

BEFORE THE  
**Oil Conservation Commission**  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1175

**TRANSCRIPT OF PROCEEDINGS**

**DEARNLEY-MEIER AND ASSOCIATES**  
COURT REPORTERS  
605 SIMMS BUILDING  
TELEPHONE 3-6691  
ALBUQUERQUE, NEW MEXICO

November 13, 1956

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
November 13, 1956

IN THE MATTER OF:

Southeastern New Mexico nomenclature case calling for the creation of new pools and the extension of and deletion of certain areas from existing pools in Lea and Eddy Counties, New Mexico:

- (a) Create a new pool for Pennsylvanian production, designated as the Anderson-Pennsylvanian Gas Pool, and described as:

TOWNSHIP 17 SOUTH, RANGE 30 EAST  
Section 18: NW/4

- (b) Create a new pool for Pennsylvania production, designated as the Duffield-Pennsylvanian Gas Pool, and described as:

TOWNSHIP 16 SOUTH, RANGE 27 EAST  
Section 21: SW/4

- (c) Create a new pool for Devonian production, designated as the Four Lakes-Devonian Pool, and described as:

TOWNSHIP 12 SOUTH, RANGE 34 EAST  
Section 1: NW/4  
Section 2: NE/4

- (d) Create a new pool for Wolfcamp production, designated as the Four Lakes-Wolfcamp Pool, and described as:

TOWNSHIP 12 SOUTH, RANGE 34 EAST  
Section 1: NW/4  
Section 2: NE/4

- (e) Create a new pool for Pennsylvania production, designated as the Fren-Pennsylvanian Gas Pool,

and described as:

TOWNSHIP 17 SOUTH, RANGE 31 EAST

Section 15: SW/4  
Section 21: E/2  
Section 22: NW/4

- (f) Create a new pool for Seven Rivers production, designated as the High Lonesome-Seven Rivers Pool, and described as:

TOWNSHIP 16 SOUTH, RANGE 29 EAST

Section 15: NW/4

- (g) Create a new pool for Pennsylvanian production, designated as the Ranger Lake-Pennsylvanian Pool, and described as:

TOWNSHIP 12 SOUTH, RANGE 34 EAST

Section 23: SE/4

- (h) Create a new pool for Yates production, designated as the Saladar-Yates Pool, and described as

TOWNSHIP 20 SOUTH, RANGE 28 EAST

Section 33: SW/4

- (i) Create a new pool for Delaware production, designated as the Wye-Delaware Pool, and described as:

TOWNSHIP 22 SOUTH, RANGE 27 EAST

Section 29: NW/4

- (j) Extension of the Aid Pool to include therein

TOWNSHIP 17 SOUTH, RANGE 29 EAST

Section 19: SW/4

- (k) Extension of the Atoka Pool to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST

Section 10: E/2 and E/2 W/2  
Section 11: S/2  
Section 13: W/2 W/2  
Section 21: NE/4

Section 22: NE/4

- (l) Extension of the Dean Permo-Pennsylvanian Pool to include therein:

TOWNSHIP 15 SOUTH, RANGE 36 EAST  
 Section 23: S/2 SE/4

- (m) Extension of the Dos Hermanos Yates-Seven Rivers Pool to include therein:

TOWNSHIP 20 SOUTH, RANGE 30 EAST  
 Section 32: E/2 NE/4

- (n) Extension of the North Gladiola-Devonian Pool to include therein:

TOWNSHIP 12 SOUTH, RANGE 38 EAST  
 Section 5: W/2

- (o) Extension of the High-Lonesome Pool to include therein:

TOWNSHIP 16 SOUTH, RANGE 29 EAST  
 Section 21: E/2 and SW/4  
 Section 28: All

- (p) Extension of the Hobbs Pool to include therein:

TOWNSHIP 18 SOUTH, RANGE 37 EAST  
 Section 26: E/2 NE/4

- (q) Extension of the Roberts Pool to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST  
 Section 8: NE/4

- (r) Extension of the Townsend-Wolfcamp Pool to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST  
 Section 1: Lots 9, 10, 15, and 16  
 Section 8: Ne/4 SW/4

- (s) Extension of the Jalmat Gas Pool to include therein:

TOWNSHIP 22 SOUTH, RANGE 35 EAST  
Section 11: SE/4

(t) Deletion from the Terry-Blinebry Oil Pool the following:

TOWNSHIP 21 SOUTH, RANGE 37 EAST  
Section 3: Lots 6, 10, 11, and 12

(u) Extension of the Blinebry Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST  
Section 3: Lots 6, 10, 11, and 12

(v) Extension of the Blinebry Oil Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST  
Section 3: Lots 6, 10, 11, and 12

BEFORE:

Mr. A. L. Porter  
Mr. E. S. (Johnny) Walker

TRANSCRIPT OF PROCEEDINGS

MR. PORTER: Mr. Montgomery, will you take the stand.

RANDALL F. MONTGOMERY

called as a witness, having been previously duly sworn, testified as follows:

DIRECT EXAMINATION

BY: MR. COOLEY

Q State your full name and occupation.

A Randall F. Montgomery, engineer with the New Mexico Oil Conservation Commission.

Q You have been qualified as an expert before this Commission?

A Yes, sir, I have.

MR. COOLEY: Are the witness' qualifications acceptable?

MR. PORTER: They are.

Q Mr. Montgomery, as engineer for the Oil Conservation Commission, you have had an opportunity to study the condition of the oil and gas pools in this district?

A Yes, sir, I have.

Q Have you had an opportunity to make a study of the gas production from the Pennsylvanian formation on Township 17 South, Range 30 East?

A Yes, I have, and I recommend that in Paragraph a, that the pool be created as advertised to create a new pool for Pennsylvanian production, and designated as the Anderson-Pennsylvanian Gas Pool.

I have a plot here, which I have marked here as Exhibit No. 1. I recommend that the pool be extended to cover the Northwest Corner of Township 17 South, Range 30 East. This is brought on by the recent completion of the Great Western Drilling Company Grayburg Deep Unit 1 in Unit F of Section 18, Township 17 South, Range 30 East. Completed in the Pennsylvanian as a gas distillate well on 10/20/54, top perforation, 11,039. The depth range would

be eleven to twelve.

Q Have you had an opportunity to make a study of the Pennsylvanian production of gas in Township 16 South, Range 27 East?

A Yes, sir, I have, and I recommend that the Duffield-Pennsylvanian Gas Pool be created as advertised under Paragraph B, and I have marked here Exhibit No. 2 which outlines that area, that being the Southwest quarter of Section 21, which was due to the completion of the Continental Oil Company Gertrude M. Duffield well No. 1 in Unit K of Section 21, Township 17 South, Range 27 East, completed as a gas distillate well on April 17, 1952 on the Pennsylvanian. The top perforation was 8616.

Q Have you had an opportunity to make a study of oil production from the Devonian formation on Township 12 South, Range 34 East?

A Yes, sir, I have, and I recommend that that pool be created as advertised, namely, Four Lakes-Devonian Pool, which was due to the discovery of Humble Oil and Refining Company South Four Lakes Unit No. 2 in Unit G of Section 2, Township 12 South, Range 34 East completed in the Devonian Formation on October 12, 1956. The top perforation was 12,809.

I have marked here Exhibit No. 3, which will outline this area.

MR. COOLEY: I move the Commission at this time to dismiss Paragraph D of Case 1175 due to an error in advertising.

MR. PORTER: Without objection, it will be dismissed.

Q Have you had an opportunity to make a study of Pennsylvanian Gas production in Township 12 South, Range 31 East?

A Yes, I have, and I recommend that that be created as advertised under Paragraph E, which was due to the completion of the Skelly Oil Company Dow B No. 21 in Unit I of Section 21, Township 17 South, Range 31 East, which is completed as a gas distillate well. It was completed on October 3, 1954 in the Pennsylvanian. The top of perforation was 11878, and following the discovery well, there were two other wells drilled in the area, which was necessary for extending it as advertised.

Q Mr. Montgomery, what would be the additional designations of the pool as --

A The Fren-Pennsylvanian Gas Pool.

Q Mr. Montgomery, have you had an opportunity to make a study of oil production from the Seven Rivers Formation on Township 16 South, Range 29 East?

A I have, and I recommend that pool be created as advertised in F, it being the High Lonesome-Seven Rivers Pool for oil production. That was due to the recent completion of Moab Drilling Company Davis-Federal No. 1 in Unit E of Section 15, Township 16 South,

Range 29 East, completed in the Seven Rivers Formation on April 3, 1956. The top of the perforation was 1219.

I am marking this plat as Exhibit No. 5, the plat outlining that area.

Q Have you made a study of oil production from the Pennsylvanian Formation, Township 12 South, Range 34 East?

A I have, and I recommend that that pool be created as advertised under Paragraph G, as outlined on Exhibit No. 6, which is designated as Ranger Lake-Pennsylvanian Pool, which is outlined as the Southeast quarter of Section 23, Township 12 South, Range 34 East. That was due to the recent completion of Phillips Petroleum Company and the Texas Pacific Coal and Oil Ranger No. 1 in Unit P of Section 23, Township 27 South, Range 34 East, completed on September 27, 1956 in the Pennsylvanian. Top of perforation, 10,312.

Q Do you have any recommendations with respect to oil production from the Yates formation in Township 20 South, Range 28 East?

A Yes, sir. As advertised in Paragraph H, I recommend that we create the Saladar-Yates Pool, which was needed to be created due to the recent completion of George D. Riggs Malco Refineries, Incorporated No. 1 in Unit L of Section 33, Township 20 South, Range 28 East, completed at the Yates formation on March

30, 1956. The depth of the casing is 650 feet.

Q Would the limits of the pool be as advertised in Paragraph H?

A That's right, the southwest quarter of Section 33. I have marked the plat showing that acreage as Exhibit No. 7.

Q Have you made a study of oil production in the Delaware Formation, Township 22 South, Range 27 East?

A Yes, sir, and I recommend that that pool, as advertised in Paragraph I, be created, being the Wye-Delaware Pool, and covering the northwest quarter of Section 29, Township 22 South, Range 27 East. This creation of this pool is based upon discovery of the United States Smelting Mining and Refining Company John A. Gentry No. 1 in Unit D of Section 29, Township 22 South, Range 27 East, completed on September 8, 1956, on the Delaware Sand. The depth of the casing was 5372 feet.

I am marking the plat showing that acreage as Exhibit 8.

Q Mr. Montgomery, have you had an opportunity to make a study of conditions in the Aid Pool in Southeast, New Mexico?

A Yes, sir, I have, and I recommend that that pool be extended as advertised. I am marking that plat as Exhibit No. 9.

Q Have you likewise had an opportunity to study the conditions in the Atoka Pool?

A I have, and I recommend that that pool also be extended as advertised on Exhibit No. 10.

Q What recommendations do you have with regard to the Dean Permo-Pennsylvanian Pool?

A I recommend that that pool be extended as advertised, and as shown on Exhibit 11.

Q Do you have any recommendations with respect to the Dos Hermanos Yates-Seven Rivers Pool.

A Yes, sir. I recommend that that pool be extended as outlined on Exhibit 12.

Q Do you have any recommendations as to the North Gladiola-Devonian Pool?

A I also recommend that that pool be extended as advertised and outlined on Exhibit 13.

Q What are your recommendations for the High-Lonesome Pool?

A My recommendations are that that pool be extended as advertised and outlined on Exhibit 14.

Q Do you have any recommendations with respect to the Hobbs Pool?

A I recommend that that pool be extended as advertised and outlined on Exhibit 15.

Q What are your recommendations with respect to the Roberts Pool?

A I recommend that that pool be extended as advertised and outlined on Exhibit 16.

Q Do you have any recommendation with respect to the Townsend-Wolfcamp Pool?

A Yes, sir. I recommend that that pool be extended as advertised and outlined on Exhibit 17.

Q Do you have any recommendation with respect to the Jalmat Gas Pool?

A Yes, sir. I recommend that this pool be extended as advertised and as outlined on Exhibit 18.

Q Do you have any further recommendations to make to the Commission at this time?

A No, sir, I don't.

MR. PORTER: Does anyone have any questions of Mr. Montgomery?

MR. ROSS: Ross, with Humble. It is my recollection that the Skelly Lynch "A" was a discovery well, or pool, which is now proposed on the Fren-Pennsylvanian?

A You are correct, it is the Lynch "A" No. 6, it was a discovery well on that pool located on Unit 22, Township 17 South, Range 31 East. That was completed on January 12, 1954. Top of perforation was 11,962 feet.

MR. COOLEY: Let the record show that the witness'

testimony be corrected with respect to the Fren-Pennsylvanian Gas Pool, be corrected as previously stated.

MR. PORTER: Does anyone else have a question of Mr. Montgomery? If not, do you offer the exhibits?

MR. COOLEY: We move the Commission to accept in evidence Exhibits Nos. 1 through 18.

MR. PORTER: Without objection, they will be admitted. The witness may be excused.

(Witness excused.)

MR. PORTER: Next witness, please.

M. C. McKAY

called as a witness, having been previously duly sworn, testified as follows:

DIRECT EXAMINATION

BY: MR. COOLEY:

Q Would you state your full name and occupation for the record.

A J. M. McKay, engineer for Shell Oil Company. I am familiar with Shell's operations in the Terry-Blinebry Field, and have previously testified before this Commission.

MR. PORTER: His qualifications are acceptable.

Q Mr. McKay, do you have any recommendations to the Commission with respect to the Terry-Blinebry Oil Pool?

A Yes, sir, I recommend that the area, Lots 6, 10, 11, and 12 of Section 3, Township 21 South, Range 37 East be deleted from the Terry-Blinebry Pool. If I may, I might enter as Exhibit 19 -- That would be the correct designation, wouldn't it?

MR. GURLEY: It is your Exhibit No. 1.

A It is in the same case.

Q All right. This Exhibit No. 19, is this evidence in this cross hatched in green.

A I was referring to my own Exhibit as Exhibit 19. I will call it whatever you like.

MR. COOLEY: Let the record show that it is Shell's Exhibit No. 19.

MR. PORTER: As I understand it, these Shell's Exhibits will be offered later, as Nos 1, 2, and 3. Will you proceed with your questions.

Q What is the basis of your recommendation for deleting this acreage from the Terry-Blinebry Oil Pool at the present time.

A Portion T, U, and V of this case/are all an out growth of Shell Oil Company's application for a non-standard proration unit to be assigned to Terry-Blinebry's No. 1, which is located in Lot 11 of Section 3, Township 21 South, Range 37 East. This well was completed in the Blinebry with an absolute open flow

production of thirteen point three million cubic feet, with a gas distillate ratio of 49,379 and distillate gravity of fifty-seven degrees. From Shell's investigation of our own development in the area, along with investigation of many of the producing wells, it is hard to pinpoint an exact gas-oil contact because of the nature of the Blinebry Reservoir being a carbonate reservoir with varying porosity and permeability. However, we feel that a realistic transition zone between the oil and gas columns is approximately 2250 feet sub-sea. Noting this sub-sea depth on the contour map that I have, that I shall tender as Exhibit, Shell Exhibit 1, as Shell Exhibit, all of the acreage in question, being Lots 6, 10, 11 and 12, of Section 3, 21 South, 37 East, is shown to be gas productive, and since the present Commission designation is such that this acreage is in the Terry-Blinebry Pool limits, we wish that this acreage be deleted from the Terry-Blinebry Oil Pool and an extension of the Blinebry Gas and Blinebry Oil Pools be made.

Q Then it is your recommendation that the Blinebry Gas Pool be extended to include Lots 6, 10, 11 and 12, Section 3, Township 21 South, Range 37 East?

A That's correct.

Q 21 South, Range 37 East, that the Blinebry Oil Pool be likewise extended?

A Yes.

Q The deletion of the Terry-Blinebry Oil Pool is shown cross-hatched in green on Shell's Exhibit No. 2, and extension of the Blinebry Oil Pool shown outlined in green as Shell's Exhibit No. 3. Shell also has Exhibit No. 4 consisting of a contour map to which the witness has just testified. I move the Commission to accept Exhibits 1 through 4 in evidence.

MR. PORTER: Have those exhibits been properly identified?

A I believe so.

MR. PORTER: Without objection, they will be admitted. Are there any further questions of Mr. McKay?

MR. MONTGOMERY: I have some questions.

CROSS EXAMINATION

BY: MR. MONTGOMERY:

Q Mr. McKay, do you have any opinion as to the proper classification in Section 4 in Lots 2, 7, 1, 9, 9, and 10?

A In Lot 8, Shell has recently completed a Blinebry oil producer, Tailer-Glenn No. 7, and at present is completing in the Blinebry Formation an oil producer, Tailer-Glenn 8 in Lot 5 of Section 3. A comparison of the two logs on each of these wells indicate that production will be obtained from a comparable interval. Under present Commission classification,

the Tailer-Glenn No. 7 is designated a Blinebry Oil Producer; Terry-Oil No. 8 is designated a Terry-Blinebry Oil Producer and I feel, it is my opinion that the Terry-Blinebry Pool should be extended perhaps to include Lot 8 of Section 4, which would be that acreage dedicated to the Tailer-Glenn No. 7.

MR. MONTGOMERY: That's all.

MR. PORTER: Any further questions of Mr. McKay? You may be excused.

(Witness excused.)

MR. PORTER: We will take the case under advisement.

STATE OF NEW MEXICO     )  
  )     ss  
COUNTY OF BERNALILLO    )

I, J. A. Trujillo, 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 in Stenotype and reduced to typewritten transcript by me; and the same is a true and correct record to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this, the 30th day of November, 1956, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

*J. A. Trujillo*  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
October 5, 1960