

Case No.

396

Application, Transcript,
Small Exhibits, Etc.

CASE 396: The application of Shell Oil Co.
for an Order permitting dual completion of
its Shell Argo #A-1, Drinkard Pool, NW/4 NW/4
22-21S-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 THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 396
ORDER NO. R-191

THE APPLICATION OF SHELL OIL
COMPANY FOR AN ORDER GRANTING
PERMISSION TO DUALY COMPLETE
AND PRODUCE ITS ARGO 'A' NO. 1 WELL,
IN THE DRINKARD POOL, LOCATED IN THE
NW/4 NW/4, SECTION 22, TOWNSHIP 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 28th 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 Argo 'A' No. 1 well, NW/4 NW/4, Section 22, Township 21 South, Range 37 East, NMPM, was completed in July, 1947, as an oil well producing from the Drinkard formation in the perforated interval 6510-6630 feet, having been drilled through the Tubb gas zone (5988-6236 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 dually complete and produce its Argo 'A' No. 1 well, NW/4 NW/4, Section 22, Township 21 South, Range 37 East, NMPM, in the Drinkard Pool, Lea County, New Mexico, in such manner that the gas from the Tubb 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. Spurrer

R. R. SPURRIER, Secretary

S E A L

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CASE No. 396
ORDER No. _____

THE APPLICATION OF SHELL OIL COMPANY
FOR AN ORDER GRANTING PERMISSION TO DUALY
COMPLETE AND PRODUCE ITS ARGO A NOIL WELL,
IN THE DRINKARD POOL, LOCATED IN THE NW $\frac{1}{4}$ NW $\frac{1}{4}$,
SECTION 22, TOWNSHIP 21 SOUTH, RANGE 37 EAST,
N.M.P.M., 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 _____ 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 Argo A No. 1 well, NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 22, Township 21 South, Range 37 East, N.M.P.M., was completed in July, 1947, as an oil well producing from the Drinkard formation in the perforated interval 6510-6630 feet, having been drilled through the Tubb Gas Zone (5988-6236 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 dually complete and produce its Argo A No. 1 well, NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 22, Township 21 South, range 37 East, N.M.P.M., in the Drinkard Pool, Lea County, New Mexico, in such manner that the gas from the Tubb 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 FURTHER, etc.

Case 396
June 20, 1952

Oil Conservation Commission
Santa Fe, New Mexico

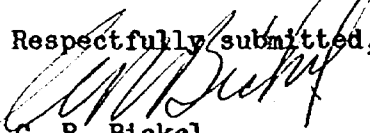
Gentlemen:

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

- a) That Shell Argo A-1, located in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 22-21S-37E, was completed in July 1947 at a total depth of 6636 feet. The appended Exhibit A shows the location of this and all other wells on the Argo "A" lease together with the locations of all offset wells.
- b) That the said well was completed as an oil well producing from the interval 6510-6630 feet in the Drinkard formation after having been drilled through the Tubb gas productive interval extending from approximately 5988 to 6236 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 Tubb gas-productive horizons and (2) set a Baker production packer at approximately 6460 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 Tubb 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 Tubb 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 Tubb gas has been tested to be less than 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 Argo A-1 so that oil from the Drinkard formation may be produced through the tubing and gas from the Tubb formation through the casing.

Respectfully submitted,


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

Specify **NEKOOSA** BOND
MADE IN U.S.A.

*John
O'Brien*

2/10/54