

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 20, 1967
EXAMINER HEARING

IN THE MATTER OF:)

Application of Tenneco Oil)
Company for Special Pool Rules,)
McKinley County, New Mexico.)

Case No. 3695

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

MR. NUTTER: The hearing will come to order, please.
The next case will be 3695.

MR. HATCH: Case Number 3695, continued from the November 29, 1967, Examiner Hearing. Application of Tenneco Oil Company for Special Pool Rules, McKinley County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch and Kelly on behalf of the Applicant. I have one witness and ask that he be sworn.

(Witness sworn.)

JACK WILLOCK

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLY:

Q Please state your name, position and employer, please.

A My name is Jack Willock. I'm a petroleum engineer employed by the Tenneco Oil Company in Durango, Colorado.

Q And you have previously qualified as an expert witness before this Commission?

A I have.

Q Are you the same witness that testified for Tenneco

in Case Number 3660 that had Order No. R-3325 issued on it?

A Yes.

Q And in that case, what was Tenneco seeking?

A We requested permission to drill wells two hundred feet apart in both the Upper and Lower Hospah Sands in the South Hospah Field. We also sought water flood approval for the Upper Hospah Sands. In addition, although my testimony wasn't clear, we requested permission to drill wells to both the Upper and Lower Hospah Sands on any location within the lease as long as the wells were two hundred feet apart and three hundred thirty feet from the lease line.

In this hearing, we are attempting to clarify this point, and we're requesting Commission approval to drill and produce both Sands within the lease boundaries, so long as they are two hundred feet apart and three hundred and thirty feet from the outer lease boundary.

Q Now referring to what has been marked as Exhibit 1, would you show the Examiner the affect of the present spacing rules on the Hospah pools?

A Exhibit Number 1 shows the current producing Hospah Wells as black dots. This is the Upper Hospah Sand; and wells that we've drilled since the hearing as white circles. Also, we have Well Number Nine, Hospah Well No. 9, which is in the northwest of the northeast quarter. It is the well we intend

to use as a water source well, and Hospah A Lease, Well No. 7, which is in the northeast of the southwest quarter, we will probably recomplete this well to the Upper Hospah Sand. It is currently completed as a Dakota Well.

The white area on Exhibit Number 1, in the center of each forty and fifty-two acre tract, shows the current legal drilling area for Upper and Lower Hospah Sand Wells. The cross-hatched area is illegal under Statewide Rule 104. The white area covers ten acres and the cross-hatched area, thirty acres in each forty acre tract. In effect, we are limited to one-fourth of the area in each tract for drilling.

A six hundred sixty foot wide band between the white tracts is prohibited for development.

Q Now, why is it important, as far as the Upper Hospah, for us to have some more flexibility in these spacing holes?

A By previous testimony, we established that the Upper Hospah Sand divides into four separate sand members. We need to drill new wells where the maximum sand development is present. If we are unable to spot these wells properly, we will lose water flood oil. We believe we'll lose fifteen to twenty percent of total recovery if we can't place the wells properly.

As to the Lower Hospah Sand, from this sand, we produce a very viscous oil, seventy centipoise, approximately,

by a strong bottom water drive. The sand is homogeneous, and the drainage area is severely limited, due to early water entry and water connate. Even though the sand is up to forty-eight feet thick, water breakthrough occurs after only two to four thousand barrels of cumulative production. It's my opinion that the six hundred and sixty feet between legal wells under Rule 104 cannot be drained.

Q Now, as far as the Upper Hospah, only one of the wells that were drilled since the present order is orthodox, is that correct?

A Yes, sir. We've drilled Wells 13, 14, 15, 16, 17 and 18 since the order was issued and only Number 17 was orthodox under the current rules.

Q As to the Lower Hospah, what's the situation there, as far as your drilling under this present well?

A We have drilled seven wells to the Lower Hospah Sand, Wells 6, 7, 8, 9, 10, 11 and 12, and all are orthodox under the current rule. We were exploring the lease at that time.

Q Now, your Well Number 15 in the Upper Hospah, what will be the situation on that well if the new rules are adopted?

A It will still be unorthodox until we complete our

unitization agreement to unitize both the Hospah and the Hospah A Leases.

Q That's because it's closer than three hundred thirty to the lease line?

A Yes, sir. The lease line is the east-west line running through the middle of Section 12. The Hospah Lease is the north half of Section 12, and the Hospah A Lease is the south half.

MR. NUTTER: Is it a full three hundred thirty feet from this west boundary?

A Yes, sir. I can give you an exact location on it if you'd like.

It's twenty-five hundred feet from the north line and three thirty from the west line.

Q Now is Tenneco actively preparing their unit?

A Yes, we're working on it now.

Q Well, then, do you seek an exception for this well as an unorthodox location under the proposed rules?

A Yes, sir. We'd like to have a temporary allowable until the fifteenth, until we complete the unit agreement testing.

Q Now, what other operators are in these pools?

A There's only one other operator. That's Tesoro Oil Company, who operates the leases directly offsetting to the north and the northeast and the east of our Hospah, Hospah A leases.

Q Are you aware of any objection on their part to these proposed rules?

A No, sir, we have no objection from them.

MR. KELLY: Mr. Examiner, we are aware of no wells that would become unorthodox, but it's possible that Tesoro might have some, but I think the application and the publications set that out as a possibility.

Q And, is it your recommendation to cover that possibility that any wells that would be made unorthodox be given an allowable, also?

A Yes, sir.

Q In your opinion, would the granting of this application have any adverse affect on any operator's correlative rights?

A No, sir.

Q In your opinion, would the granting of this application prevent waste by recovering otherwise unobtainable oil?

A Yes, sir.

Q Was Exhibit 1 prepared by you or under your supervision?

A Yes, sir.

MR. KELLY: That's all I have on direct, and I move the introduction of Exhibit Number 1.

MR. NUTTER: Tenneco's Exhibit Number 1 will be

admitted into evidence.

(Whereupon, Applicant's Exhibit
Number 1 was admitted into
evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Willock, at one time, it was my understanding that Tesoro was attempting to purchase Walker Brothers properties.

A They have.

Q And they have purchased?

A Well, they made a deal. I'm not acquainted with the -- I have no first-hand knowledge of what the deal was, but they are operating Section 1, Township 17 North, Range 9 West, Section 30 -- What would this be, 31, 30 or 31 here, the northeast offset?

Q Northeast.

A And the east offset, which would be Section -- Well, this is 12, so it would be Section 7. It would be Section 6 and 7 in Township 17 North, Range 8 West. They're operating all three offset leases to us.

Q Now in order that wells can be ascribed to a particular proration unit, to prevent wells from being drilled right on a line and I see the proposal that you have here would not prevent a well from being drilled right on a line dividing a forty acre unit --

A Yes, sir.

Q -- what would be a reasonable restriction as far as footage from a forty-acre line on the interior of your lease to give you flexibility for this water flood program?

A Well, we've drilled one 20 feet off the line as you can see here. Number 14 is three hundred and -- It's actually 20 feet off the line. It's seventeen hundred feet from the north line and thirteen hundred from the west line, so it's twenty feet -- I think twenty feet would be a good --

Q Twenty feet?

A Yes, sir.

Q So you would propose that we would make a provision then that the wells would have to be at least two hundred feet apart, and they would have to be at least twenty feet from the forty acre line and they would have to be at least three hundred thirty feet from the outer boundary of the lease?

A Yes, sir. Along this area right here, we drilled No. 14 in that spot to attempt to get it as close as we could to the fault up there. It didn't turn out to be good business, a disappointing well. It didn't turn out too good in the Upper Hospah Sand, but it was because of geological reasons that we didn't know at the time, but it appears to be an exceptionally good well for the Lower Hospah Sand, so that compensated for it.

Q Which one was that?

A No. 14. It has forty-eight feet of that oil sand in the Lower, and that will give us a well up close to the fault there in the Lower Hospah Sand.

Q And Numbers 13, 2, 17 and 12 are all at least three hundred thirty feet from the boundary of the Hospah A Lease, aren't they?

A Thirteen?

Q Twelve, 13, 2 and 17, they're at least three hundred thirty feet from the south boundary of the Hospah?

A Yes, sir, I believe 2 is. Two was drilled before we took over the lease, and I don't have the exact footage on there, but it's been accepted as legal, and it's been produced for over two years.

Q And it looks like the A-3 and the A-1 would be at least three hundred thirty feet from the boundary.

A Yes, sir.

Q Now that leaves the only one possibility, this No. 9 up here at the north.

A It will be our water source.

Q It's a water supply well?

A Yes, sir. We intend to use it in the entrata, deeper sand. It was a four thousand foot well.

Q And this is proposed as rules, not for Tenneco's lease, but for pools?

A For pooling, yes, sir. I understand it's set up that way.

MR. NUTTER: Are there any other questions of Mr. Willock? You may be excused.

Do you have anything further, Mr. Kelly?

MR. KELLY: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 3695? We'll take the case under advisement.

* * *

I N D E X

| <u>WITNESS</u> | | <u>PAGE</u> |
|---------------------------------|--|-------------|
| JACK WILLOCK | | |
| Direct Examination by Mr. Kelly | | 2 |
| Cross Examination by Mr. Nutter | | 8 |

| <u>EXHIBIT</u> | <u>MARKED</u> | <u>OFFERED AND ADMITTED</u> |
|----------------|---------------|---------------------------------|
| Applicant's 1 | 2 | 8 |

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

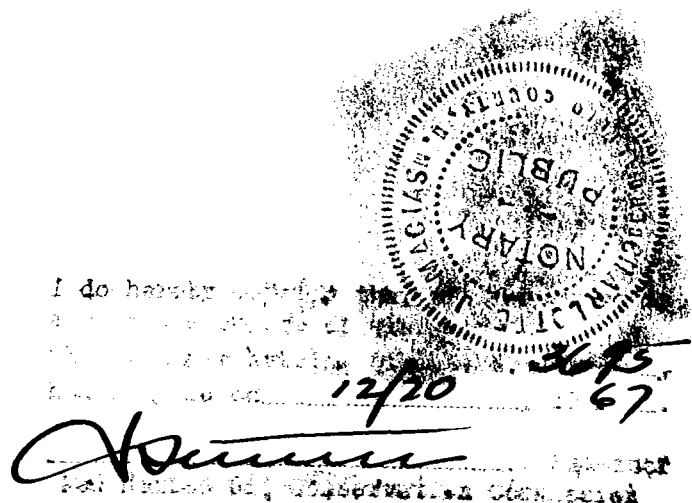
I, CHARLOTTE MACIAS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 20 day of January, 1968.

Charlotte Macias
 NOTARY PUBLIC

My Commission Expires:

February 10, 1971



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 29, 1967

EXAMINER HEARING

IN THE MATTER OF:)

Application of Tenneco Oil)
Company for Special Pool Rules,)
McKinley County, New Mexico.)

Case 3695

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3695.

MR. HATCH: Case 3695. Application of Tenneco Oil Company for Special Pool Rules, McKinley County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch and Kelly on behalf of the Applicant. We move that the case be continued until the December hearing. The witness, Mr. Willick, called yesterday and he is sick in bed and his doctor told him he wasn't to come. Apparently, they had a conflict with their Mr. Plum, so no one else could come.

MR. UTZ: Case 3695 will be continued to the December 20th Examiner Hearing.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, KAY EMBREE, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 6th day of December, 1967.

Kay Embree
Notary Public

My Commission Expires:

Mar 13, 1971

I do hereby certify that the foregoing is
a complete record of the proceedings in
the hearing held at Case No. 3649,
heard by me on March 29, 1962.
James H. [illegible], Examiner
New Mexico Oil Conservation Commission

SOUTH HOSPAH UPPER SAND POOL
SOUTH HOSPAH LOWER SAND POOL
McKinley County, New Mexico

Order No. R-3361, Adopting Operating Rules for the South Hospah Upper Sand and South Hospah Lower Sand Pools, McKinley County, New Mexico, January 2, 1968.

Allowable assigned subject to market demand factor prescribed in Statewide Rule 503, Order No. R-4348, September 1, 1972 (see Section I).

Application of Tenneco Oil Company for special pool rules, McKinley County, New Mexico.

CASE NO. 3695
Order No. R-3361

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on December 20, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 2nd day of January, 1968, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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 the applicant, Tenneco Oil Company, seeks the promulgation of special pool rules for the South Hospah Upper Sand Oil Pool and the South Hospah Lower Sand Oil Pool, McKinley County, New Mexico, to provide that wells drilled in said pools could be located anywhere on the 40-acre unit except that no well could be located closer than 330 feet to the outer boundary of the lease nor closer than 200 feet to another well producing from the same pool.

(3) That the applicant further proposes that any existing well not located in accordance with the above requirements be granted an exception to said requirements.

(4) That adoption of the proposed special rules and regulations will prevent waste and protect correlative rights, provided a 40-acre proration unit in the South Hospah Upper Sand Oil Pool or the South Hospah Lower Sand Oil Pool is subject to a 40-acre unit allowable for wells in the South Hospah Upper Sand Oil Pool or South Hospah Lower Sand Oil Pool, whichever is applicable, regardless of the number of wells on the unit.

IT IS THEREFORE ORDERED:

That Special Rules and Regulations for the South Hospah Upper Sand Oil Pool and the South Hospah Lower Sand Oil Pool, McKinley County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
SOUTH HOSPAH UPPER SAND OIL POOL
AND THE
SOUTH HOSPAH LOWER SAND OIL POOL

RULE 1. Each well completed or recompleted in the South Hospah Upper Sand Oil Pool or in the South Hospah Lower Sand Oil Pool or in the Gallup formation within one mile thereof, and not nearer to or within the limits of another designated Gallup oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located no nearer than 330 feet to the outer boundary of the lease upon which it is located nor closer than 200 feet to another well drilling to or capable of producing from the same pool nor nearer than 20 feet to the boundary of the 40-acre tract upon which it is located.

RULE 3. The Secretary-Director of the Commission shall have authority to grant exceptions to Rule 2 without notice and hearing when an application therefor has been filed in due form and the necessity for the exception is based upon topographical conditions.

All operators owning acreage within 330 feet of the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators owning acreage within 330 feet of the proposed location or if no such operator has entered an objection to the unorthodox location within 20 days after the Secretary-Director has received the application.

RULE 4. A 40-acre proration unit in the South Hospah Upper Sand Oil Pool or the South Hospah Lower Sand Oil Pool shall be subject to a 40-acre unit allowable for wells in the South Hospah Upper Sand Oil Pool or the South Hospah Lower Sand Oil Pool, whichever is applicable, regardless of the number of wells on the unit.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Hospah Upper Sand Oil Pool or the South Hospah Lower Sand Oil Pool or in the Gallup formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location not previously approved by order of the Commission shall notify the Aztec District Office of the Commission in writing of the name and location of the well on or before January 15, 1968.

(2) That all provisions of Order No. R-3270 and Order No. R-3325 that are in conflict with the provisions of this order are hereby superseded.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

WHITE, GILBERT, KOCH & KELLY
(GILBERT, WHITE AND GILBERT)

ATTORNEYS AND COUNSELORS AT LAW

LINCOLN BUILDING

SANTA FE, NEW MEXICO

CARL H. GILBERT 11891-1963

L. C. WHITE

WILLIAM W. GILBERT

SUMNER S. KOCH

WILLIAM BOOKER KELLY

JOHN F. MCCARTHY, JR.

November 27, 1967

POST OFFICE BOX 787

TELEPHONE 982-4301

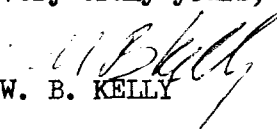
(AREA CODE 505)

Mr. A. L. Porter
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed find original and two copies of Tenneco's
Application for Special Pool Rules in the South
Hospah Upper and Lower Sand Pools, McKinley County,
New Mexico. This case has been set for hearing on
November 29th under style number 3695.

Very truly yours,


W. B. KELLY

WEK:cc

Enclosures

DOCKET MAILED

Date 12-7-67