

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1701

TRANSCRIPT OF HEARING

June 25, 1959

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

I N D E X

<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>
GERALD J. SAVAGE	4		
JOHN HOOVER	8		

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
June 25, 1959

IN THE MATTER OF:)
)
Application of Gulf Oil Corporation)
for an oil-oil dual completion.)
Applicant, in the above-styled cause,)
seeks an order authorizing the dual)
completion of its Learcy McBuffington)
Well No. 5, located in the NW/4 SE/4,)
Section 13, Township 25 South, Range)
37 East, Lea County, New Mexico, in)
such a manner as to produce oil from)
an undesignated Paddock Pool and oil)
from the Justis-Ellenburger Pool)
through parallel strings of tubing.)
)

CASE NO.
1701

BEFORE:

ELVIS A. UTZ, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: The hearing will come to order. The first case on the docket will be 1701.

MR. PAYNE: Case 1701. Application of Gulf Oil Corporation for an oil-oil dual completion.

MR. KASTLER: My name is Bill Kastler and I'm appearing for Gulf Oil Corporation. Our two witnesses in this hearing No. 1701 are Mr. G. J. Savage and Mr. John H. Hoover.

(Witnesses sworn.)

GERALD J. SAVAGE

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINER

BY MR. KASTLER:

Q Mr. Savage, will you please take the stand?

A All right, sir.

Q For the record, will you state your name, your place of employment and your residence?

A I am Gerald J. Savage. I work for the Gulf Oil Corporation at Roswell, New Mexico, as a Production Geologist.

Q Mr. Savage, have you previously appeared and qualified as an expert geologist and testified before the New Mexico Oil Commission?

A Yes, I have, sir.

Q Are you familiar with Gulf's application in Case No. 1701?

A Yes, sir.

Q Do you have a lease plat which will be helpful in explaining what Gulf is seeking in this case?

A Yes, sir, I have caused this exhibit to be labeled No. 1 in this Case 1701.

Q Referring to Exhibit No. 1, would you please state who is involved and illustrate where the well is located?

A This lease shows Gulf's McBuffington lease being in the south half of Section 13, Township 25 South, Range 37 East. Gulf's No. 5 Learey McBuffington located 1750 feet from the south line and 1980 feet from the east line is circled and marked in red. This lease plat also shows offset operators.

Q Was well No. 5 previously authorized by the New Mexico Oil Commission to be dually completed in the Ellenburger and Blinbry zones?

A Yes, sir, that is correct.

Q What is the order number, if you know?

A I believe the order number for that dual was R-1197.

Q And in this application is it true that you are seeking to amend R-1197 in order that you may now dually complete in the Ellenburger and Paddock Oil Pool?

A Yes. We specifically request that order R-1197 be amended or cancelled.

Q Do you have a contour map?

A I have copies of a contour map which I have caused to be labeled Exhibit No. 2 in Case 1701.

Q Referring to Exhibit No. 2, would you explain what is shown and illustrated in this?

A This is a contour map on top of the Glorieta formation in which the Paddock pay is located. This is contoured with a contour interval of 25 feet and shows the structural position of

Gulf's No. 5 Learoy McBuffington.

Q In the Paddock pool?

A In the Paddock, that's right.

Q And the perforations in Well No. 5 now, or as proposed, will be within the vertical limits of the Paddock Oil zone?

A Yes, sir. They are present within the vertical limits of the Paddock oil zone.

Q For Exhibit No. 3 have you prepared or caused to be prepared an electric log that shows the perforations and formations encountered?

A Yes, sir, I have. On this log are specifically shown the tops of the formations encountered in this area. And shown at a depth of 4940 and 4946 are the perforations within the Paddock oil zone.

Q Has testimony previously been given in connection with the Ellenburger as it has been encountered in this well?

A Yes, I believe it was in Case No. 1455. The Ellenburger formation was discussed in this well.

Q And the perforations in the Ellenburger are not shown on Exhibit No. 3?

A No, sir. The Ellenburger in this well is producing through open hole below 8,260 feet to a total depth of 8,300 feet.

Q Mr. Savage, were Exhibits No. 1, 2, and 3 prepared by you or at your direction or under your supervision?

A Yes, sir, they were.

MR. KASTLER: Mr. Utz, these are the only questions I have of Mr. Savage. And I would like to move at this time that Exhibits No. 1, 2, and 3 be admitted into evidence in this case.

MR. UTZ: Without objection they will be admitted into evidence.

BY MR. UTZ:

Q Mr. Savage, would you point out again the Paddock zone for me on this map or log?

A The top of the Glorieta formation in this well is found at a depth of 4,645 feet. It is my understanding the Paddock oil zone is what is left after we take out the Paddock gas or the Justis gas. The Justis gas is defined as existing from the top of the Glorieta formation down to a point which is 40 feet above a marker found at a depth -- I believe it's 4879 feet in Gulf's No. 8 Learcy McBuffington. And correlating the log of the No. 5 Learcy McBuffington with the log of the No. 8 Learcy McBuffington, I find that the base of this Justis Gas Pool is at a depth of 4892 on this log, which is 48 feet above the top of our first perforation. Does that answer your question, sir?

Q Yes, I believe so. Now, R-1197 was a dual order for what two zones again?

A It was a dual order permitting the dual of the Blinbry and Ellenburger formations in this well.

Q So in effect what you want to do is change from the Blinebry to the Justis?

A To the Paddock oil, I believe. It is undesignated at the present time, but I believe it would be called the Paddock oil zone.

MR. PORTER: Does the Glorieta include both the Blinebry and the Paddock?

A Yes, sir, I believe both the Justis gas, this Paddock oil and the Blinebry formations, the Blinebry pays are within the Glorieta formation.

MR. UTZ: Are there any other questions of the witness? If not, the witness may be excused.

(Witness excused.)

JOHN HOOVER

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Will you please state your name and where you live, and by whom are you employed?

A My name is John Hoover, Roswell, New Mexico, employed by the Gulf Oil Corporation.

Q Mr. Hoover, have you previously appeared and qualified

and testified on behalf of Gulf Oil Corporation as a Production Engineer?

A Yes, sir, I have.

Q Are you familiar with Gulf's application in this Case No. 1701?

A Yes, sir.

Q Have the two zones, namely the Ellenburger and the Paddock zones, been previously approved for dual completion?

A To my knowledge they have not.

Q Do you have a proposed mechanical installation drawing or schematic diagram?

A Yes, sir. We have labeled this Exhibit No. 4.

Q Referring to Exhibit No. 4, would you please explain what is shown on that?

A Exhibit 4 is the mechanical installation of this proposed oil-oil dual completion. It shows that we have 13 3/8 inch casing set at 423 feet and cemented to the surface. We have 9 5/8 inch casing set at 3450 feet cemented to the surface. We have 7 inch casing set at 8,260 feet cemented with a thousand sacks at the top of the cement by temperature surveys is at 3775 feet. We have two strings of tubing. We have a Baker Model "D" packer which is a permanent type packer set at 8150 feet. We have a long string of 2 7/8 inch hydril tubing set to the packer, 2 3/8 inch tubing below the packer. We have 2 3/8 tubing latched into a

Baker parallel string anchored at 4205 feet. On our drawing we have labeled the Ellenburger oil and have shown it in pink and the Paddock in green. The Paddock perforations are shown on here as 4940 feet and 4946. The Ellenburger in the open hole below 8260 to a total depth of 8300.

Q Mr. Hoover, can adequate tests be performed to insure that no commingling exists in the well bore in this installation?

A Yes, it can.

Q How would those tests be performed and what would they show?

A The Ellenburger crude is sweet. The Paddock crude is sour, having a .67% sulphur. The gravity of the Ellenburger oil is 45 degrees; of the Paddock 39 degrees. On our Ellenburger we have a tubing pressure of 1600 pounds closed in. On the Paddock 1120 pounds. Therefore, we have ample differential between the two fluids and we can make packer leakage tests. We have on the Ellenburger the bottom hole pressure at a datum of minus 5,050 feet is 3253 pounds; on the Paddock at a datum of a minus 1860 feet was 2,099 pounds. Correcting this bottom hole pressure to our packer setting depth would give us less than 200 pounds differential across the packer.

Q In other words, if any commingling should occur it would show up immediately, is that correct?

A Yes.

Q Would this granting of this application be in the interest of conservation and protection of correlative rights?

A Yes, it would.

Q Would the granting of this application result in a substantial saving to the operator?

A Yes, it would.

Q In what way?

A For example, our estimated cost to dual Paddock and Ellenburger is \$182,600. The cost to drill an Ellenburger well we estimate at \$155,000; the cost to drill a Paddock is estimated at \$65,000; or to make a total of the two wells at \$220,000 as compared to our dual cost of \$182,600. This we realize a saving of some \$37,400.

Q Mr. Hoover, was Exhibit No. 4 prepared by you or at your direction or under your supervision?

A Yes, sir.

MR. KASTLER: These are the only questions I have of the witness Mr. Hoover. And at this time I would like to offer Exhibit No. 4 into evidence.

MR. UTZ: Without objection Exhibit No. 4 will be entered into evidence. Are there any questions of the witness? If there are no questions the witness may be excused.

(Witness excused.)

MR. UTZ: Are there any other statements to be made in this case? If not, the case will be taken under advisement.

STATE OF NEW MEXICO)
 : ss
 COUNTY OF BERNALILLO)

I, Ned A. Greenig, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision and that the same is a true and correct record to the best of my knowledge, skill and ability.

Witness my hand and seal this the day of July, 1959,
 in the City of Albuquerque, County of Bernalillo, State of New Mexico.

 Notary Public

My Commission Expires:
 May 5, 1963

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 1201,
 heard by me on June 24, 1958.

 Examiner
 New Mexico Oil Conservation Commission