

Case No.

437

---

Application, Transcript,  
Small Exhibits, Etc.

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. 437  
ORDER No. R-226

THE APPLICATION OF SHELL OIL  
COMPANY FOR AN ORDER GRANTING  
PERMISSION TO DUALLY COMPLETE  
AND PRODUCE ITS SHELL-LIVINGSTON,  
NO. 9 WELL, LOCATED IN THE SE/4  
SW/4 SECTION 3, 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 November 20, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, herein-after referred to as the "Commission".

NOW, on this <sup>th</sup>28 day of ~~November~~ 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. 9, SE/4 SW/4, Section 3, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, is now being drilled and will be completed as an oil well producing from the Drinkard formation at an approximate depth of 6580-6660, having drilled through the Blinebry gas zone at a depth of 5560-5750 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 hereby is authorized to dually complete and produce its Shell-Livingston Well No. 9, SE/4 SW/4 Section 3, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Blinebry formation may be produced through the annular space between the casing and tubing, and oil from the Drinkard formation through the tubing by proper perforations and the installation of a proper packer or packers;

CASE NO. 437- - - ORDER NO. R-226

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. Mechem*  
EDWIN L. MECHEM, Chairman

*Guy Shepard*  
GUY SHEPARD, Member

*R. R. Spurrer*  
R. R. SPURRIER, Secretary

S E A L

OIL CONSERVATION COMMISSION

P. O. BOX 871  
SANTA FE, NEW MEXICO

December 1, 1952

C  
O  
P  
Y

Mr. C. R. Bickel  
Box 1957  
Hobbs, N. M.

Dear Sir:

We enclose the following orders issued in your company's  
dual completion applications:

Order R-216 in Case 429  
Order R-221 in Case 432  
Order R-218 in Case 431  
Order R-226 in Case 437  
Order R-215 in Case 428

Yours very truly,

W. B. Macey  
Chief Engineer

WBM:mr



SHELL OIL COMPANY

OCT 14 1952

Case 437

THIS LETTER IS FROM OUR  
FIELD OFFICE

AT Box 1957  
Hobbs, New Mexico

October 10, 1952

Subject: Dual Completion  
Livingston 9  
Lea County, New Mexico

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Gentlemen:

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

a) That Shell Livingston 9, located in the SE/4 of the SW/4 of Section 3, T-21-S, R-37-E, is now being drilled as a Drinkard test. It is anticipated that Livingston 9 will be completed in late November 1952 at an approximate total depth of 6660 feet as a Drinkard producer. The twin well, Shell Livingston 7, a Hare Field producer, located 100 feet east of Livingston 9, proved the Drinkard oil productive by a drill stem test.

b) That the said well will be completed as an oil well producing from the approximate interval 6580-6660 feet in the Drinkard formation after being drilled through the Blinebry gas-productive interval extending from approximately 5560 to 5750 feet. These data are depicted on the appended Exhibit B, a copy of the electrical log of the twin Livingston 7. It is planned to run an electrical survey of Shell Livingston 9 prior to completion and a copy of that log will be filed with the Commission.

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 6530 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.

New Mexico  
Oil Conservation Commission

- 2 -

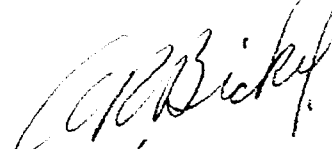
October 10, 1952

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 Blinbry 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 Livingston 9 so that oil from the Drinkard formation may be produced through the tubing and gas from the Blinbry formation through the casing.

Respectfully submitted,



C. R. Bickel  
Division Manager

Attachments