

Case No.

435

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. 435
ORDER No. R-224

THE APPLICATION OF SHELL OIL
COMPANY FOR AN ORDER GRANTING
PERMISSION TO DUALLY COMPLETE
AND PRODUCE ITS SHELL STATE "F",
WELL NO. 1 LOCATED IN THE NE/4
SE/4 OF SECTION 29, TOWNSHIP 19
SOUTH, RANGE 37 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 ²⁴12 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 "F", Well No. 1, NE/4 SE/4, Section 29, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in July, 1936, as an oil well producing from the Grayburg formation in the open-hole interval 3687-3943, having drilled through the Seven Rivers-Queen gas zone at an approximate depth of 3400-3650 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 State "F", No. 1 well, located in the NE/4 SE/4 Section 29, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Seven Rivers-Queen formation may be produced through the annular space between the casing and tubing, and oil from the Grayburg 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

S E A L



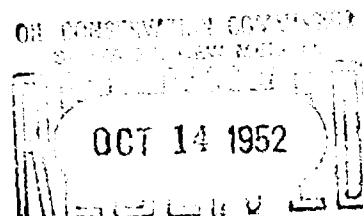
SHELL OIL COMPANY

THIS LETTER IS FROM OUR
FIELD OFFICE

AT Box 1957
Hobbs, New Mexico

October 9, 1952

New Mexico Oil Conservation Commission
Santa Fe, New Mexico



Gentlemen:

We are attaching herewith a total of eight individual applications for hearings requesting permission to recomplete presently producing oil wells as dual gas-oil producers. Of these eight wells, three are in the Monument Field and five are in the Eunice Field. We would appreciate these applications being placed on the November agenda.

With our application for each dual completion we have attached a plat covering the area surrounding the subject well, a graphic illustration of the proposed mechanical aspects of the dual production assembly, and a type lithologic and radio-activity log of the Eunice-Monument area.

If there is any further information needed with regard to these applications, please do not hesitate to call upon us at any time.

Yours very truly,

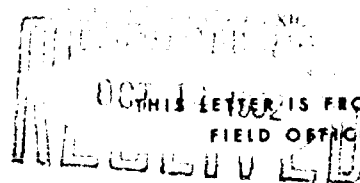
C. R. Bickel
Division Manager

Attachments



SHELL OIL COMPANY

OIL COMMISSION



AT 10/1/52

10/1/52

October 1, 1952

Case 435

Subject: Application to dual complete
Shell State F-1, Monticello Area,
New County, New Mexico as dual
completion (see) (see) 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 F-1, located in the NW/4 of the S/4 of Section 29, T-19-S, R-37-E, was completed in July 1938 at a total depth of 3943 feet. The appended exhibit A shows the location of this well together with the locations of all offset wells.

(b) That the said well was completed as an oil well producing from the interval 3677-3943 feet in the Grayburg formation after having been drilled through the Seven Rivers-Queen gas productive interval extending from approximately 3400 feet to 3650 feet. The appended exhibit B is a type log of the Monticello area. It is planned to run a radio-activity survey of Shell State F-1 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 Seven Rivers-Queen gas-productive horizons and (2) set a Baker retainer production packer at approximately 3675 feet in the 7-inch casing. The exact interval(s) to be perforated will be selected after the above-mentioned radio-activity survey has been completed.

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

October 7, 1932

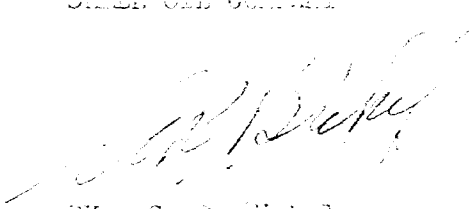
(f) That the applicant will do such things as may be required of it by the New Mexico Oil Conservation Commission in the maintenance of separation of production from said two horizons.

(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 F-1 so that oil from the Chaparral formation may be produced through the tubing and gas from the Seven Rivers-Thorn formations through the casing.

Respectfully submitted,

SHELL OIL COMPANY


BY: C. R. Mickel

Oil Production

Tree Showing Rams Closed

2000

1000

500

250

125

62.5

31.25

15.625

7.8125

3.90625

1.953125

0.9765625

0.48828125

0.244140625

0.1220703125

0.06103515625

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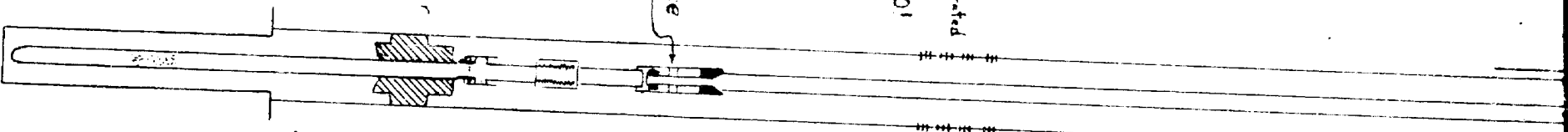
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9 5/8" Casing Cemented @ 13631'
w/ 430 sxs neat

Casing Not Perforated
w/ 4 1/2" diam. slots / feet
Approx. from 2400' to 3650'

Otis Side Door Choke
Blacked Off
@ 3655'

Baker Model "D" Retainer
Production Pack
Set @ 3675'



7" Casing Cemented @ 3687' w/ 250 sxs neat

Tubing Perforations

TD 3943'

Details of Mechanical Work sent to be
Installed in Daily Controlled Surface
and Monument Wells are appended to
all Conservation Consents.