

Case No.

433

Application, Transcript,
Small Exhibits, Etc.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

July 25, 1957

Shell Oil Company
P. O. Box 1957
Hobbs, New Mexico

Re: Cancellation of DC
established by Order R-222

Gentlemen:

Reference is made to your letter of application dated July 5, 1957 for a 320 acre non-standard gas proration unit for your State "H" Well No. 4.

Your application indicated you would abandon the Eumont gas zone in your State Well No. 2 located in the NE/4 NE/4 of Section 13, Township 21 South, Range 35 East, and make only a single oil completion in the Eumont Gas Pool. The increase in acreage for your State Well No. 4 from 160 acres to 320 acres will become effective September 1, 1957.

This is to notify you that the dual completion of Well No. 2 established by Order R-222 issued December 4, 1952, will be cancelled on September 1, 1957.

The basis for this cancellation is to be the re-completion of this Well No. 2 as a single oil completion in the Eumont Gas Pool and the increase of acreage will become effective on September 1, 1957 for your Well No. 4 as a non-standard gas proration unit in the Eumont Gas Pool.

Yours very truly,

A. L. PORTER, Jr.
Secretary-Director

WHL:mg

cc: Oil Conservation Commission - Hobbs
New Mexico Oil & Gas Engineering Committee - Hobbs
El Paso Natural Gas - Jal
Phillips Petroleum Co., P. O. Box 66, Eunice

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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. 433
ORDER NO. R-222

THE APPLICATION OF SHELL OIL
COMPANY FOR AN ORDER GRANTING
PERMISSION TO DUALY COMPLETE
AND PRODUCE ITS SHELL STATE
"H" NO. 2 WELL, LOCATED IN THE
NE/4 NE/4, SECTION 13, TOWNSHIP
21 SOUTH, RANGE 35 EAST, NMPM,
LEA COUNTY, NEW MEXICO, IN THE
EUNICE-MONUMENT POOL.

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, hereinafter referred to as the "Commission".

NOW, on this ²⁶4 day of *December*, 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 applicant's Shell State "H", No. 2 Well, NE/4 NE/4, Section 13, Township 21 South, Range 35 East, NMPM, was completed in April, 1937, as an oil well producing from Seven Rivers-Queen formation in the open-hole interval 3800-3925 feet, having drilled through the Yates gas zone at an approximate depth of 3400-3700 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 dualy complete and produce its Shell State "H", No. 2 Well, NE/4 NE/4, Section 13, Township 21 South, Range 35 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Yates formation may be produced through the annular space between the casing and the tubing, and oil from the Seven Rivers-Queen formation through the tubing by proper perforations and the installation of a 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,

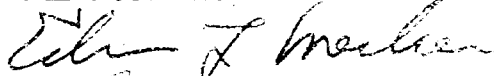
PROVIDED, FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives 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,

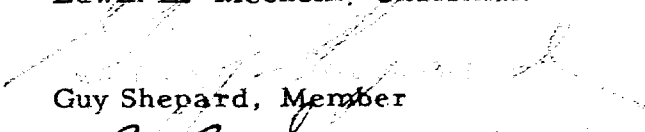
PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and 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. Mechem, Chairman


Guy Shepard, Member


R. R. Spurrier, Secretary



SHELL OIL COMPANY

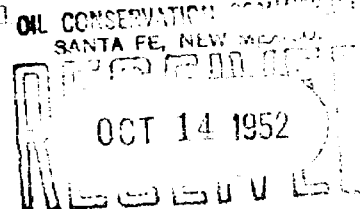
THIS LETTER IS FROM OUR
FIELD OFFICE

AT OK 1057
Tulsa, Oklahoma

October 6, 1952

Case 433

Subject: Application to Dually Complete
Shell State H-2, Dunice Field
Lea County, New Mexico as a
Water (Gas) Seven Rivers-Queen
(Oil) Well



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 State H-2, located in the NE/4 of the NW/4 of Section 13, T-21-S, R-35-E, was completed in April, 1937 at a total depth of 3925 feet. The appended Exhibit A shows the location of this and all other wells on the Shell State H lease together with the locations of all offset wells.

(b) That the said well was completed as an oil well producing from the interval 3600-3925 feet in the Seven Rivers-Queen Formation after having been drilled through the Yates gas productive interval extending from approximately 3400 feet to 3700 feet. The appended Exhibit B is a type log of the Dunice-Monument area. It is planned to run a radio-active survey of Shell State H-2 during the dual completion operation and a copy of the log will be filed with the Commission.

(c) That the applicant proposes to (1) perforate the 7-inch casing opposite the Yates gas-productive horizons and (2) set a water receiver production packer at approximately 3600 feet in the 7-inch casing. The exact interval (s) to be perforated will be selected after the above-mentioned radio-active survey has been completed.

(d) That the applicant proposes to dually complete the said well to produce oil from the Seven Rivers-Queen Formation through the casing and gas from the Yates formation through the 7-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 Seven Rivers-Queen formation and gas from the Yates formation is in the interests of conservation and the protection of correlative rights.

October 6, 1932

(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.

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 State H-2 so that oil from the Seven Rivers-Queen formation may be produced through the tubing and gas from the Yates formation through the casing.

Respectfully submitted,

SHELL OIL COMPANY

BY: C. R. Mickel

Oil Production

Tree Showing Rams Closed

Gas Flow Line

9 5/8" Casing Cemented @ 2586'
w/ 375 SXS, NCB

Casing Not Perforated
w/ 4-21 grain shells / foot
Approx. From 2400' to 2700'

9 5/8" Casing Cemented @ 1686'
w/ 372 sxs neat

Casing Test Perforated
w/ 4-21 grain shells / feet
Approx. From 1400' to 1700'

Otis Side Door Choke
Blacked Off
@ 1716'

Baker Model 'D' Retainer
Production Pack
Set @ 1780'

7" Casing Cemented @ 1800' w/ 225 sxs neat

Tubing Perforations

TD 1925'

Detail of Mechanical Work to be
Installed in Fully Completed Sunc
and Monument Wells for Submission to
Oil Conservation Commission