

Case No.

394

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Application, Transcript,  
Small Exhibits, Etc.

CASE 394: The application of Shell Oil Co.  
for an Order permitting dual completion of  
its Shell State #2, Drinkard Pool, SE/4 NE/4  
15-21S-37E, NMPM, Lea County, New Mexico.

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. 394  
ORDER No. R-189

THE APPLICATION OF SHELL OIL  
COMPANY FOR AN ORDER GRANTING  
PERMISSION TO DUALY COMPLETE  
AND PRODUCE ITS STATE No. 2 WELL,  
IN THE DRINKARD POOL, LOCATED  
IN THE SE/4 NE/4 SECTION 15 TOWN-  
SHIP 21 SOUTH, RANGE 37 EAST,  
NMPM, LEA COUNTY, NEW MEXICO

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on August 19, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this *28<sup>th</sup>* day of *August* 1952, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises,

FINDS:

(1) That due notice having been given as required by law, the Commission has jurisdiction of the case and the persons and subject matter thereof.

(2) That the applicant's State No. 2 well, SE/4 NE/4, Section 15, Township 21 South, Range 37 East, NMPM, was completed in January, 1949, as an oil well producing from the Drinkard formation in the open-hole interval 6585-6641 feet, having been drilled through the Blinebry gas zone (5550-5722 feet).

(3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil - gas wells, the Commission is unconvinced of the soundness, as a waste-prevention practice, of such dual/multiple completions as a general practice in New Mexico without specific controls over each such project.

IT IS THEREFORE ORDERED:

That the applicant herein, Shell Oil Company, be, and it is hereby authorized to dualy complete and produce its State No. 2 well, SE/4 NE/4, Section 15, Township 21 South, Range 37 East, NMPM, in the Drinkard Pool, Lea County, New Mexico, in such manner that the gas from the Blinebry gas zone be produced through the annular space between the casing and the tubing, and oil from the Drinkard formation through the tubing by proper perforations and installation of the proper packer or packers;

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, and,

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 ratio thereof determined, and,

PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and 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, and shall be filed with the Commission within ten (10) days after the completion of such test, 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 and reservoir pressure determination of 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 hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Edwin L. Mecham*

EDWIN L. MECHEM, Chairman

*Guy Shepard*

GUY SHEPARD, Member

*R. R. Spurrier*

R. R. SPURRIER, Secretary

S E A L

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

Case No. 394  
Order No. \_\_\_\_\_

THE APPLICATION OF SHELL OIL COMPANY  
FOR AN ORDER GRANTING PERMISSION TO DUALY  
COMPLETE AND PRODUCE ITS STATE No. 2 WELL,  
IN THE DRINKARD POOL, LOCATED IN THE SE $\frac{1}{4}$ NE $\frac{1}{4}$ ,  
SECTION 15, TOWNSHIP 21 SOUTH, RANGE 37 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

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(3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil - gas wells, the Commission is unconvinced of the soundness, as a waste-prevention practice, of such dual/multiple completions as a general practice in New Mexico without specific controls over each such project.

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PROVIDED FURTHER, etc.

*Case 377*

June 20, 1952

Oil Conservation Commission  
Santa Fe, New Mexico

Gentlemen:

By means of this application the Shell Oil Company wishes to state the following:

- a) That Shell State 2, located in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 15-21S-37E, was completed in January 1949 at a total depth of 6641 feet. The appended Exhibit A shows the location of this and all other wells on the State lease together with the locations of all offset wells.
- b) That the said well was completed as an oil well producing from the interval 6585-6641 feet in the Drinkard formation after having been drilled through the Blinebry gas productive interval extending from approximately 5550 to 5722 feet. These data are depicted on the appended Exhibit B.
- c) That the applicant proposes to (1) perforate the 5 1/2-inch casing opposite the Blinebry gas-productive horizons and (2) set a Baker production packer at approximately 6540 feet in the 5 1/2-inch casing.
- d) That the applicant proposes to dually complete the said well to produce oil from the Drinkard formation through the tubing and gas from the Blinebry formation through the 5 1/2-inch casing. The manner and method of the proposed dual completion are shown on Exhibit C.
- e) That the granting of this application for permission to produce dually oil from the Drinkard formation and gas from the Blinebry formation is in the interests of conservation and the protection of correlative rights.
- f) That the applicant will do such things as may be required of it by the New Mexico oil Conservation Commission in the maintenance of separation of production from said two horizons.
- g) That the manner and method of the proposed dual completion is mechanically feasible and practical. No corrosion problems are anticipated as the hydrogen sulfide content of the Blinebry gas has been tested to be approximately 0.001 per cent and no carbon dioxide has been found in this gas.

Therefore, the Shell Oil Company requests that the Oil Conservation Commission set a certain day upon which this application may be heard and after said hearing to grant permission in order that the applicant may dually complete State 2 so that oil from the Drinkard formation may be produced through the tubing and gas from the Blinebry formation through the casing.

Respectfully submitted,

*C. R. Bickel*  
C. R. Bickel  
Division Manager  
Shell Oil Company  
Hobbs, New Mexico