

Case No.

485

Application, Transcript,
Small Exhibits, Etc.

CASE 485: Shell dual completion Livingston
No. 2, SWSE 3-21S-37E (Drinkard Pool),
oil from Drinkard, gas from Tubb

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. 485
ORDER No. R-276

THE APPLICATION OF SHELL OIL
COMPANY FOR AN ORDER GRANTING
PERMISSION TO DUALY COMPLETE
AND PRODUCE ITS SHELL LIVINGSTON,
WELL NO. 2, LOCATED IN THE SW/4
SE/4 OF SECTION 3, TOWNSHIP 21 SOUTH,
RANGE 37 EAST, NMPM, LEA COUNTY,
NEW MEXICO, IN THE DRINKARD POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 17, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this ^{27th} day of ~~February~~ ^{February}, 1953, 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 applicant's Shell Livingston, Well No. 2, SW/4 SE/4, Section 3, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in March, 1950, as an oil well producing from the Drinkard formation through casing perforations 6601-6607, having drilled through the Tubb gas zone at an approximate depth of 6100-6350.

(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 hereby is authorized to dually complete and produce its Shell Livingston, Well No. 2, SW/4 SE/4, Section 3, Township 21 South Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Tubb formation may 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 the installation of a proper packer or packers;

Case No. 485 - Order No. R-276

PROVIDED, HOWEVER, That subject well shall be completed, and thereafter produced, in such a manner that there will be no commingling with in 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.

PROVIDED FURTHER, That upon the actual dual completion of such subject well applicant shall submit to the District Office of the Commission in which the subject well is located Form C-103, Form C-104 and Form C-110 outlining the information required on these forms by existing Rules and Regulations.

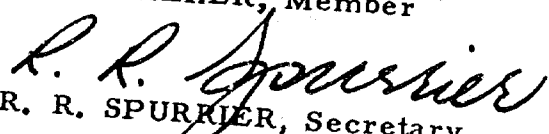
IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order 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. MECHEM, Chairman

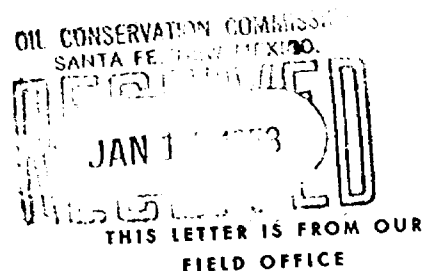

E. S. WALKER, Member


R. R. SPURRIER, Secretary

S E A L



SHELL OIL COMPANY



AT Box 1957
Hobbs, New Mexico

January 9, 1953

Case 485

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

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

- a) That Shell Livingston 2, located in the SW/4 of the SE/4 of Section 3, T-21-S, R-37-E, was completed in March, 1950 at a total depth of 6674 feet, plugged back total depth of 6615 feet. The appended Exhibit A shows the location of this and all other wells on the Livingston lease together with the locations of all offset wells.
- b) That the said well was completed as an oil well producing from the interval 6601 to 6607 feet in the Drinkard formation after having been drilled through the Tubb gas productive interval extending from approximately 6100' to 6350 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 6450 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.

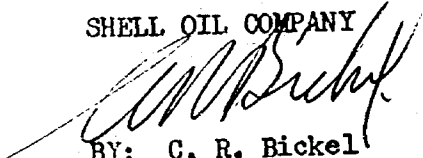
January 9, 1953

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 only 0.14 grains per 100 cubic feet.

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 Shell Livingston 2 so that oil from the Drinkard formation may be produced through the tubing and gas from the Tubb formation through the casing.

Respectfully submitted,

SHELL OIL COMPANY


BY: C. R. Bickel

JDS:BD

Attachments