this proposed unit does bear to the total?

A. Yes, sir.

Q. Of the regular unit?

A. Yes, sir.

Q. Have you calculated the number of barrels per day allowable which would be authorized under the present current rate based

upon that formula which you recommend?

A. Using 60 acres, that would be 3/4ths of the unit, which would give 484 barrels for a 60-acre unit.

MR. KELLOUGH: That is all.

By Mr. McCormick:

Q. Mr. Christie, I understand you desire to have parts of three different 40-acres set up as the acreage attributable to this well?

A. Yes, sir.

Q. That is something that has never been done before, isn't it?

A. I am not sure whether it has ever been done before.

Q. Don't you think that would be a very complicated procedure if we took 15 acres out of one forty, and thirty out of another, nineteen out of another, and said arbitrarily it was an acreage that was attributable to a certain well?

A. If the total sixty acres is less than the unit for that pool which is 80 acres, and since we have done the calculation for you, I don't think it is very complicated.

Q. Originally, this was the north half of the northwest?

A. Yes, sir.

Q. And you have drilled a well which demonstrated half of that was unproductive?

A. Yes, sir.

Q. Well, then, shouldn't the allowable be confined to the balance of the - to the balance of the productive half of that

eighty?

A. Well, we still have an area of less than 80 acres and we know that the northeast corner of the SW quarter of the NW quarter has production on it. We have no other way of getting it than of drilling a well on the 7.9 acres. And the only way to drill that 7.9 acres is to include it in the total unit,

Q. How is the royalty owned in the 160 acres?

A. The royalty, I believe, is the same as within the entire tract. I believe there is a slight difference in an over-ride. The over-riding royalties differ.

Q. Do you have the data on that that you could present?

MR. KELLOUGH: If the Commission please, I wish to state into the record at this time that our records show the royalty is all of common ownership under the entire northwest. There is one over-ride by one person as to the east half and another oil payment owned by another person as to the west half. Well, now it is our opinion that the question of the pooling of these over-rides in the event it becomes necessary, is not a proper matter for this hearing. If a proration unit is established, then the result would be that there will be as to the over-rides, two separate tracts owned by different persons. Then, it is our intention to attempt to obtain from those persons an agreement pooling their over-ride. If we are unsuccessful in doing that, of course, the next step in the procedure would be to come back before the Commission. That is our position at this

hearing and we are seeking the establishment of a proration unit. Now - excuse me - that is all.

MR. McCORMICK: Just what would be the proration unit you seek?

A. It would be sixty acres.

Q. I mean what would be the legal description of it?

A. The legal description would be that area in the NW¼ of Section 2 that is bound by the north line and the N½ of the east line, and the dotted line indicated as the productive limits which run diagnnally NW - SE.

Q. Don't you think it would be a bad precedent to start setting up units that don't follow subdivision lines?

A. Not necessarily, no sir.

Q. Do you know of any one place where that is done?

A. In New Mexico?

Q. Any other state.

A. There are a number of field rules in Texas that provide that only productive acreage be considered. I am not in a position to say what fields they are, but they are in the field rules.

MR. KELLOUGH: May I -

MR. McCORMICK:(interrupting) What would happen if you can't get an agreement out of these over-riding royalty owners?

A. As Mr. Kellough pointed out, I think we would have to come before the Commission and get an agreement to unitize them.

MR. KELLOUGH: If the Commission please, that is a question of law, and we would probably be required to enforce our rights under the law as we saw them if that contingency happens. But, it is our position that it isn't at issue at this particular hearing. We have no reason of knowing now or no reason to believe that they will not agree.

MR. SHEPARD: Do you have any reason to believe they will?

MR. KELLOUGH: No.

MR. McCORMICK: Who are the over-riding royalty owners?

MR. KELLOUGH: I am speaking now from memory - I had better not speak from memory. We have a schedule in our file; I will get it. Just a minute, I will get it right now. In this connection, I would like to ask Mr. Christie one or two questions that would help clarify this issue. I don't want to interrupt Mr. McCormick's examination. But if I could at this time -

MR. SHEPARD: Go ahead.

By. Mr. Kellough:

Q. Mr. Christie, if a well were located in the center of the NE, NW of Section 2, would it drain the recoverable oil from under that part of the unit located in the SE, NW?

A. Yes, I believe it would.

Q. In your opinion, could a commercially productive well be drilled to include only the productive area which is located in theSE, NW?

A. It couldn't be drilled on the state-wide spacing pattern.

It would be outside the limits of production. If you drilled it on the 7.9 acres rather than within that area, it would be an uneconomic proposition.

Q. It would also be an unnecessary well?

A. Yes, sir.

Q. In other words, if the recoverable oil which lies under SENW would be recovered by that well, do you know of any reason why that should not be attributable to the well?

A. No, sir, I do not.

Q. So that the royalty owners and over-riding royalty owners in participating in that well would get the credit from the recoverable oil which was taken from underneath their tract?

A. Yes, sir.

Q. No, in answer to Mr. McCormick's question, the records in the Amerada office show that under the W½ of the N½ Melvin Neal and Mary Lois Neal own an oil payment of 1/16th of 7/8ths from the W½ of the NW of Section 2 and other lands not involved until $2,827.25 is paid. The records in the Amerada office further show that W. R. Childers and Alice L. Childers own 1/8 of 8/8ths under the E½ of the NW of Section 2 until production from that land, and other lands other otherwise involved, equals $19.308. So, the title problem is, I again submit, not a present issue in the creation of this proration unit, for the royalty ownership is common among all of the entire quarter section. There are

two oil payments as indicated. One covers the part in the west half, the other part in the east half. Now, under our view of the New Mexico law, the over-riding royalty or these oil payments would be and should be apportionable to the parties in proportion that their interest, whatever it is, bears to the proration unit. If the oil is all recovered by the well in the proration unit, we know of no reason why the parties owning an interest in that unit should not participate in the production in accordance with their ownership and furthermore, know of no reason why the oil company should be penalized because within the proration unit, there would appear to be two separate over-rides.

MR. McCORMICK: Mr. Christie, how accurate would you say these contours are? I mean how closely can you guarantee their exact location?

A. I believe that would be a question for Mr. Veeder to answer.

Q. It is still somewhat speculative, isn't it?

A. Yes, sir.

Q. It could be two or three, or five hundred feet one way or the other way, couldn't it?

A. It couldn't be, in my opinion, under the Cooper, Number 1. I don't think it would vary that much.

MR. KELLOUGH: If the Commission please, those are geological questions and we would be glad to have Mr. Veeder testify on those provisions.

MR. McCORMICK: How much would it cost to drill a well to the projected depth?

A Approximately 325 to 350 thousand dollars.

Q How long will it take the well to pay out at 320 barrels a day?

A Well, I don't know. It would be just a question - there isn't too long a payout.

Q About a year?

A I would have to do some calculating.

Q At 640 barrels which is the present top unit allowable for an eighty-acre unit, it is six months or so, isn't it to pay out?

A It is estimated about that.

MR. KELLOUGH: I wish to call another witness in view of this line of examination.

MR. SHEPARD: Of course, Mr. Kellough.

C. V. MILLIKIN

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. KELLOUGH:

Q You are Mr. C. V. Millikin of Tulsa, Oklahoma?

A Yes, sir.

Q Where are you employed, Mr. Millikin?

A Amerada Petroleum Corporation.

Q And what is your capacity?

A Engineer.

Q You are the Chief Engineer, the head of the Engineering Department of that company?

A Yes, sir.

Q How long have you been employed as an engineer by the Amerada?

A Over 20 years.

Q And you have previously testified in this hearing in connection with engineering matters?

A Yes, sir.

Q Now, Mr. Millikin, do you know of any instances wherein proration units or well drilling units, or spacing units, however they may be called, have been created to comprise other than regular governmental subdivisions.

A Yes, sir, there are some in Oklahoma and some in Louisana, quite a number in Louisana.

Q Do you know of any which have been created to compare to the geological boundary limits of the pool?

A As indicated by the structural contures, yes, sir, both states.

Q Do you know of any reason why it should not be included in the proration unit we are requesting?

A I think it is quite reasonable to include it because certainly that production of oil under the limits of that Southeast quarter section, that is, southeast of the northwest,

clearly indicates that there is some oil within that area. And that there is not sufficient oil within that area to justify the expense of drilling a well to it. In order that this division of oil and the allocation will be reasonable and fair and give each owner in the field a reasonable opportunity to recover his reasonable share of the oil, I think it is essential that be given consideration as contributory drainage area to this proposed location.

Q Do you think it would be inequitable or that it would tend to deprive the owners in this pool of their just share of the oil if you were to eliminate - located in the southeast-northwest?

A I do.

Q In your opinion will the proration unit as here proposed and the allowable as here requested protect the correlative rights of the parties in the pool and insure that each party recovers his fair share of the oil to which he is entitled?

A I think it will provide that opportunity.

MR. KELLOUGH: No further questions.

By MR. McCORMICK:

Q Mr. Millikin, how will it protect anyone's correlative rights to say that the 20 odd acres of the 40 acres south of the well should be attributable to that well when you own the lease on the entire quarter section -

MR. KELLOUGH: (Interrupting) If the Commission please, Mr. McCormick refers to 20 or so acres. It is considerably less than that.

MR. McCORMICK: He has the map.

THE WITNESS: Yes. I don't think it was the purpose of the question.

MR. KELLOUGH: I didn't want the Commission to be misled.

THE WITNESS: I am not clear enough on your question, Mr. McCormick, to give you a concise answer.

MR. McCORMICK: The proration unit to begin with was the north half of the northwest of this section.

A Right.

Q 80 acres. And the well drilled in the northwest-northwest was dry.

A Right.

Q Which demonstrated at least half of the 40 acres was non-productive.

A Right.

Q Now, you want to move into the east half of the 80?

A Right.

Q And drill a well and take all of the 40 below that?

A Right.

Q As attributable?

A Right.

Q How will that serve to protect anyone's correlative rights?

A Well -

Q (Interrupting) When you own all the leases and royalties

in common?

A Whether the lease and royalties are owned in common wouldn't change the principle of it. That is, we are trying to provide an opportunity for the equitable distribution of the ultimate recovery oil from this pool allocated to each of the owners in that pool. Whether all of this lease, that is, both the entire- let me back.up. Whether all of this northwest corner of the section is common ownership or not wouldn't change the principle under which we are looking at it.

Q The only real difference would be instead of getting maybe a 320 allowable, if you will attribute this other acreage to it you will get a 380 allowable. That is the immediate difference isn't it?

A Wait a minute. Instead of getting 380 you would get -

Q Instead of getting half of an 80, you would get three-fourths of an 80 allowable.

A By leaving that out.

Q By assuming that half of the 80 has already proved to be dry and you drill in the other half you would be entitled to half an allowable.

A Well, that would depend on the circumstances and those circumstances don't exist in this particular case. If that one-half of the 80 is all that was really productive then, in that event that would be true. But that doesn't happen to be the circumstances in this case.

MR. McCORMICK: That is all I have.

MR. CAMPBELL: If the Commission please, I would like to enter an appearance here. I am Jack M. Campbell of Atwood, Milan, and Campbell of Roswell, New Mexico. I am here on behalf of Rose Eaves. It appears from Exhibit A that this well, if drilled, will be a 40 acre offset to two wells, one to the north and one to the east, which are on the acreage of Rose Eaves. That is correct, isn't it.

THE WITNESS: Yes.

MR. CAMPBELL: We have no objection to the exception but the allowable is rather significant to Rose Eaves because this well constitutes a 40 acre offset to her two wells. If the Commission sees fit to adopt the proceedure of setting up a proration unit based on the estimated productive limits and is satisfied with the productive limets and reduces it percentage rise, we have no objection. However, in view of the letter submitted by the royalty owners asking a full proration unit allowable for this well, we would tremendously object to allocating a full 80 acre allowable when it was apparent that probably half of the acreage according to Amerada's estimate, at least part of the 40 acres to the west, is nonOproductive. When Mr. Veeder is called back to the stand I would like to ask him a question or two in connection with the determination of how much of that 40 to the west is productive and how they arrived at that conclusion. But as I say, if the Commission was to cut the allowable percentage rise on what they think is a proper base, we have no

objection. But we object to the full allowable where part of the proration unit has been shown to be partially non-productive.

MR. SHEPARD: Any further questions of Mr. Millikin.

MR. KELLOUGH: Do you have any further comments?

MR. MILLIKIN: I think not.

MR. KELLOUGH: Is there any further examination of Mr. Veeder. I have no questions. If you gentlemen wish to cross examine Mr. Veeder, you may proceed.

CROSS EXAMINATION

By MR. CAMPBELL:

Q Mr. Veeder, I wish you would explain generally, how you arrived at the possiblility of what are the west 40 acres of that 40 acre proration unit when the well drilled on the pattern was apparently a dry hole -

A Well, if you will notice on the map our Datum of 8,890 on the Amerada Cooper No. 1 is a dry hole. I will give you a history of the well. It was carried to a total depth of 12,620 feet. We had topped the Devonian at 12,597 feet. The top of the Devonian pay is 12,602 which is this figure of 8,890, we set 5½ inch casing at 12,598 which would be in the top of the Devonian. That well was acidized at 3,000 gallons and we had - we tested that well for several days. And after testing it thoroughly we found the well wasn't commercially productive. Then because of that we know we cannot go below a minus 8890 to drill a commercial well in

the Devonian. That is our dash line which is confined to Section 2. In the northwest quarter of Section 2 we do not extend that line anyplace else on the map as you notice. That line conforms with the strike of those contures. We do have our other points. We have our points on the No. 1Eaves which is in Section 35 and have control on the Eaves "A" [illegible] which is in Section 2 to the east.

Q Well, in your calculation then there is some - there would be production in a well drilled in the southwest of the northeast of 2.

A There is possible production in the very northeast corner, yes, sir, of that quarter.

Q Would you repeat again - I wasn't up here at the time - how much acreage you are attributing to the northwest of the northwest of 2?

A Northwest of northwest of 2?

MR. KELLOUGH: Mr. Campbell, Mr. Christie calculated the acreage.

MR. CHRISTIE: 15.5.

MR. CAMPBELL: I have no further questions.

By MR. McCORMICK:

Q Are any of the wells in the Knowles Pool making water?

A Yes, sir.

Q Which ones?

A Well, of course, the A-1 Rose Eaves is, and I understand the Hamilton is. I do not know, of course, the producing history of the wells after they are drilled. That question should be referred to the engineers.

Q Mr. Christie, could you testify about that, which wells are making water and about what percentage?

MR. CHRISTIE: The No. 1 Stella B Rose does was completed making water and is producing -

MR. McCORMICK: You don't have to have just exact figures, just roughly.

MR. CHRISTIE: I believe it is approximately 20 per cent.

MR. McCORMICK: That is the fartherest north well.

MR. CHRISTIE: Yes, sir.

MR. McCORMICK: And can you give us an estimate on the others? It doesn't have to be the per cent.

MR. CHRISTIE: The Hamilton No. 1 is producing water. I don't seem to have the figure. I believe around 8 to 10 per cent. I would be glad to furnish the exact information.

MR. McCORMICK: What about the Eaves?

MR. CHRISTIE: The Eaves No. 1, and the Eaves A No. 1 at the present time are not making any water.

MR. McCORMICK: This is a water drive?

MR. CHRISTIE: Yes a very active water drive.

MR. McCORMICK: We have always been told up here previously if you called on a water drive too much you would have water coming, is that true?

MR. CHRISTIE: It would depend on the boundaries in the pay. If close to the water table you might pull in water by producing at too high a rate.

MR. McCORMICK: Do you think that these wells, the top allowable unit at 640 barrels, is producing that too heavy?

MR. CHRISTIE: Well, of course, they have only been producing at that rate since the first of the year. And it is rather a limited time, I believe, to determine the effect of that increased rate. We have noticed however, that the wells are weakening to some extent. But the time has been so short we are not sure whether it is the result of the resultant increased and the water hasn't caught up to that rate or whether it is actually going to cause a rapid drop in the bottom hole pressure at the increased rate. I think it will take another month or two probably before we will know exactly whether the rate is too high or not.

MR. McCORMICK: The proposed location of this well would make it lower than the Hamilton No. 1 that is now making water -

MR. VEEDER: I believe it would be.

MR. McCORMICK: And your Hamilton No. 1 is now making water.

MR. SHEPARD: Anybody have any further questions? If not, the witness will be excused.

MR. KELLOUGH: I wish to make a little statement though in connection with the evidence.

MR. SHEPARD: You may.

MR. KELLOUGH: That we have requested, it is true, a proration unit which conforms to the productive limits of the pool. Now, the witnesses testify that that would protect the correlative rights of the parties. In that connection I wish to elaborate a little. Under the New Mexico statute. The number, as a matter of fact is 69-113. Where there are separately owned tracts within a proration unit then the parties may pool, and if unable to do so, then the Commission may require that those interest be pooled. Now, so far as Amerada is concerned, Amerada owns all of the oil and gas leases involved in this instance. The only effect on Amerada if could have would be in connection with allowables. And of course we are very much interested in keeping a close watch on this allowable ourselves to be assured that the reservoir will not be injured. Now, then, as far as the royalty ownership is concerned, it also makes no difference here because the royalty ownership is the same. Now, it so happens as appeared in the record that there are two separate royalty interest. Now if under your/proceedure/the statutory those are to be pooled pooling and combining would be calculated on the percentage of ownership that each party had in the unit. So that if you exclude the part in

the southeast of the northwest, the result would be that when you started to divide up the over-riding royalty payments then the owners under that tract would receive a less amount than the owner under the tract to the west, would receive a little more even though the oil is coming from the tract. So that the correlative rights are protected by having the proration unit cover the area from which the oil is actually being produced. And the witnesses have all testified you couldn't get a commercial well drilled which would encompass only the approximately 7 acres involved at that point to the depth that these Devonian wells are drilled, and furthermore, it would be an unnecessary well and then if it couldn't pay out, which it couldn't inasmuch as the evidence, uncontradicted, is that the well on the northeast of the northwest would drain it. So that, of course, is a question for the Commission to decide. But it is our opinion and therefore our recommendation that to protect the correlative rights of all parties that the only way it can properly be done is to have the proration unit to include the productive area where the oil is coming from.

It is our request, then, that this Commission permit us to drill this well which our geologist testified in his opinion would be a productive well, and that the Commission create a proration unit which will comprise the productive area and that the allowable then be determined.

Now, only one further statement. That is in connection with whether it has ever been done before. Mr. Millikin testified it has been done in Louisiana and in Oklahoma. As to the Oklahoma matter, I personally participated and the unit was called Carnard unit, which was created to conform with the geological boundaries. It resulted in an egg-shaped unit, divided in the middle. You have one on one side and one on the other. The only point I make of that is that it may happen to be unusual but it certainly isn't novel and has been done before.

MR. McCORMICK: That was a unit over a whole structure, wasn't it?

MR. KELLOUGH: That was a unit over a whole structure.

MR. McCORMICK: Have you ever heard of a unit of just one drilling unit within a pool?

MR. KELLOUGH: I have no personal knowledge. I would be glad to recall Mr. Millikin and ask him.

MR. MILLIKIN: In the case of the Carnard unit, that covered a structure, but there were two units. The structure was divided approximately in the middle, and both units followed the contures. In the case in Louisiana I had specific knowledge and in one case it involved several drilling units within the pool. Each one doesn't involve an entire pool.

MR. SPURRIER: What would Amerada's reaction be to a 40-acre allowable?

MR. KELLOUGH: As a matter of reservoir performance I would like to ask Mr. Millikin that question. I don't believe my legal opinion on that matter would be worth anything? Mr. Millikin, what in your opinion would be the desirability or effect on the reservoir of a 40-acre allowable?

MR. MILLIKIN: As far as Amerada is concerned, I think that would be perfectly all right. We own all the other production and I think Amerada would get all the oil there is from that pool according to our information at this moment. But I believe to cut the allowable to 40 acres would create some inequities among other interest in the pool.

MR. SPURRIER: What would be the reaction of Rose Eaves, Mr. Campbell, to the 40 acre allowable?

MR. CAMPBELL: It would be fine.

MR. McCORMICK: The creation of the drilling unit doesn't really effect the legal obligation to pay royalties. If you have royalties under a particular 80 and the well is not drilled on that 80 that still doesn't give you a royalty.

MR. KELLOUGH: If the Commission please, he is asking a legal question.

MR. McCORMICK: That is right. I will withdraw from Mr. Millikin.

CHAIRMAN SHEPARD: Any furhter questions.

(Off the record.)

CHAIRMAN SHEPARD: We will stand adjourned until 1:30.

(Noon recess.)

CHAIRMAN SHEPARD: The meeting will come to order. The next case is 249.

MR. HINKLE: For the purpose of the record my name is Clarence Hinkle of Hervy, Dow, and Hinkle of Roswell, representing the Amerada Petroleum Corportation. Case 249 is the application of the Amerada Petroleum Corporation for a temporary 80-acre spacing order in the Bagley-Silure-Devonian pool in Lea County. It is also a companion case, that is on your Docket, No. 251, which is also by the Amerada Corporation, and it is an application for a pooling agreement of two 40 acre tracts, and that case is predicated upon case 249. In other words, it would depend upon the action of the Commission in 249 as to whether or not you could go ahead with 251. Since the filing of these applications, last week there was a meeting in Washington of the Petroleum Administrator for Defense in regard to the allocation of steel pipe and tubing goods for the purpose of drilling wells in the oil industry. And one of the grounds of the application of Amerada in Case 249 is on account of the shortage in steel. That is the reason they wanted 80-acre spacing. The information that we have is that the Petroleum Administrator for Defense is about to take some action in the very near future with respect to the allotment of tubular goods which might have a material bearing on this case. For that reason the Amerada would like to request that both of these cases be continued or postponed for 90 days until your hearing of April 24th. Now, it is my understanding that there is no objection to such a postponement

or continuance by any of the parties affected. Mr. Mathers, one of the royalty owners that would be affected in the pooling agreement with his attorney is here and I understand he will have no objection.

MR. McCORMICK: Is that correct, Mr. Swarthout?

MR. SWARTHOUT: That is correct.

CHAIRMAN SHEPARD: Without objection, both of these cases 249 and 251 will be continued until April 24th. We will take up now case 250.

MR. HOLLOWAY: I am J. B. Holloway employed by Tidewater Associated Oil Company and its producing department in Houston. The purpose of this hearing is to include our State No. 3 in the boundaries of some designated field or pool. We completed our State No. 3 on November 22 and at a location about a quarter mile north of the North Brunson Field. And on November 21st, the Commission by its order No. 241 - I mean Case No. 241 - Order No. R-38, set out an area known as the North Brunson Pool which consist of the southwest quarter of section 2 and the southeast quarter of section 3 and the northeast quarter of section 4, the northeast quarter of section 10, the northwest quarter of section 11. Our well is a half mile from the south boundary of the north Brunson pool and we have brought R. E. LeBond who is our regional geologist, and he has prepared a cross section of our lease and has prepared a conture map of the

north portion of the Brunson pool upon which I believe the Commission will be able to determine into which field our well should be included. There is a possibility that the Commission may decide it is all one field. Our well having been drilled between the two will be found to connect them up.

R. E. LeBLOND,

having been first duly sworn, made the following statement:

MR. LeBLOND: This is a map of the north part of the Brunson field and the north Brunson field. It outlines our two wells. They are shown in purple. The map is contoured on the top of the Ellenberger Dolomite, using 100 foot contour intervals, which shows the structure of the Brunson Field and the north Brunson field and including our lease upon the edges of the two fields. The edge of the Ellenberger is shown in orange on the map with approximate oil and water edge is shown in green. I do believe this map indicates our well is simply an extension of the Brunson Field. The wells are similar in all respects, at lease, geologically speaking, to the wells in the Brunson Field.

MR. SPURRIER: You want to offer that as an exhibit?

MR. LeBLOND: Yes, sir.

MR. SPURRIER: It is marked Exhibit A and it will be accepted.

MR. LeBLOND: We also have a cross section showing

our lease has little bearing on the problem, but it does indicate the relation of the wells on the lease.

(Marked Exhibit B.)

MR. HOLLOWAY: This is the subject we have been speaking of. This well (indicating on map) was on potential yesterday. It is completed now. It is also in the Ellenberger which is the Brunson pool. So we have two wells now that need to be included within some designated field.

MR. SPURRIER: You say yesterday, Mr. Holloway, it was on potential yesterday.

MR. HOLLOWY: We have some additional prints of these if the Commission would like to have them.

MR. SPURRIER: I think this is sufficient.

MR. McCORMICK: Where is the location of the second well you just spoke of?

MR. HOLLOWAY: The second well. It is the 40 acres immediately west of the No. 3 well.

MR. SPURRIER: That would be the northwest northwest.

MR. LEBLOND: It would be in the northeast northwest of Section 15, 21 -

MR. HOLLOWAY: The plat shows the north boundary of the Brunson and the south boundary of the north Brunson.

MR. McCORMICK: In your opinion should all of section 15 be included in the Brunson pool?

MR. LEBLOND: I would have to look at my map just once.

Well, I believe it should. And maybe possibly 160 acres of the section on the east side that hasn't been productive.

MR. McCORMICK: You think that is a separate reservoir from the North Brunson pool?

MR. LeBLOND: Well, I haven't studied the North Brunson pool in detail and I wouldn't want to answer that. But they are very similar.

CHAIRMAN SHEPARD: Any further questions? If not, you may be excused. These cases will be taken under advisement and we hope to have the orders out shortly on them. If there is nothing further we will stand adjourned.

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STATE OF NEW MEXICO)
) SS.
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the attached transcript of proceedings before the Oil Conservation Commission is a true and complete record thereof to the best of my knowledge, skill and ability.

DATED AT Albuquerque, New Mexico, this _____day of February, 1951.

_____
Notary Public.

My Commission expires August 4, 1952.