CASE 3670: Application of AMERADA FOR A DUAL COMPLETION, LEA COUNTY NEW MEXICO.

ASE MO.

APPlication,
TYANSCripts,
SMAIL Exhibits
ETC.

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico Gil Conservation Commission

LAND COMMISSIONER GUYTON & HAYS MEMBER



P. O. BOX 2088 SANTA FE

November 13, 1967

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: Case No. 3670
Order No. R-3337
Applicant:

Amerada Petroleum Corp.

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/ir		
Carbon copy	of order also sent to:	
Hobbs OCC	×	
Artesia OCC_		
Aztec OCC		
Other	Mr. George E. Erickson	

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE No. 3670 Order No. R-3337

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR A DUAL COMPLETION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 25, 1967, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 9th day of November, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Amerada Petroleum Corporation, seeks authority to complete its State "MA" Well No. 3, located in Unit M of Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico, as a dual completion (combination) to produce gas from the Moore-Wolfcamp Gas Pool and oil from the Moore-Pennsylvanian Pool through tubing installed in parallel strings of 2 7/8-inch and 3 1/2-inch casing, respectively, cemented in a common well bore.
- (3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (4) That approval of the subject application will prevent waste and protect correlative rights.

-2-CASE No. 3670 Order No. R-3337

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to complete its State "MA" Well No. 3, located in Unit M of Section 24, Township 11 South, Range 32 East, NMPM, Lea County, New Mexico, as a dual completion (combination) to produce gas from the Moore-Wolfcamp Gas Pool and oil from the Moore-Pennsylvanian Pool through tubing installed in parallel strings of 2 7/8-inch and 3 1/2-inch casing, respectively, cemented in a common well bore;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take a sone segregation test upon completion of the well.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GINTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

esr/

Heard 10-25-67
Rec. 10-31-67

Showed Much (continue)

Thimpless

The Moone - Woffent zone will be

produced then 1'2 inchesting setal.

7 & 51 in 2'8 inch casing. (bas). The

Moore - Rum will be produced then

2'8 inch Juling set J. 5325 in 3'2"

Casing. The 28 of 3'his set in a

comom hole. * cemberel 6.6400'.

Thick has

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 25, 1967

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 3668:

Application of Mobil Oil Corporation for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Bridges State Well No. 121 located in Unit L of Section 13, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the North Vacuum-Abo, Vacuum-Upper Pennsylvanian, and Vacuum-Middle Pennsylvanian Pools, through parallel strings of tubing.

CASE 3669:

Application of Amerada Petroleum Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its State "VA" Lease by the injection of water into the Grayburg-San Andres formation through two wells located in Units K and M of Section 23, Township 17 South, Range 34 East, Vacuum Pool, Lea County, New Mexico.

CASE 3670:

Application of Amerada Petroleum Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (combination) of its State "MA" Well No. 3 located in Unit M of Section 24, Township 11 South, Range 32 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Moore-Wolfcamp Gas Pool and oil from the Moore-Pennsylvanian Pool through tubing installed in parallel strings of 2 7/8 inch and 3 1/2 inch casing, respectively, cemented in a common well bore.

CASE 3671:

Application of Amerada Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation, Bagley Field, Lea County, New Mexico, through the following three wells, all located in Township 12 South, Range 33 East:

L. H. Chambers Well No. 2, Unit C of Section 11; Disposal Interval - 9005 to 9393 feet;

State BT "D" Well No. 4, Unit N of Section 2; Disposal Interval - 8979 to 9291 feet;

J. T. Caudle Well No. 1, Unit H of Section 10; Disposal Interval - 9001 to 9326 feet;

CASE 3672:

Application of Charles B. Read and Len Mayer for back allowable, Eddy County, New Mexico. Applicants, in the above-styled cause, see the assignment of back allowable for the period from

April 7, 1967, to August 3, 1967, to their Trene Brainard Well No. 1 located in Unit E of Section 20, Township 18 South, Range 26 East, Atoka-Pennsylvanian Pool, Eddy County, New Mexico, said period being from the date of completion of the well to the date of approval by the Federal Power Commission for the sale of gas from said well.

- CASE 3673: Application of Ralph Lowe for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates formation in the interval 2964 feet to 2982 feet in his Humble State Well No. 1 located in Unit G of Section 36, Township 25 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.
- CASE 3674: Application of Robert N. Enfield for the amendment of Order No. R-3189, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3189 which pooled all mineral interests in the Chaveroo-San Andres Pool underlying the NW/4 NW/4 of Section 11, Township 8 South, Range 33 East, Chaves County, New Mexico. Applicant specifically seeks the amendment of paragraph (9) of Order No. R-3189 to fix \$125.00 per month as a reasonable charge for supervision and operational overhead for the subject well and to authorize the applicant to withhold from production the proportionate share of said \$125.00 and the proportionate share of actual operating costs of said well attributable to each non-consenting working interest.
- CASE 3675: Application of Gulf Oil Corporation for a unit agreement, Eddy County, New Moxico. Applicant, in the above-styled cause, seeks approval of the North Hackberry Yates Unit Area comprising 720 acres nore or less, of Federal Lands in Sections 23 and 24, Township 19 South, Range 30 East, Eddy County, New Mexico.
- CASE 3676: Application of Gulf Oil Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Yates formation through eight wells in Sections 23 and 24, Township 19 South, Range 30 East, North Hackberry-Yates Pool, Eddy County, New Mexico.
- CASE 3677: Application of Dugan Production Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Salt Creek-Dakota Oil Pool, San Juan County, New Mexico, to permit the drilling of wells on 2 1/2 acre spacing provided that no well be located nearer than 165 feet to the outer boundary of the quarter-quarter section and no nearer than 200 feet to another well producing from the same pool, and provided further, that a 40-acre proration unit would be subject to a 40-acre allowable regardless of the number of wells on the unit.
- CASE 3678: Application of Ryder Scott Management Company for a waterflood expansion, waterflood buffer zone, and several unorthodox locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of its Artesia-Nichols Waterflood Project,

Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico, by the conversion of its Western-Yates Collier State Well No. 1 located in Unit F of Section 20 and its Mershon State State Well No. 2 located in Unit D of Section 21. Applicant further proposes to drill three additional water injection wells at the following unorthodox locations in Section 20: 2650 feet from the North and West lines; 2650 feet from the North line and 1330 feet from the East line; and 1310 feet from the North line and 1330 feet from the East line. Applicant further seeks the designation of the W/2 NW/4 of Section 21 and the SW/4 NW/4, E/2 NW/4, NE/4, and W/2 SE/4 of Section 20 and the NW/4 NE/4 of Section 29 as a waterflood buffer zone with capacity allowables, or as an area wherein transfer of allowable between leases would be permitted.

CASE 3679:

Application of Sinclair Oil & Gas Company for the amendment of Order No. R-2854, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks the amendment of Order No. R-2854, which order established a 160-acre non-standard gas proration unit comprising the W/2 SW/4, SE/4 SW/4, and SW/4 SE/4 of Section 26, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico, to be dedicated to applicant's J. R. Cone "A" Well No. 2 located in Unit L of said Section 26. Applicant now seeks the dedication of said unit to its J. R. Cone "B" Well No. 1 located in Unit N of said Section 26.

CASE 3680:

Application of Texaco Inc. for an unorthodox location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to recomplete its State "CT" Well No. 4 at an unorthodox location 660 feet from the North line and 1980 feet from the West line of Section 35, Township 7 South, Range 35 East, in the Todd-Upper San Andres Pool, Roosevelt County, New Mexico, in exception to the pool rules which require wells to be located in the NE/4 or the SW/4 of the Section.

Ches 3670

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR APPROVAL OF A DUAL COMPLETION, LEA COUNTY, NEW MEXICO

33

APPLICATION

- 1. Applicant proposes to complete the above-described well for production of gas from the Moore-Wolfcamp Gas Pool, and the production of oil from the Moore-Pennsylvanian Oil Pool.
- 2. Applicant proposes to complete the well for production through two parallel strings of casing. Casing to the Pennsylvanian zone will be 3½ inch casing perforated at 8341 feet to 8429 feet with production through 3/8 inch OD tubing. Wolfcamp production will be through 2-7/8 inch casing perforated from 8133 feet to 8250 feet with production through 1-1/4 inch OD tubing.
- 3. To the best of applicant's information and belief, the Commission has not heretofore approval a dual completion for the productive zones involved in this application.
- 4. Approval of this application will result in the prevention of waste and correlative rights will be protected.

WHEREFORE, applicant requests that this application be set for hearing before the Commission's duly appointed examiner, and that after notice and hearing as required by law,

DOCKET MAILED

Dale 10-11-67

the Commission enter its order approving the dual completion as applied for.

Respectfully submitted,

AMERADA PETROLEUM CORPORATION

KELLAHIN & FOX
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO

ATTORNEYS FOR APPLICANT

dearnley-meier reporting service, inc.

1120 SIMMS BLDG. . P. O. BOX 1092 . PHONE 243-6691 . ALBUQUEROUE, NEW MEXICO

BEFORE THE MEW MEXICO OIG CONSERVATION COMMISSION Santa Fe, New Mexico October 25, 1967 EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corporation for a dual completion, Lea County, New Mexico.

Case No. 3670

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING



MR. UTZ: The next case will be case 3670.

MR. HATCH: Application of Amerada Petroleum Corporation for a dual completion, Lea County, New Mexico.

MR. ERICKSON: George E. Erickson, Jr., Amerada Petroleum Corporation, Box 2040, Tulsa, appearing for Amerada, in assocation with Jason Kellahin. Mr. Examiner, I would like to move immediately to amend our application in paragraph two, there's a typographical ommission in line 4. It reads, "with production through 3/8 inch OD," that should be 2-3/8 inch tubing.

MR. UTZ: We had a pretty good hunch that's what you meant.

 $$\operatorname{MR}$.$ ERICKSON: I have one witness, Mr. Jack $\ensuremath{\operatorname{\textbf{Evans}}}$, for this case.

MR. HATCH: Let's have the records show that he has already been sworn.

(Whereupon Applicant's Exhibits 1, 2, and 3 were marked for identification.)

A. JACK EVANS, called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ERICKSON:

Q Mr. Evans, are you familiar with the subject matter

of this application?

- A Yes, sir, I am.
- Q I ask you to direct your attention to what has been marked as Exhibit I for identification, and ask you to describe that exhibit.
- County, New Mexico, Township 11 South, Range 32 East. On the map, wells indicated are the large circles showing the Wolfcamp Gas Producers colored in orange, and in green would be the Pennsylvanian Oil Producers. The Devibuib wells are marked in solid dots. The subject well, the one where we ask for dual completion, is indicated by the red arrow and is completed in the Wolfcamp Gas and the Pennsylvanian Oil.
- Q Mr. Evans, to the best of your knowledge are there any other dual completions by the Moore-Wolfcamp Gas Pool and the Moore-Pennsylvanian Oil Pool in this area?
 - A No, sir, there is not.
- Q Now, I would like to invite your attention to what has been marked as Exhibit 2 for identification and ask you to describe that exhibit.
- A Exhibit 2 is the log run on the Amerada State
 "MA" number 3, the subject well, showing the Wolfcamp zone

perforations colored in green, and the Pennsylvanian Oil perforations is colored in red, showing approximately 90 feet of separation between the two zones.

- Q Now, I'd like to look at what has been marked as Exhibit 3, for identification and ask you to describe that exhibit.
- A Exhibit 3 is a down hole scamatic of the Amerada State "MA" number 3 showing the configuration of the casing and tubing strings that we have used in this well.
- Q Would you indicate the casing string to he used for the gas and the string for oil production?
- A For the gas string we have used 2-7/8 inch OD casing cemented at 8594 feet; for the oil zone we have cemented 3½ inch OD casing at 8596 feet, there were 800 sacks of cement used in the cementing of these two casing strings. I wanted to point out too, that the surface casing 10-3/4 inch OD was set at 1459 feet and that 8-5/8 inch intermediate casing was set at 3650 feet.
- Q And these two casings are separated by this intermediate casing, is that correct?
 - A I don't understand.
 - Q Well, there is a separation between the two strings?
 - A yes, sir. They are cemented in a common well bore.

Q Would you point out for the examiner the perforations for the gas and the oil zone, please?

A The Wolfcamp Gas zone is perforated over a gross interval from 8133 feet to 8250 feet, and this correspondes to the green perforations indicated on Exhibit 2. The Pennsylvanian zone is perforated over a gross interval from 8341 feet to 8429 feet, and that Correspondes to the red perforations indicated on Exhibit 2. Our proposal is to produce the gas through 1½ inch OD tubing and produce the oil through 2-3/8 inch OD tubing.

Q Now, Mr. Evans, if the application is approved, will the proposal that you describe particularly refer to the scamatic marked as Exhibit 3, will that proposal protect against commingle production?

A Yes, sir, it will.

Q Have you made any tests on the production capacity of the two zones involved in this application?

A Yes, sir.

Q Will you describe the results of those tests?

A The gas zone on potential tests flowed 966 mcf a day, dry gas, with a flowing tubing pressure of 844 pounds. The Pennsylvanian Oil zone on potential tests flowed 265 barrels of oil per day with 14 barrels of water,

flowing tubing pressure was 520 pounds, the gas oil ratio was 1915. The oil gravity is 45.5 degrees api corrected.

Q In your opinion, is this proposal an efficient method to produce from the two zones which are the subject matter of the application?

A Yes, sir.

Q Were these exhibits prepared either by you or under your supervision?

A Yes, sir, they were.

MR. ERICKSON: At this time, I would like to move the acceptance into evidence of Exhibits 1 through 3, and also let the records show that Mr. Evans has previously testified, and asked that his qualifications again be accepted, just for the sake of the record.

MR. UTZ: Let the records so show.

(Whereupon Applicant's Exhibits 1, 2, and 3 were admitted in evidence.)

MR. ERICKSON: Do you have any questions of the witness, Mr. Examiner?

MR. UTZ: No, I don't believe I have any questions.

Are there any questions of the witness? The witness may

be excused.

(Witness excused.)
MR. UTM: The case will be taken under adivsement.

PAGE

AND

6

INDEX

A. JACK E	CVANS			·
Dire	ect Examination	by Mr.	Erickson	2
				OFFERE
EXHI	BIT	MARKE		OFFERED ADMITTED

2

WITNESS

Applicant's 1 through 3

STATE OF NEW MEXICO) ss COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

My Commission Expires: June 19, 1971

I do horeby sorting the the guarantees in a compared the the presentation of the presentation of the presentation of the part of the presentation of the part of t

aurt Reporter

		1		
	HOORE			
15				
		1	13	1
	(Verson & Brown)	Texas	Texas-Gulf	18
	1-\$5026° 2-\$17-680	5-\$10,740	·	
	-1 1	1	i	
	3.\$10,715 1.€10,660	4 . 0,630	I PANAGE	1
446) 1978	Robinson "4"		ΙΦΙΙ,010' State "2"	1
No.	Amerada	Texas	(Gulf)	
		3 ●#2 € 20	Penrose	
	1		į	1
			1	
22	Robinson	\$ • 10,600° 1 • 10,600°	o'l 10403·	
	Robinson 23		(Gulf-Powhaten)	
		Amerada Texas	C. Beal	19
	1.010685	2.010,606		.1
		<u> </u>	1 - \$ 10578"	
			/ 1	1
	A.M. Lee et al	100,500	į į	
	Texas Texas	MA"State BR"	Moore	1
	1 \$ 10 CAP 1 \$ 10 807	1.0471' 2.10,500'	Magnolía	
\$ 150 \$ 150 \$ 150	BP NOTI St. BU"	Moore Zela, soor	1 ⊅- 10,67 8 ′	1
	De Kalb Amerada Mid-Cont.	Sargian 0,560' 2010593'		
	1Ф10713	7 0,560 2 • 10593 1		
	51.7 26 St. Ld6 33 A	Moore B 25	Moore	
	! ! !	Texas 3 • 10,600' 2 • 10,600'	- Moore Ring	30
्रिक्ष सर्वे		₹10,232	ιφί <u>ο</u> ίους, -	
	L	i	, 1,5	
	1	1	1	
	ļ	ļ	I	√ {
		NCFI BN State	BM '	
	AMERADA PETROLEUM CORP.	_		4
4	EXHIBIT			
, % 	NO_3670	1	MOORE	CICIO
	DATE 10-25-67	1 (FA COUNTY 1	FIELU
34 RESCHOOL CV	35	1 ,	LEA COUNTY, N	JEM WEXICO
Dri Vara LV	AMINER OTZLEGEND:	1	T-11-S	R-32-E
THE COLUMN TO SERVICE	HOM COMAN OF A WOLFCAMP GAS	1		
1 - Will	PENN OIL DEV. OIL	, [SCALE: 1" 2	nonal
CASE MON SE	270	Ĭ	VVALE. 1 - 2	.000
		1		

OCT 2 - 1987-WELL -COMPANY_AMERICADA 21 - Twp 11-5_ Rgo 3.7 E STATE FI. Above Ferm. Datum ATTECOFFIX SINSTRESTY MA #3 STATE Aleul Petroleum Carpecation Elev.; K.B D.F. <u>13.39</u> G.L. 16.3.28 Other Services:

GUARD

FORKO 8000 8100 8300 8400

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

FXHISTIND # 7 CASE NO. EXHIGIT NO. 3670

PROPOSED DUAL COMPLETION

AMERADA STATE MA NO. 3

HOORE FIELD. LEA COUNTY

OIL CONSERVATION COMMISSION

EXHILITINO, ASSENDED TO SERVE TO SERV

