

Case 342 - Shell Oil Co. to dually com-
plete Shell, Turner #2, Drinkard pool,
as Tubb (gas) Drinkard (oil) well

Case No.

342

Application, Transcript,
Small Exhibits, Etc.



SHELL OIL COMPANY

THIS LETTER IS FROM OUR
FIELD OFFICE

AT Box 1957
Hobbs, New Mexico

February 27, 1952

Subject: Case 342 -
Dual Completion of
Shell-Turner No. 2

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

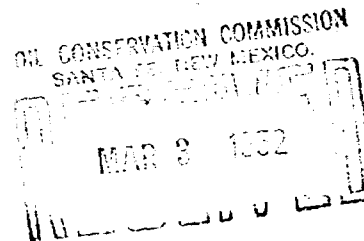
Gentlemen:

This letter is with regard to Case No. 342 which was heard before the Commission February 21, 1952 to consider the application of Shell for an order permitting the delayed dual completion of its Turner No. 2 in such a manner as to permit production of gas from the Tubb formation and oil from the Drinkard, said well originally having been completed in March 1948 as an oil well only.

In order to more thoroughly determine the merits of this application, the Commission examiners asked for information regarding the sulfur content of Tubb gas in this area. Since this information was not readily available to the Shell representative, Mr. W. A. Scott, at the time of the hearing, we respectfully submit the following supplemental data to be included with the application for Case No. 342.

Available data from the two Tubb gas producers nearest Shell Turner No. 2 are tabulated below.

- (1) Trinity Weatherly No. 1-E
SW/4 NE/4 Sec. 21, T-21-S, R-37-E
Single zone Tubb well
Hydrogen sulfide content: zero
- (2) Cone Anderson No. 1
NE/4 SE/4 Sec. 21, T-21-S, R-37-E
Direct west offset to Shell Turner No. 2
Tubb (gas) - Drinkard (oil) dual producer
Total sulfur content: 0.05 grains per 100 cu. ft. of gas

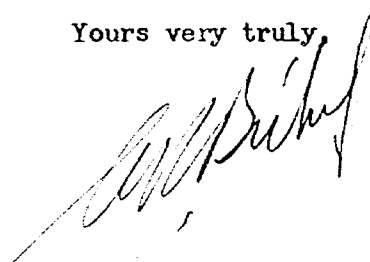


Oil Conservation Commission
Page 2
February 27, 1952

In light of the above information, we wish to inform you that the Tubb gas, in the area of Shell Turner No. 2, is considered to be "sweet" and not to contain sulfur in a large enough quantity to be corrosive.

We wish to thank you for allotting sufficient time for this information to be obtained. If there is any further information found to be needed for the consideration of this case we will be happy to be of any assistance.

Yours very truly,

A handwritten signature in dark ink, appearing to read 'C. R. Bickel', written in a cursive style.

C. R. Bickel
Division Manager



SHELL OIL COMPANY
INCORPORATED

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

JAN 21 1952
RECEIVED

THIS LETTER IS FROM OUR
FIELD OFFICE

Box 1957
AT Hobbs, New Mexico

January 18, 1952

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

Subject: Application to Dually Complete
Shell Turner 2, Drinkard Field,
Lea County, New Mexico as a Tubb
(Gas)-Drinkard (Oil) Well

Gentlemen:

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

a) That Shell Turner 2, located in the NW/4 of the SW/4 of
Section 22-21S-37E, was completed in March 1948 at a total depth of
6627 feet. The appended Exhibit A shows the location of this and all
other wells on the Turner lease together with the locations of all offset
wells.

b) That the said well was completed as an oil well producing
from perforated intervals between 6571 feet and 6615 feet in the Drinkard
formation after having been drilled through the Tubb gas productive
interval extending from approximately 6000 feet to 6260 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 pro-
duction packer at approximately 6450 feet and a Cameron anchor-type
packer at approximately 6440 feet in the 5-1/2-inch casing which is
cemented at 6626 feet.

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.

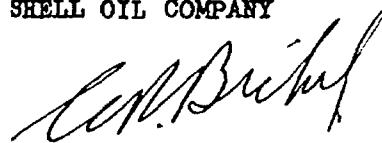
f) That the applicant will do such things as may be required of it by the New Mexico Oil Conservation Commission in the maintenance of separation of production from said two horizons.

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 Turner 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
Division Manager

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 342
ORDER NO. ^R134

AN APPLICATION OF SHELL OIL COMPANY
FOR AN ORDER AUTHORIZING THE DUAL
COMPLETION (GAS-OIL) OF THEIR NO. 2
TURNER WELL, LOCATED NWSW SEC. 22,
TWP. 21 SOUTH, RGE. 37 E, NMPM, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10 a. m. on February 21, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this th20 day of March, 1952, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being fully advised in the premises,

FINDS: (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That although recent experiments tend to show that mechanical packers and other devices are now available for effecting successful dual completions, the Commission finds that specific control of each project should be maintained.

IT IS THEREFORE ORDERED:

That effective as of the date of this order, Shell Oil Company, the applicant herein, be, and it hereby is authorized to dually complete its No. 2 Turner well, located in the NWSW Sec. 22, Twp. 21 S, Rge. 37 E, NMPM, Lea County, New Mexico, to produce gas from the Tubb formation through the annulus between the casing and the tubing, and oil from the Drinkard formation through the tubing, by the use of proper perforations and the use of proper packer or packers;

PROVIDED HOWEVER, That said No. 2 Turner well shall be dually completed and produced in such a manner that there will be no comingling within the well-bore of the said well of gas, or oil and gas produced from the two separate strata, and

PROVIDED FURTHER, That said well shall be equipped in such a manner that reservoir pressures may be determined separately for each of the two separate 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, or oil and oil and gas from each separate stratum may be accurately measured and the gas/oil ratio determined, and

Case No. 342
Order No. 134

PROVIDED FURTHER, that the operator shall make any and all tests, including segregation tests and tests for leakage outside the casing but not excluding other tests and/or determinations at any time and in such manner as may be deemed necessary by the Commission and remedy any situation reflected. 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, and results of such tests properly attested to by the applicant and all witnesses and shall be filed with the Commission within ten days after the actual completion of each such test, and

PROVIDED FURTHER, that prior to the time said well is dually completed the applicant shall supply the Commission, for its approval, with plat or drawing showing the proposed method and manner of completion,

PROVIDED FURTHER, that upon the dual completion of the well the applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to produce the seal from both zones or strata, showing tubing and location of packers, other devices used, location and extent of perforations, name and depth of each producing zone or stratum, and special report of production, gas/oil ratio, and reservoir pressure determination of each horizon or stratum at the time of completion.

IT IS FURTHER ORDERED, That jurisdiction of this case is hereby retained by the Commission for such further order or orders in the premises as may from time to time seem necessary or convenient to the Commission, and this case shall not be considered as establishing a precedent for authorizing general dual completions, and upon failure of the applicant to comply with any provision or provisions of this order, by the authority hereunder shall terminate, upon ten days written notice by the Commission.

DONE at Santa Fe, New Mexico, on the day and year hereinabove written.

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO



EDWIN L. MECHEM, CHAIRMAN



GUY SHEPARD, MEMBER



R. R. SPURRIER, SECRETARY

S E A L

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

IN THE MATTER OF:

In the matter of the application of
Shell Oil Company for an order per-
mitting the delayed dual completion
of its Turner No. 2 Well, NW SW Sec-
tion 22, T. 21 S, R. 37 East, NMPM,
in such manner as to permit produc-
tion of gas from the Tubb formation
and oil from the Drinkard, said well
having been originally completed in
March 1948 at a total depth of 6627
feet as an oil well only.

CASE NO. 342

TRANSCRIPT OF HEARING

February 21, 1952

(Mr. Graham reads the notice of publication.)

MR. SCOTT: By means of this application, the Shell Oil
Company wishes to state the following:

(a) That Shell Turner 2, located in the NW/4 of the SW/4
of Section 22-21S-37E, was completed in March 1948 at a total
depth of 6627 feet. (Exhibit A marked for identification.) The
appended Exhibit A shows the location of this and all other wells
on the Turner lease, together with the locations of all offset wells.

At this time I would like to present our Exhibit No. A to
the Commission.

MR. GRAHAM: Do you propose to rework the well and drill?

MR. SCOTT: Yes, sir, within the bounds of the rules of the Commission, with regard to the rules of the Commission. I would like to present Exhibit B, which is a log of this well.

(Marked Exhibit B for identification.)

MR. SCOTT: The said well was completed as an oil well producing from perforated intervals between 6571 feet and 6615 feet in the Drinkard formation after having been drilled through the Tubb gas productive interval extending from approximately 6000 feet to 6260 feet. These data are depicted on the appended Exhibit B.

At this time I would like to present to the Commission Exhibit C, which shows the mechanical proposal with regard to the dual completion of this well. We propose to complete this well to produce oil from the Drinkard 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.

That the granting of this application for permission to produce daily oil from the Drinkard formation and gas from the Tubb formation is in the interests of conservation and the protection of correlative rights.

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.

We further wish to state that the manner and method of the proposed dual completion is mechanically feasible and practical.

Therefore, in view of this testimony we will request that the application be granted.

MR. SPURRIER: Does anyone have any questions of Mr. Scott?

MR. GRAHAM: You are familiar with the general type of order issued in dual completion?

MR. SCOTT: Yes.

MR. GRAHAM: As to the form?

MR. SCOTT: We are. In fact, I might add one other bit of data if you would like to have pressures. For the record, we estimate the Tubb bottom hole pressure to be approximately 2110 pounds per square inch. The last bottom hole pressure we took in the well on the Drinkard, Drinkard pressure, 1240 pounds per square inch.

MR. GRAHAM: Is that sweet gas or sour gas?

MR. SCOTT: That I am not prepared to answer at this time.

MR. GRAHAM: There is a difference in the quality?

MR. SCOTT: We can investigate that and let the Commission know before the application is decided upon.

MR. SPURRIER: Very well. Do you offer these Exhibits A through C in evidence?

MR. SCOTT: Yes, I do.

MR. SPURRIER: Without objection, they will be accepted. Any other questions?

MR. MACEY: I would like to ask a couple of questions. You have a west offset, the Dome well that is producing from the same zone at the present time.

MR. SCOTT: Yes.

MR. MACEY: Is that a dual completion? Do you know?

MR. SCOTT: I think it is.

MR. MACEY: You didn't drill stem test the section when you drilled the Drinkard Well to start with, did you?

MR. SCOTT: No, we didn't. I am sure that we didn't drill stem test it.

MR. MACEY: On the map I notice that they record the Tubbs drill stem test up to the North on this (indicating) and it is not on here. I took it for granted that you had tested that when you drilled the well.

MR. SCOTT: No, sir, probably we didn't. The Tubb and the Blinberry gas horizons in that area have come into notice by the operators as being productive after that Drinkard well was drilled, I am sure.

MR. SPURRIER: Any further questions?

MR. MACEY: What is the name of the field, is it the Tubbs gas field or what?

MR. SCOTT: I don't believe any name.

MR. SPURRIER: Probably no designation.

MR. SCOTT: I believe there is no designated pool there, just three or four Tubb gas wells. Maybe two, now completed and producing.

MR. SPURRIER: If no further questions, the witness may be excused. We will take the case under advisement and wait to hear from you, Mr. Scott, about the sulphur content of the gas. Otherwise, I would recommend to the Commission that your application be approved.

MR. SCOTT: That letter will be sent in due time.

MR. SPURRIER: There being no further business, the meeting is adjourned.

C E R T I F I C A T E

I HEREBY CERTIFY that the foregoing and attached Transcript of Hearing, in Case No. 342, before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on February 21, 1952, is a true and correct record of the matters herein contained to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 27 day of Feb, 1952.


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