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. 1464 Order No. R-1206

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR APPROVAL OF AN OIL—OIL DUAL COMPLETION IN THE FUSSELMAN FORMATION ADJACENT TO THE JUSTIS—FUSSELMAN POOL AND IN THE DRINKARD FORMATION ADJACENT TO THE JUSTIS—DRINKARD POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 11, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 18th day of June, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, 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, is the operator of the Ida Wimberly Well No. 3, located 1980 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to dually complete the above-described Ida Wimberly Well No. 3 in such a manner as to permit the production of oil from the Fusselman formation adjacent to the Justis-Fusselman Pool and the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool through parallel strings of 2 3/8-inch tubing.
- (4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (5) That approval of the subject application will not cause waste nor impair correlative rights.

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(6) That the subject application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Amerada Petroleum Corporation, be and the same is hereby authorized to dually complete its Ida Wimberly Well No. 3, located 1980 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of oil from the Fusselman formation adjacent to the Justis-Fusselman Pool and the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool through parallel strings of 2 3/8-inch tubing.

PROVIDED HOWEVER, That subject well shall be completed and thereafter produced in such a manner that there will be no commingling within the well-bore, either within or outside the casing, of gas, oil and gas, or oil produced from either or both of the separate strata,

PROVIDED HOWEVER, That prior to the actual dual completion the operator shall make pressure tests of the casing to prove that no casing leaks exist. In the event a casing leak is apparent the operator shall take appropriate steps to adequately repair the leak. The results of these tests shall be reported to the Commission on Form C-103.

PROVIDED FURTHER, That upon the actual dual completion of such subject well applicant shall submit to the appropriate District Office of the Commission copies of Oil Conservation Commission Form C-103, Form C-104, Form C-110, and Form C-122, outlining the information required on those forms by existing Rules and Regulations, and two copies of the electric log of the well.

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used at any time as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil or gas-liquid ratio thereof determined, and

PROVIDED FURTHER, That the operator shall make any and all tests, including segregation and packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Justis-Fusselman Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any other tests and/or determinations as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of offset operators if any there be at their election, and the results of each test, properly attested to by the applicant herein and all witnesses, shall be filed with the Commission within

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fifteen (15) days after the completion of such tests, and further, that applicant shall file with the Commission in duplicate a packer setting affidavit, which affidavit shall be due within fifteen (15) days of the dual completion or whenever the packer is disturbed, and

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas-oil ratio or gas-liquid ratio, and reservoir pressure determination for each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO CIL CONSERVATION COMMISSION

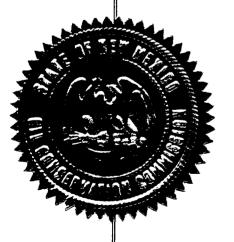
EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

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

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BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico

IN THE MATTER OF:

CASE NO. 1464

MAIN OFFICE OCC

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO 3-6691 5-9546

June 11, 1958

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO JUNE 11, 1958

IN THE MATTER OF:

CASE NO. 1464 Application of Amerada Petroleum Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the : dual completion of its Ida Wimberley Well No. 3, located 1980 feet from the: South line and 990 feet from the West: line of Section 24, Township 25 South, : Range 37 East, Lea County, New Mexico, : in such a manner as to permit the pro-: dúction of oil from the Fusselman ad- : jacent to the Justis-Fusselman Pool.and: oil from the Drinkard formation adjacent to the Justis-Drinkard Pool through: parallel strings of tubing.

BEFORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The hearing will come to order. Next case will be Case 1464.

MR. PAYNE: Application of Amerada Petroleum Corporation for an oil-oil dual completion.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe, representing the applicant, Amerada Petroleum Corporation, and we have one witness, Mr. McBryde.

(Witness sworn)

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Will you state your name, please?
- A I am O. C. McBryde, Jr.
- Q By whom are you employed and in what position?
- A I am division engineer in Midland for Amerada Petroleum Corporation.
- Q Have you previously testified before this Commission as an expert engineer and had your qualifications accepted by the Commission?
 - A Yes, sir, I have.
 - MR. KELIAHIN: Are the witness qualifications acceptable?
 - MR. NUTTER: Yes, sir, they are. Please proceed.
- Q Mr. McBryde, are you familiar with the application in Case 1464?
 - A Yes, I am.
 - Q Now, what is proposed to be done under that application?
- A We propose to dually complete our Wimberley No. 3 in the area of the Justis Pool by running two parallel strings of two and three-eighths inch OD tubing.
 - Q Now, what formations do you propose to produce?
 - A In the Drinkard oil pool and the Fusselman oil pool.

Q Now, referring to what has been marked as Exhibit No. 1, would you state what that is?

A Exhibit No. 1 is a plat of the Justis Pool area showing the location of the subject well, which is circled in red. Also shows the location of other dual completions in the area with the formations involved shown on the map. You'll note that there are two other Drinkard Fusselman duals immediately north of our well, which have been dualed in this pool. The plat also shows the well locations and lease ownership in the area.

Q Now, referring to what has been marked as Exhibit No. 2, will you state what that is?

A Exhibit No. 2 is a marked electric log of the Amerada Wimberley No. 3. On the two-inch scale we have marked the top of the Drinkard formation, the Drinkard perforations; that's around 5900 hundred feet if you found them. The packer location.

Q What is the packer location approximately?

A Approximately 6800 feet. The casing depth which is 6960 feet, the top of the Fusselman formation, which is 6796 feet, and the Fusselman producing interval which is open hole from the casing shoe to the total depth of 7,000.

- Q Which gives you approximately how much open hole?
- A Approximately 40 feet.
- Q Now, referring to what has been marked as Exhibit No. 3, will you state what that is?
 - A Exhibit No. 3 is a schematic diagram of the Winberley No.

dual completion. Shows the casing setting depth and top of cement, the packer setting depth, the Drinkard formation perforations, the Fusselman producing interval, the tubing program, and the total depth of the well.

- Q What type of packer is proposed to be used?
- A We are using a Baker Model D production packer.
- Q Is there anything else in connection with Exhibit No. 3, Mr. McBryde?
 - A No, sir, but I have some information on the completion.
- Q All right. Now, will you tell the Commission the history of completion of this well, please?

A Yes, sir. The Wimberley No. 3 was located 990 feet from the West line and 1980 feet from the South line of Section 24, in Township 25 South, Range 37 East, Lea County, New Mexico. The well was drilled to a total depth of 7,000 feet with seven inch casing set at 6,960 feet. The casing was cemented in two stages; the first stage at 6,960 with 90 sacks of cement mixed with 4 per cent gel; the second stage at 6,094 feet with 295 sacks of cement, also mixed with 4 percent gel. The top of the cement by temperature survey was 4,057 feet. The well was completed in the Fusselman on May the 5th, 1958. It, was actually dually completed in the Fusselman and Drinkard, but we are waiting on this order before we produce the Drinkard. The Fusselman completion is producing from open hole at 6,960 feet to 7,000 feet; on completion tests the zone flowed at a daily rate of 856 barrels of oil and 12 barrels of acid water on

a three-quarter inch choke. Gas-oil ratio was 885 to 1 with tubing pressure of 100 pounds. Oil gravity was 36.6 degrees API corrected. Bottom hole pressure in the Fusselman zone at a minus 3,900 feet was 2,853 pounds after a fifty-eight hour shut-in. The Drinkard completion is producing from perforations at 5,886 to 5,946 feet. On completion test the zone flowed at a daily rate of 687 barrels of oil and 8 barrels of acid water on a 20/64 inch choke. Gas-oil ratio was 711 to 1; tubing pressure was 375 pounds. Oil gravity was 38.3 degrees API corrected. Bottom hole pressure at minus 2,900 feet in the Drinkard was 2662 pounds, after shut-in period of several weeks.

MR. NUTTER: What was that bottom hole pressure again?

A 2,662 pounds. That was minus 2,900. I have estimated that if we were to drill a single well to the Drinkard formation, the cost of such a well would be \$113,600. Likewise, if we were to drill a single well to the Fusselman formation, I've estimated the cost to be \$136,300. Total cost of two single wells drilled to the Drinkard and Fusselman formations would be \$249,900. The estimated cost of this dual completion is \$156,800, which represents a saving of \$93,100 by dualling instead of drilling two single wells.

Q Mr. McBryde, is the type of completion proposed similar to or identical with the completions which have heretofore been approved by this Commission?

- A It is very similar, if not identical.
- Q Does that type of completion enable you to make any and all

tests which may be necessary or required by the Commission?

- A Yes, sir, it does.
- Q Is the type of completion such that, in your opinion, there will be no commingling of fluids from the two producing horizons in the well?
 - A It is.
- Q Is the completion such that in the event of packer leakage it would be detected promptly and steps taken to correct it?
 - A Yes, sir. We could detect it if we got a leak.
- Q Were Exhibits 1, 2 and 3 prepared by you or under your direction and supervision?
 - A They were prepared under my direction.
- MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1, 2 and 3.
- MR. NUTTER: Is there objection to the introduction of Amerada's Exhibits 1 through 3? If not, they will be so admitted.
- Q (By.Mr.Kellahin)Mr. McBryde, in your opinion, is approval of this application in the interest of conservation and the prevention of waste?
 - A Yes, it is.
- Q And will correlative rights be protected by such a completion?
 - A Yes, sir.
 - MR. KELLAHIN: 'That's all the questions we have.
 - MR. NUTTER: Any questions of Mr. McBryde? If not, the wit-

ness may be excused.

(Witness excused)

MR. NUTTER: Does anyone have anything further to offer in Case 1464? We will take the case under advisement and take up Case 1465.

CERTIFICATE

STATE	OF I	NEW	MEXICO)	
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COUNTY	OF	BEI	RNALILLO)	ł

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal, this, the <u>s</u> day of <u>suly</u> 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph a. Dujella NOTARY PUBLIC

My Commission Expires:

October 5, 1960

DOCKET: EXAMINER HEARING JUNE 11, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, NM

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1337:

Application of Gulf Oil Corporation for an order amending Order R-1093. Applicant, in the above-styled cause, seeks an order amending Order R-1093 to provide for the commingling, in exception to Rule 303, but only after separate measurement, of oil produced from the Fusselman, Ellenburger, and McKee formations underlying its Learcy McBuffington Lease, comprising the S/2 of Section 13, Township 25 South, Range 37 East, Lea County, New Mexico, and the transfer of said production by means of automatic custody transfer equipment, in exception to Rule 309 (a); applicant also seeks authority to commingle the production, after separate measurement, from the Blinebry and Drinkard formations and the Langlie-Mattix Pool underlying the above-described McBuffington Lease, and to transfer said production by means of automatic custody transfer equipment. Applicant further seeks authority to produce more than 16 wells into each of the common transfer facilities described above, in exception to Rule 309 (a).

CASE 1341:

Application of Jal Oil Company, Inc. for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Sarkeys Well No. 2, located 660 feet from the North and West lines of Section 25, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry Oil Pool and oil from the Tubb Gas Pool through parallel strings of tubing.

CASE 1464:

Application of Amerada Petroleum Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimberley Well No. 3, located 1980 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Fusselman adjacent to the Justis-Fusselman Pool, and oil from the Drinkard formation adjacent to the Justis-Drinkard Pool through parallel strings of tubing.

CASE 1465:

Application of Magnolia Petroleum Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its New Mexico "S" No. 1 Well, located 990 feet from the North line and 1650 feet from the East line of Section 2, Township 16 South, Range 32 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Wolfcamp formation adjacent to the Anderson Ranch-Wolfcamp Pool and oil from the Anderson Ranch-Devonian Pool through parallel strings of tubing.

CASE 1466:

Application of Tidewater Oil Company for an exception to Rule 309 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing the installation of automatic custody transfer equipment with positive displacement meters and automatic sampling equipment and other related facilities to receive, measure, and transfer custody of oil from the Justis-Ellenburger Pool produced from the wells located on its Coates "C" Lease, which comprises the E/2, SE/4 NW/4, and NE/4 SW/4 of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 1467:

Application of Continental Oil Company for the establishment of a new Tubb gas pool and for the promulgation of special rules and regulations. Applicant, in the above-styled cause, seeks an order establishing a new pool for Tubb gas production to be designated as the Warren-Tubb Gas Pool with horizontal limits consisting of the E/2 of Section 28, Township 20 South, Range 38 East, Lea County, New Mexico. The applicant further seeks the promulgation of special pool rules similar to those adopted for the Tubb Gas Pool, as set forth in Order R-586, subject to modification of certain of said rules.

CASE 1468:

Application of Continental Oil Company for the establishment of a new Blinebry gas pool and for the promulgation of special rules and regulations. Applicant, in the above-styled cause, seeks an order establishing a new pool for Blinebry gas production to be designated as the Warren-Blinebry Gas Pool with horizontal limits consisting of the E/2 of Section 28, Township 20 South, Range 38 East, Lea County, New Mexico. The applicant further seeks the promulgation of special pool rules similar to those adopted for the Blinebry Gas Pool, as set forth in Order R-610, subject to modification of certain of said rules.

CASE 1469:

Application of Phillips Petroleum Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 of Section 14, Township 19 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Bern "A" Well No. 1, located 660 feet from the South and East lines of said Section 14.

CASE 1470:

Application of Phillips Petroleum Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the N/2 of Section 12, Township 19 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Monument Well No. 1, located 1977 feet from the North line and 660 feet from the East line of said Section 12.