

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case No. 1624

TRANSCRIPT OF HEARING

APRIL 8, 1959

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE, NEW MEXICO  
Phone CHapel 3-6691

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case 1624 Application of El Paso Natural Gas Company  
for an oil-gas dual completion. Applicant,  
in the above-styled cause, seeks an order  
authorizing the dual completion of its  
Huerfano Unit Well No. 103 located in the  
NE/4 NW/4 of Section 3, Township 26 North,  
Range 10 West, San Juan County, New  
Mexico, in such a manner as to permit the  
production of oil from the Angels Peak-  
Gallup Oil Pool and the production of gas  
from the Dakota formation adjacent to the  
Angels Peak-Dakota Gas Pool through parallel  
strings of two-inch tubing.

Room 109  
Oil Conservation Commission  
April 8, 1959

BEFORE:

E. J. FISCHER, Examiner.

TRANSCRIPT OF HEARING

MR. FISCHER: We will take up next Case 1624.

MR. PAYNE: Case 1624, "Application of El Paso Natural  
Gas Company for an oil-gas dual completion."

MR. SETH: Oliver Seth and Mr. Garrett Whitworth appearing  
for the applicant.

MR. WHITWORTH: We have one witness, Mr. John Mason.

MR. FISCHER: Any other appearances to be made in this case?

(Witness sworn in.)

JOHN MASON

called as a witness, having been first duly sworn, was

examined and testified as follows:

DIRECT EXAMINATION

BY MR. WHITWORTH:

Q Will you state your name, by whom you are employed and in what capacity, Mr. Mason.

A My name is John Mason, employed by El Paso Natural Gas Company as a proration engineer.

Q Would you give the examiner a brief history of your scholastic training and experience?

A I graduated from Vanderbilt University in March, 1953, with a B. S. degree in chemical engineering. Since that time, I have worked almost two years with the Atlantic Refining Company, six months with the Brazos Oil and Gas Company and three years at different times as an engineer with the Railroad Commission of Texas. Since October the 1st, 1958, I have worked with El Paso Natural Gas Company in my present capacity.

Q What is that present capacity?

A Proration Engineer.

MR. WHITWORTH: We ask that the witness be qualified.

MR. FISCHER: He is.

Q (By Mr. Whitworth) Are you familiar with El Paso Natural Gas Company's Huerfano Unit No. 103 in the application in this case?

A Yes, I am. This is an application requesting an order

authorizing El Paso to complete the Huerfano No. 103 as an oil-over gas dual in such a manner as to permit production of oil from the Gallup formation and the production of gas from the Dakota formation. At the time the application was filed, the gas-oil ratio data indicated that this was an oil completion in the Gallup zone. Since that time, the periodic gas-oil ratio measurements have indicated that this might more properly be classed as a gas completion in that the gas-oil ratios indicated on March 15, of this year showed a GOR of approximately nine thousand to one.

MR. WHITWORTH: In view of this testimony, we ask that El Paso's application on this date be amended to reflect an application for a gas-gas dual instead of an oil-gas, to obviate the necessity of filing for administrative ruling on gas-gas dual.

MR. PAYNE: If you had known this was going to be a gas-gas dual, would it have been eligible for administrative approval?

MR. WHITWORTH: It would have, yes sir.

MR. PAYNE: I see no objection to that.

MR. FISCHER: If there is no objection, then we will so amend it.

(Thereupon the document was marked as El Paso's Exhibit No. 1 for identification.)

Q (By Mr. Whitworth) Do you have a plat that has been marked as El Paso's Exhibit No. 1 indicating the location of the

well and all of the offset operators?

A Yes, I do. Exhibit No. 1 shows that the Huerfano Unit No. 103 is located sixteen hundred fifty feet from the west line, nine hundred ninety feet from the north line in Section 3, Township 26 North, Range 10 West. This diagram also indicates that Weaver-Brown is the other operator to the north in Section 34 and that El Paso Natural Gas Company is the operator as to the remaining surrounding acreage.

Q Will you explain where that well is located on the plat, Mr. Mason?

A Yes, it is located in the northeast quarter of the northwest quarter of Section 3, Township 26 north, Range 10 West. It is indicated by being circled with the red circle.

Q Now, do you have a diagrammatic sketch of the physical equipment on this well?

A Yes, I do.

MR. WHITWORTH: We ask that it be marked as El Paso's Exhibit No. 2.

(Thereupon, the document was marked as El Paso's Exhibit No. 2 for identification.)

A Exhibit No. 2 is a schematic diagram of the Huerfano No. 103. It shows that we have a total depth of seven thousand thirty feet, surface casing is ten and three quarter inch J-55 grade set at three hundred sixty three feet and cemented with four

sacks of cement which was circulated to the surface. The oil string is seven and five eighths inch J-55 and N-80 casing set at 6446. There is a five and a half inch liner of J-55 grade set from 6313 to 7027 feet. There is Baker Model D Production Packer set at 6270, nominal two inch tubing set in the Gallup to permit production from the Gallup formation, two inch EUE 4.7 pounds per foot and this tubing is ~~landed~~ at 6238 in the tubing perforation at 6203. The tubing string through which the Dakota will be produced is nominal two inch EUE 4.7 pounds ~~landed~~ at 6877. The tubing perforation is at 6834. The Gallup formation is perforated from 6241 to 6265 with four shots per foot and it was fractured with oil and sand. The Dakota formation was perforated from 68 at various intervals, from 6880 to 7000 feet shot with two shots per foot and fractured with oil and sand.

Q When was this well completed?

A This well was completed December the 8th, 1958.

Q Do you have potential information and-gas-oil ratio information with respect to completion on the Gallup zone and the Dakota zone on this well?

A Yes, I do. The Gallup formation, the initial gas-oil ratio test that was taken March the 7th, 1959, test results were 82.8 barrel of oil per day, three hundred three MCF of gas and that gave us a gas-oil ratio of 28,000, 55 to 1 on March the 15th. Another gas-oil ratio test indicated production of 22.8 barrels of

oil, 3200 hundred fifty six MCF of gas, which resulted in gas-oil ratio of 98,947 to one. The Dakota formation was tested December 17th, 1958. The three quarter inch choke test showed a volume of 4460 MCF per day and the calculated absolute open flow of 5303 MCF per day.

Q Do you have a log of this well?

A Yes, I have.

MR. WHITWORTH: We'll ask that that be marked as El Paso's Exhibit No. 3.

(Thereupon, the document was marked as Exhibit No. 3 for Identification)

Q (By Mr. Whitworth) Would you please explain to the examiner what the log shows?

A This log shows the top and the base of the Gallup formation with the perforated interval and also shows the top and the bottom of the Dakota formation with perforated intervals.

Q In your opinion, would the granting of this application prevent the unnecessary drilling of wells and thereby prevent waste?

A Yes, it would.

Q Would the granting of this application prejudice correlative rights, in your opinion?

A No sir, it would not.

Q How were El Paso's exhibits in this case prepared?

A Exhibits No. 1 and 2 were prepared at my request by

the engineering department of our Farmington office, Exhibit No. 3 is a standard induction log run by the Schlumberger Well Surveying Corporation.

Q And in your opinion, would the equipment that El Paso has installed in this well permit any kind of tests that the Commission may require?

A Yes, it would.

Q Is there any thing else you wish to add to your testimony?

A No, that's all.

MR. WHITWORTH: We ask that El Paso's Exhibits No. 1, 2, and 3 be admitted.

MR. FISCHER: Without objection, they will be admitted.

MR. WHITWORTH: That's all.

MR. FISCHER: Any question of Mr. Mason?

MR. NUTTER: Yes.

MR. FISCHER: Mr. Nutter?

CROSS EXAMINATION

BY MR. NUTTER

Q Mr. Mason, where is this well located in relation to the Angels Peak-Gallup Oil Pool?

A I believe this is considered to be a part of Angels Peak-Gallup Oil Pool.

Q Is it within the defined limits of that pool?

A I couldn't say definitely, but the information that I have was gathered from the way in which the case was advertised and the Commission has stated that it was within the limits of the Gallup Oil Pool.

Q So actually rather than being a gas-gas dual completion, this is a high gas oil ratio oil well in the Angels Peak Gallup Oil and a Dakota gas well, isn't it?

A It would appear that way; however, though I haven't made any detailed studies on the geological location, the exhibits that we presented to the Commission at the reclassification hearing indicated that this well was located higher on the structure than the other wells that are presently classified as gas-gas duals.

Q This has been the so-called gas-cap in the pool?

A Yes.

MR. NUTTER: That's all.

MR. FISCHER: Any other questions of Mr. Mason?

CROSS EXAMINATION

BY MR. FISCHER

Q Mr. Mason, I notice in your original application on this 103 Huerfano, in your diagramatic sketch, you still don't make that change in your mechanical installation in the well?

A That's correct.

Q In any event, whatever this well is called or however it is classified, you still propose to operate that well under this

mechanical installation, is that right?

A Yes, as far as I know we will.

MR. FISCHER: Any other questions?

The witness may be excused.

(Witness excused)

MR. FISCHER: Any other statements to be made?

The case will be taken under advisement.

We will take a short recess.

(Short recess)

MR. FISCHER: The hearing will come to order, please.

Mr. Whitworth did you want to reopen Case No. 1624?

MR. WHITWORTH: Yes, I would like to reopen this case in order to request that should the Commission find that this well is an oil well instead of a gas well, then we withdraw our request for an amendment and leave the application as it is.

MR. FISCHER: All right.

MR. WHITWORTH: Or as it was in the beginning.

MR. FISCHER: All right, we will take the case under advisement.



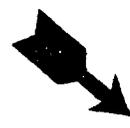
*DAY*

*Case 1624*

# El Paso Natural Gas Company

El Paso, Texas

March 16, 1959



ADDRESS REPLY TO:  
POST OFFICE BOX 997  
FARMINGTON, NEW MEXICO

Mr. A. N. Brown  
Suite 337  
1740 Broadway  
Denver 2, Colorado

Re: Huerfano #103 Well

Dear Mr. Brown:

El Paso Natural Gas Company proposes a dual completion well to be located in the W/2 of Section 3, Township 26 North, Range 10 West, San Juan County, New Mexico. This well will be dually completed in both the Gallup and Dakota formations.

Inasmuch as you are the owner and operator of the acreage which adjoins the drilling block, and if you have no objections to this proposed dual completion, we would appreciate your signing the attached copy of this letter and returning same to this office.

In the event our records are incorrect and you are not the lease owner of the acreage described above, it would be appreciated if you could advise us as to the correct owner.

Your prompt consideration of this matter will be greatly appreciated.

Very truly yours,

D. N. Canfield  
Division Landman  
Land Department

DNC:MC:cs

The above mentioned dual completion well is hereby approved.

A. N. BROWN

3/19, 1959.

**NEW MEXICO OIL CONSERVATION COMMISSION**

SANTA FE, NEW MEXICO

7-3-58

**APPLICATION FOR DUAL COMPLETION**

Field Name Wildcat Dakota & Angel Peak Gallup Ext.		County San Juan	Date PM 6:37	Date 2-16-59
Operator El Paso Natural Gas Company		Lease Huerfano Unit		Well No. 103 (GD)
Location of Well Unit C	Section 3	Township 26N		Range 10W

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES X NO \_\_\_\_\_
2. If answer is yes, identify one such instance: Order No. DC 677; Operator, Lease, and Well No.:

Huerfano Unit No. 99 (GD)

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Gallup	Dakota
b. Top and Bottom of Pay Section (Perforations)	6241-6265	6880-7000
c. Type of production (Oil or Gas)	Oil	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing

4. The following are attached. (Please mark YES or NO)

- Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- No c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*
- No d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

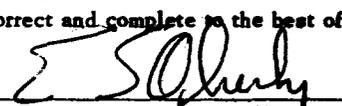
5. List all offset operators to the lease on which this well is located together with their correct mailing address.

El Paso Natural Gas Company is Unit Operator.

W. R. Weaver - Waiver requested. To be sent under separate cover to Santa Fe.

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_ . If answer is yes, give date of such notification \_\_\_\_\_

**CERTIFICATE:** I, the undersigned, state that I am the Div. Petroleum Engineer of the El Paso Natural Gas Co. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.



Signature

\* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

**NOTE:** If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed.