

Case No.

335

Application, Transcript,
Small Exhibits, Etc.



SHELL OIL COMPANY
INCORPORATED

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

DEC 17 1951

THIS LETTER IS FROM OUR
FIELD OFFICE

Box 1957
AT Hobbs, New Mexico

December 14, 1951

Subject: Application to Dually Complete
Shell Sarkeys 2, Drinkard Field,
Lea County, New Mexico as a
Blinebry (Gas)-Drinkard (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 Sarkeys 2, located in the NE/4 of the SW/4 of
Section 23-21S-37E, was completed in July 1948 at a total depth of 6610
feet. The appended Exhibit A shows the location of this and all other
wells on the Sarkeys lease together with the locations of all offset wells.

b) That the said well was completed as an oil well producing
from the interval 6460 - 6610 feet in the Drinkard formation after having
been drilled through the Blinebry gas productive interval extending from
approximately 5555 feet to 5670 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 Blinebry gas-productive horizons and (2) set a Baker
production packer at approximately 6400 feet and a Cameron anchor-type
packer at approximately 6390 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.

December 14, 1951

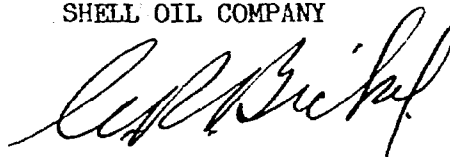
f) That the applicant will do such things as may be required of it by the New Mexico Oil Conservation Commission in the maintenance of separation of production from said two horizons.

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 Sarkeys 2 so that oil from the Drinkard formation may be produced through the tubing and gas from the Blinbry formation through the casing.

Respectfully submitted,

SHELL OIL COMPANY

A handwritten signature in dark ink, appearing to read 'C. R. Bickel', is written over the typed name.

BY: C. R. Bickel

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 335 and 336 (Consolidated)
ORDER NO. R-131

THE APPLICATION OF SHELL OIL
COMPANY FOR AUTHORITY TO DUALY
COMPLETE AND PRODUCE ITS SARKEYS
NO. 2 WELL, NE SW 23-21S-37E, NMPM;
AND ITS SHELL TURNER NO. 5 WELL,
NE SE 22-21S-37E, NMPM, AS BLINEBRY
(GAS) - DRINKARD (OIL) WELLS.

ORDER OF THE COMMISSION

BY THE COMMISSION:

These causes, as consolidated, came on for hearing at 10 o'clock
a. m. on January 22, 1952, at Santa Fe, New Mexico, before the Oil Conserva-
tion Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 6th day of March 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 Com-
mission has jurisdiction of the case and the persons and subject matter thereof.

(2) That applicant's Sarkeys No. 2 well, NE SW 23-21S-37E, NMPM,
was completed in July 1948 as an oil well in the Drinkard pay, bottomed at
6610', and produced from the 6460' - 6610' interval, having drilled through
the Blinebry gas zone (5555' - 5670').

(3) That applicant's Shell Turner No. 5, in NE SE 22-21S-37E,
NMPM, was completed in September 1949 as an oil well in the Drinkard pay,
bottomed at 6612', and produced from the 6450' - 6612' interval, having
drilled through the Blinebry gas zone (5510' - 5635').

(4) 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 sound-
ness, 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, effective as of January 22, 1952,
the applicant herein, Shell Oil Company, be, and it hereby is authorized to
dually complete and produce (1) its Sarkeys No. 2 Well, NE SW 23-21S-37E,
NMPM, in the Drinkard pool, 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; (2) in like manner, its Shell-Turner No. 5 well in NE SE 22-21S-37E,
NMPM, in the Drinkard pool, Lea County, New Mexico, 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;

In each case, by proper perforations and packer installations,

PROVIDED, HOWEVER, That each of the subject wells herein shall be completed and thereafter produced in such a manner and way that there will be no commingling within the well-bore between the respective formations either within or outside the casing, of gas, oil, or oil and gas produced from either or both of the separate producing horizons, and,

PROVIDED FURTHER, That each of the subject wells for dual completion and production shall be equipped in such a way that reservoir pressures thereunder may be determined separately for each of the two specified zones of production, and, further, each subject well shall be equipped with all necessary connections which may be 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 for each subject well may be accurately measured or tested and the gas-oil ratio thereof determined, and,

PROVIDED FURTHER, That the applicant/operator shall make any and all tests, including segregation tests but not excluding other tests, at any convenient time, and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by a representative of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each such test for each subject well, properly attested to by the applicant/operator, and all witnesses, shall be filed within 10 days after completion thereof with the Commission in Santa Fe, New Mexico; and

PROVIDED FURTHER, That prior to the time each such subject well is dually completed, the applicant/operator shall furnish the Commission, for its approval, a drawing showing the proposed method and manner of completion, together with an electrical log showing the location and extent, for each subject well, of each separate stratum yielding production, and the vertical footage location of the proposed perforations, and,

PROVIDED FURTHER, That upon the actual dual completion of each such subject well (Sarkeys No. 2, NESW 23-21S-37E, and Shell-Turner No. 5, NESE 22-21S-37E) a plat or diagrammatic sketch of the mechanical installations which were actually used to complete and produce the seal between the strata for each subject well, and a special report of production, gas-oil ratio, and reservoir pressure determination of each producing zone for each subject well, be furnished immediately following completion.

IT IS FURTHER ORDERED, That jurisdiction of Causes No. 335 and 336, as consolidated, is hereby retained by the Commission for such other and further orders as may seem necessary or convenient to it, for the prevention of waste and/or protection of correlative rights; upon failure of applicant or its successors to comply with any requirement of this order, after proper notice and hearing, the Commission may terminate the authority hereby granted for either or both subject wells, and require applicant or its successors and assignees to limit its activities to regular

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Case No. 335 and 336
Order No. R-131

single-zone production in the interest of prevention of waste and/or
protection of correlative rights.

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

SEAL

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

Transcript of Hearing

CASE NO. 335

January 22, 1952

Henrickson's Reporting Service
2224 - 47th Street
Los Alamos, New Mexico

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

January 22, 1952

Case 335: Shell Oil Company's application for permission to dually complete its Sarkys No. 2 well, Northeast quarter, Southwest quarter, Section 23, Township 21 South, Range 37 East, NMPM as a Blinbry gas-oil well which was completed in July of 1948 as an oil well only at 6,610 feet in the Drinkard formation.

JOHN D. SAVAGE.

having first been duly sworn, testified as follows:

MR. SAVAGE: May we not combine cases 335 and 336 - they are similar. They are both alike, really.

MR. GRAHAM: Will you please explain how they are similar?

MR. SAVAGE: Well, the wells themselves are both Drinkard producers, close to the same depth of approximately 6,600 feet each and we request permission to bring each well into a Blinbry gas-Drinkard oil to completion. And the method of procedure which we plan to carry out is the same in each case and we will perforate the "scrubs" on each well.

MR. GRAHAM: Proceed in your own words.

MR. SAVAGE: Well, we plan to do it this way. These wells are now Drinkard-producing wells and we will kill a well, perforate the deposit above the gas-collecting zone, and expect to do

completion by the use of a Baker Production Type Packer. It is really a permanent insulation of the casing above the present oil zone and gas will produce in the "attics" while the oil will continue to be produced in the new.

MR. GRAHAM: Have you previously submitted - - -

MR. SAVAGE: Yes, we submitted our application to do this work. We submitted three exhibits - the first, exhibit A, which was a map showing the well which we are supposed to work on and the location of all surrounding off-set wells; the second exhibit, exhibit B, are copies of the venticleases of the wells we intend to work on and they show how we are to perforate in the existing producing zone and then Exhibit C, the boundaries of each well with a diagrammatic sketch of the ^{mechanical} means whereby we propose to effect the dual completion. Those were sent in with our application to do the work.

MR. GRAHAM: You are familiar with the usual type of order in these dual completions issued by the Commission?

MR. SAVAGE: Our present order - - -

MR. GRAHAM: With particular reference to your sand gauge test?

MR. SAVAGE: Oh yes, indeed.

MR. GRAHAM: Inside and outside?

MR. SAVAGE: Yes.

MR. GRAHAM: Is this work contemplated or has it already - -

MR. SAVAGE: We have done no work.

MR. GRAHAM: And after you have completed each of these wells,
then you will be prepared to actually submit a draft of - - -

MR. SAVAGE: Yes, we will.

MR. SPURRIER: Do have a relative bottom hole or a - - -

MR. SAVAGE: I don't have it handy but they are in the New
Mexico file.

MR. SPURRIER: Are there any further questions of this witness?

If not, the witness may be excused.

- - - - -

STATE OF NEW MEXICO)
) ss
COUNTY OF LOS ALAMOS)

I hereby certify that the foregoing and attached transcript
of hearing in Case 335 before the Oil Conservation Commission on
January 22, 1952, at Santa Fe is a true record of the same to the
best of my knowledge, skill and ability.

DATED at Los Alamos, this 22nd day of January, 1952.


Audrey M. Henrickson

My commission expires September 20, 1955.

Before the Oil Conservation Commission
of New Mexico.

In the Matter of the Hearing Called
by the Oil Conservation Commission
of New Mexico for the purpose of
Considering:

Case 335 & 336 (Consolidated)

Order No. _____
(DUAL COMPLETION)

The application of Shell Oil Companies
for Authority to drill, complete
and produce its Barkey No 2
well, NE⁴SW⁴ 23. Twp. 21. S. R. 37E
N.M.P.M., and its Shell-Turner
No 5 well, NE⁴SE⁴ 22- 21.5-37E
N.M.P.M. as Blinking gas, Brunkard
oil wells,

Order of the Commission

By the Commission: These Causes as Consolidated,
Came on for hearing at 10:00 o'clock a.m. on
January 22, 1952, at Santa Fe, New Mexico, before
the Oil Conservation Commission of New Mexico, hereinafter
referred to as the "Commission".

Now: on this 8th day of February, 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 Sarkeys #2 well, NE¹/₄SW¹/₄ 23-21S-R37E Nmpm was completed in July 1948 as an oil well in the Brinkard pay, ~~at 6670'~~ bottomed at 6610', and producing from the 6460'-6610' interval, having drilled through the Blinbury gas zone (5555'-5670').

(3) That Applicant's Shell Turner no 5, in NE¹/₄NE¹/₄ 22-21S-37E, Nmpm was completed in September 1949, as an oil well in the Brinkard pay bottomed at 6612' and producing from the 6450'-6612' interval, having drilled through the Blinbury gas zone (5510'-5635').

(4) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for engineeringly 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 effective ^{as of} January 22, 1952 The applicant herein, Shell Oil Company, be, and it hereby is Authorized to dually complete and produce (1.) its Sarkeys #2 well, NE¹/₄SW¹/₄ 23-21S-R37E, Nmpm in the _____ Port, Lea County, N.M., in such a manner that gas from the Blinbury formation (5555'-5670') may be produced through the Annular space between the casing and tubing, and oil from the Brinkard (6460'-6610') formation through the tubing. ~~by proper perforation and installation of proper packers or other devices~~, and (2.) -

(2) ~~in~~ in like manner, its Shell-Turner No 5, well
in NE⁴ SE⁴, 22-31S-37E. 7 m pm, in the _____ (Pore
Lea County, 7 m., that gas from The Blinney formation (5510' - 5635')
may be produced through the annular space between the
casing and tubing, and Oil from The Shunkard (6450' - 6612')
formation through the tubing; in each case by proper
perforations and packer installations,

Provided, however, that ~~the~~ each of the Subject wells herein,
shall be completed, and thereafter produced, in
such a ~~way~~ manner and way that there will be
no commingling within ~~the~~ the well bore, either
within, or outside the casing of gas, oil, or oil and
gas produced from either or both of the separate
producing horizons, and,

Provided, further that each of the Subject wells
for dual completion and production shall be
equipped in such a way that reservoir pressures
thereunder may be ~~be~~ determined separately for
each of the two specified zones of production, and further
each Subject well shall be equipped with all
necessary connections which may be 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 for each Subject
well may be accurately measured or tested and
the oil gas ratio thereof determined, and,

Provided further that the Applicant/Operator shall
make any and all tests, including segregation
tests but not excluding other tests, at ~~anytime~~
any convenient time, and in such manner as
deemed necessary by the Commission; the original

and all subsequent tests shall be witnessed by a representative of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each such test for each subject well, properly attested to by the Applicant/operator, and all witnesses, shall be filed within 10 days after completion ^{thereof} with the Commission in Santa Fe, New Mexico, and

Provided Further That prior to the time each such ~~well~~ subject well is dually completed, the applicant/operator shall furnish the Commission, for its approval, a drawing, showing the proposed method and manner of completion, together with an electrical log showing the location and extent for each subject well, of each separate stratum yielding production, and the vertical footage location of the proposed perforations, and, Provided Further, that upon the actual dual completion of each such subject well (Sarkis #2, NE 1/4 - 23-21S-37E, and Shell-Turner nos. NE 1/4 - 22-21-37E) a plot or diagrammatic sketch of the mechanical installations which was actually used to complete and produce the well between the strata for each subject well, and a special report of production, gas/oil ratio, and reservoir pressure determination of each producing zone for each such subject well, immediately following completion.

It is Further Ordered, That Jurisdiction of Cause no 335 and 336, as consolidated is hereby retained by the Commission for such other and further orders as may seem necessary or convenient to it, for the prevention of waste and/or

Protestant - Correlative rights; upon failure
~~of~~ of applicant or its successors to comply with
any requirement of this Order, after proper notice
and hearing, the Commission may terminate
the Authority hereby granted for either or both
subject wells, and require Applicant or its
successors and assigns to limit its activities
to regular single zone production in the
interest of preventing waste and/or protection
of Correlative rights.

Done at Santa Fe, New Mexico. on the day and
year. Hereinafter designated.

State of N. M.
Oil Conservation Commission

By ~~Ed. Wechem~~ Gov.

By Guy Shepard, State
Land Comm

By R.R.S. Secy. Sec

STATE OF NEW MEXICO
OFFICE OF STATE GEOLOGIST
SANTA FE, NEW MEXICO

January 2, 1952

C
O
P
Y

Shell Oil Company
Box 1957
Hobbs, New Mexico

Attention: Mr. C. R. Bickel

Gentlemen:

This is to advise that your applications relating to dual completion (gas - oil) of your Sarkeys No. 2 and Turner No. 5 wells in Township 21 South, Range 37 East, have been formalized as Case 335 and 336, respectively, and will be heard on January 22, 1952, at the regular hearing of the Commission.

Very truly yours,

RRS:mr

R. R. Spurrier
Secretary - Director