

CASE 1991: Application of EL PASO  
FOR THE order amending special pool  
rules for Blanco-Morris. Gas Pool.

Case No.

1987

Application, Transcript,  
Small Exhibits. Etc.

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

June 10, 1960

Mr. Fred Hannahs  
P. O. Box 228  
Santa Fe, New Mexico

Dear Sir:

On behalf of your client we enclose herewith two  
copies of Order R-1670-A in Case 1981 issued by  
the Oil Conservation Commission this date.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ir/

Carbon copy of Order sent to:

Mr. Jason Kellahin  
Oil Conservation Commission;  
Hobbs and Aztec

C  
O  
P  
Y

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 1981  
Order No. R-1670-A

APPLICATION OF EL PASO NATURAL GAS  
COMPANY FOR AN AMENDMENT OF THE  
SPECIAL POOL RULES FOR THE BLANCO-  
MESAVERDE GAS POOL, RIO ARriba AND  
SAN JUAN COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 1, 1960, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 10th day of June, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, El Paso Natural Gas Company, seeks an order amending the Special Pool Rules for the Blanco-Mesaverde Gas Pool as set forth in Order R-1670 to provide that District Supervisors of the Oil Conservation Commission may approve "slim-hole" completions in the Blanco-Mesaverde Gas Pool, regardless of depth.

(3) That the evidence presented establishes that no particular problems should be encountered in the Mesaverde formation which would make the "slim-hole" method of completion undesirable; therefore, the applicant's proposed amendment to the Special Pool Rules for the Blanco-Mesaverde Gas Pool should be adopted.

IT IS THEREFORE ORDERED:

That Order No. R-1670, which sets forth the Special Rules and Regulations governing the Blanco-Mesaverde Gas Pool, Rio Arriba and San Juan Counties, New Mexico, be and the same is

-2-

CASE No. 1981

Order No. R-1670-A

hereby amended by the inclusion of Rule 34 which reads in its entirety as follows:

The Oil Conservation Commission's District Supervisors or their representatives shall have authority to approve "slim-hole" completions without the necessity for administrative approval or notice and hearing when the following conditions exist:

(1) The well is to be completed with a total depth which shall not exceed the base of the Mesaverde formation,

(2) The well is not a wildcat (it is not more than one mile from an existing well producing from the same common source of supply to which it is projected),

(3) No known corrosive or pressure problems exist which might make the "slim-hole" method of completion undesirable,

(4) The well will not be a dual completion,

(5) The tubing used as a substitute for casing will be either 2-3/8 inch OD or 2-7/8 inch OD.

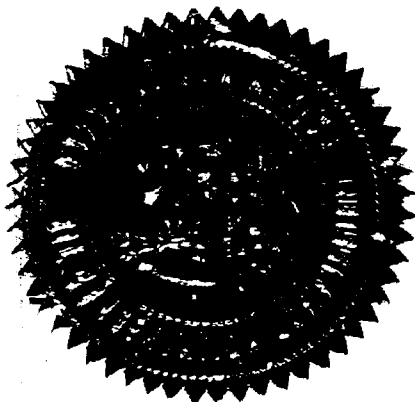
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
JOHN BURROUGHS, Chairman

  
MURRAY E. MORGAN, Member

  
A. L. PORTER, Jr., Member & Secretary



esx/

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 6-3-60

CASE 1851

Hearing Date 6-1-60

My recommendations for an order in the above numbered cases are as follows:

1. Grant E.P.H.G. request to amend R. 1670 - ~~Mesaverde~~ Blanco - Mesaverde Special Pool Rules Sec. VIII to include a new Rule 34. ~~Supersede Old Rule VIII.~~

"(e) The Commission's District Supervisors or their representatives shall have authority to approve "slim-hole" completions without the necessity for administrative approval or notice and hearing when the following conditions exist:

- "(1) The well is to be completed with a total depth which shall not exceed the base of the Mesaverde Formation,
- "(2) The well is not a wildcat (It is not more than one mile from an existing well producing from the same common source of supply to which it is projected),
- "(3) No known corrosive or pressure problems exist which might make the "slim-hole" method of completion undesirable,
- "(4) The well will not be a dual completion,
- "(5) The tubing used as a substitute for casing will be either 2-3/8 inch OD or 2-7/8 inch OD."

Seal on file

DOCKET: EXAMINER HEARING JUNE 1, 1960  
Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, N.M.  
The following cases will be heard before Elvis A. Utz, Examiner, or Oliver E. Payne, Attorney, as alternate Examiner:

CASE 1970:

Application of Gulf Oil Corporation for approval of a gas-oil dual completion. Applicant, in the above-styled cause, seeks permission to dually complete its Lea-State "AQ" Well No. 8, located in Unit E of Section 32, Township 19 South, Range 35 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the East Pearl-Seven Rivers Gas Pool and the production of oil from the Pearl Queen Pool through the casing-tubing annulus and 2-3/8 inch tubing respectively, utilizing a retrievable type packer to separate the two producing horizons.

CASE 1971:

Application of Gulf Oil Corporation for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the Blinebry oil production with the Tubb gas condensate from all wells presently completed or hereafter drilled on its Evelyn Lineberry lease, consisting of the N/2 SW/4 of Section 29, Township 22 South, Range 38 East, Lea County, New Mexico, after separately metering the Blinebry oil production.

CASE 1972:

Application of Gulf Oil Corporation for permission to commingle the production from several separate pools. Applicant, in the above-styled cause, seeks permission to commingle the Blinebry oil production with the Blinebry gas condensate and Tubb gas condensate from all wells on its T. R. Andrews lease comprising the E/2 of Section 32, Township 22 South, Range 38 East, Lea County, New Mexico, after separately metering the Blinebry oil production.

CASE 1973:

Application of Graridge Corporation for approval of the unorthodox locations of three water injection wells. Applicant, in the above-styled cause, seeks approval of an unorthodox location for three water injection wells to be located in the SE/4 NE/4 of Section 28, Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.

- CASE 1974: Application of C. T. Robertson for an order authorizing a water flood project. Applicant, in the above-styled cause, seeks an order authorizing him to institute a water flood project in the Coyote-Queen Pool, Chaves County, New Mexico, by the injection of water into the Queen formation through six wells located in Sections 11 and 14, Township 11 South, Range 27 East.
- CASE 1975: Application of Amerada Petroleum Corporation for approval of, an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State LM "T" Well No. 5, located in Unit A, Section 36, Township 23 South, Range 36 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Jalmat Gas Pool and the production of oil from the Langlie-Mattix Pool through parallel strings of 1-inch tubing and 2-3/8 inch tubing respectively, utilizing a retrievable type packer to separate the two producing horizons.
- CASE 1976: Application of Caulkins Oil Company for approval of a gas-gas dual completion and for the establishment of a non-standard gas unit. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Reuter PC-297 well in such a manner as to permit the production of gas from the South Blanco-Pictured Cliffs Gas Pool and the production of gas from the Dakota Producing Interval through parallel of 1 1/4-inch and 2 3/8 inch tubing respectively. Applicant further seeks an order establishing a non-standard gas unit to be dedicated to the subject well in the Dakota Producing Interval consisting of the SW/4 of Section 15 and the NW/4 of Section 22, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 1977: Application of Hondo Oil & Gas Company for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of an automatic custody transfer system to handle the production from the Empire-Abo Pool from all wells presently completed or hereafter drilled on the Hondo-Western-Yates State 647 lease, which lease consists of acreage in Sections 25, 26, 34, 35, and 36, all in Township 17 South, Range 28 East, Eddy County, New Mexico.



CASE 1978:

Application of Shell Oil Company for an order authorizing two salt water disposal wells. Applicant, in the above-styled cause, seeks an order authorizing the disposal of produced salt water through its State ETA Well No. 1, located in the NE/4 NE/4 of Section 8, Township 16 South, Range 35 East, Lea County, New Mexico, with the injection to be in the Wolfcamp formation in the interval from 10,365 feet to 10,463 feet. Applicant further seeks an order authorizing the disposal of produced salt water through its State EDA Well No. 2, located in the SW/4 SW/4 of Section 7, Township 16 South, Range 35 East, Lea County, New Mexico, with injection to be in the Wolfcamp formation in the interval from 10,712 feet to 10,734 feet.

CASE 1979:

Application of The Atlantic Refining Company for an order authorizing a water injection project in the Horseshoe-Gallup Oil Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing the injection of water, for purposes of pressure maintenance and/or secondary recovery, into the Horseshoe-Gallup Oil Pool through 15 wells located in Sections 19, 20, 29, 30 and 31, Township 31 North, Range 16 West, San Juan County, New Mexico. Applicant further requests that special rules and regulations be promulgated governing the operation of this water injection project including the assignment of a project allowable.

CASE 1980:

Application of Hudson and Hudson for nine unorthodox locations. Applicant, in the above styled cause, seeks an order authorizing the drilling of wells at nine 5-spot locations on its Puckett "A" Lease, Maljamar Pool, Lea and Eddy Counties, New Mexico, said wells to be located in the 40-acre units hereinafter described, and within 100 feet of the indicated corner thereof.

SW Corner Unit O, Section 13, and the following wells in Section 24:

SE Corner Unit D;	SE Corner Unit F;
NW Corner Unit C;	NE Corner Unit G;
SW Corner Unit B;	NW Corner Unit K;
NW Corner Unit A;	NW Corner Unit I;

all in Township 17 South Range 31 East, Eddy County.

- CASE 1981: Application of El Paso Natural Gas Company for an order amending the special pool rules for the Blanco-Mesaverde Gas Pool. Applicant, in the above-styled cause, seeks an order amending the special pool rules for the Blanco-Mesaverde Gas Pool, Rio Arriba and San Juan Counties, New Mexico, to authorize district supervisors to approve "slim hole" completions in the Blanco-Mesaverde Gas Pool, regardless of depth.
- CASE 1982: Application of Otto Reynolds for an unorthodox oil well location. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location for his Wood Well No. 1, located 330 feet from the South line and 1629 feet from the West line of Section 14, Township 29 North, Range 11 West, San Juan County, New Mexico.
- CASE 1983: Application of Ralph Lowe for permission to commingle the production from several separate leases. Applicant, in the above-styled cause, seeks permission to commingle the production from an undesignated Delaware pool from several separate leases comprising the N/2 NW/4 of Section 17 and the E/2 NE/4 and the E/2 NW/4 of Section 18, Township 25 South, Range 30 East, Eddy County, New Mexico.
- CASE 1984: Application of Mountain States Petroleum Corporation for an unorthodox gas well location and for a 183-acre non-standard gas unit. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for a well to be drilled 1050 feet from the North line and 750 feet from the West line of partial Section 31, Township 26 North, Range 2 West, Rio Arriba County, New Mexico. Applicant further seeks the establishment of a 183-acre non-standard gas unit in the Pine Lakes-Pictured Cliffs Gas Pool consisting of all of said partial Section 31 to be dedicated to the subject well.
- CASE 1985: Application of Charles Loveless, Jr. for a 280-acre non-standard gas unit. Applicant, in the above-styled cause, seeks the establishment of a 280-acre non-standard gas unit in the Atoka-Pennsylvanian Gas Pool consisting of the NE/4 NE/4, W/2 NE/4, NW/4 of Section 11, Township 18 South, Range 26 East, or in the alternative to force pool all mineral interest owners in the SE/4 NE/4 of said Section 11 in the Atoka-Pennsylvanian Gas Pool with the interests of those in the above-described non-standard unit in said pool. Said unit is to be dedicated to a well to be drilled 1650 feet from the North and West lines of said Section 11, Township 18 South, Range 26 East, Eddy County, New Mexico.

-5-

Docket No. 15-60

CASE 1986:

Application of J. M. Welch for a gas-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of his Etz Well No. 3, located in the NE/4 SE/4 of Section 13, Township 16 South, Range 30 East, Eddy County, New Mexico, in such a manner as to produce gas from the Penrose sand of the Queen formation and to produce oil from the Lovington sand of the San Andres formation in the Henshaw (San Andres) Pool, through the casing-tubing annulus and 2-inch tubing respectively, utilizing a retrievable type packer to separate the two producing horizons.

*El Paso Natural Gas Company*

*El Paso, Texas*

April 27, 1960

*Case 1981*

New Mexico Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.  
Secretary - Director

Gentlemen:

Enclosed please find El Paso Natural Gas Company's application for an order revising and amending Order No. R-110 to provide for district supervisors approval of "slim-hole" completions. This application is submitted in quadruplicate.

It is respectfully requested that hearing be had on this matter at the soonest possible date.

Yours very truly,

*Garrett C. Whitworth*  
Garrett C. Whitworth  
Attorney

GCW:hsu

Encl.

*Booked  
Miles  
5-19-60*

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF EL PASO NATURAL GAS COMPANY FOR  
AN ORDER REVISING AND AMENDING ORDER  
NO. R-110 TO PROVIDE FOR DISTRICT  
SUPERVISORS APPROVAL OF "SLIM-HOLE"  
COMPLETIONS TO A TOTAL DEPTH WHICH  
SHALL NOT EXCEED FROM THE SURFACE TO  
THE BASE OF THE MESAVERDE FORMATION  
WITHOUT THE NECESSITY FOR ADMINISTRA-  
TIVE APPROVAL OR NOTICE AND HEARING.

CASE NO. 1481

A P P L I C A T I O N

COMES NOW El Paso Natural Gas Company, a Delaware corporation, with license to do business in the State of New Mexico, hereinafter called "Applicant," and files this, its application to amend Order No. R-110, as amended, of the Oil Conservation Commission, State of New Mexico, and in support thereof would respectfully show the Commission the following:

I.

Paragraph (e)(1) of Statewide Rule 107, with respect to "slim-hole" completions provides:

"(e) The Commission's District Supervisors or their representatives shall have authority to approve "slim-hole" completions without the necessity for administrative approval or notice and hearing when the following conditions exist:

"(1) The well is to be completed with a total depth of 5,000 feet or less,"

In many instances future wells to be drilled and completed in the Blanco (Mesaverde) Pool will exceed a total depth of 5,000 feet. Many of these wells could and should be completed by "slim-hole" completion methods in order to prevent waste and the Commission's District Supervisors should have authority to approve "slim-hole" completions in the Blanco (Mesaverde) Pool without the necessity for administrative approval or notice and hearing when the conditions in the following proposed amendment exist.

## II.

Order No. R-110 dated November 9, 1951, as amended, of the Oil Conservation Commission of the State of New Mexico should be amended by adding to Section 4, Casing and Cementing Program, the following:

"(e) The Commission's District Supervisors or their representatives shall have authority to approve "slim-hole" completions without the necessity for administrative approval or notice and hearing when the following conditions exist:

- "(1) The well is to be completed with a total depth which shall not exceed the base of the Mesaverde Formation,
- "(2) The well is not a wildcat (It is not more than one mile from an existing well producing from the same common source of supply to which it is projected),
- "(3) No known corrosive or pressure problems exist which might make the "slim-hole" method of completion undesirable,
- "(4) The well will not be a dual completion,
- "(5) The tubing used as a substitute for casing will be either 2-3/8 inch OD or 2-7/8 inch OD."

## III.

The provisions of said proposed amendment should be added to Section VIII (Special Pool Rules for Blanco (Mesaverde) Gas Pool) of the proposed General Rules and Regulations for the Prorated Gas Pools of Northwestern New Mexico, now pending before this Commission, when and if such General Rules are adopted.

## IV.

The granting of this application would prevent waste and would not prejudice or violate correlative rights.

WHEREFORE, premises considered, Applicant prays that after due notice as required by law, this matter be set for hearing before either the Oil Conservation Commission of the State of New Mexico or

an examiner therefor and that upon final hearing of said matter, said Order No. R-110, as amended, be amended further as aforesaid, and that said proposed amendment be added to the General Rules and Regulations, as aforesaid, when and if the same are adopted.

Garrett C. Whitworth  
Attorney for El Paso Natural  
Gas Company

## WELL COST ESTIMATE

Form 22-32 (Rev. 4-59)

BEFORE EXAMINER USE  
OIL CONSERVATION COMMISSION

EXHIBIT NO. 1

Lease Name		CASE NO. 1981		Field Blanco Mesa Verde	
Location		County		State New Mexico	
Formation Mesa Verde-Standard Completion		Est. Total Depth: 5600'			

						PRODUCING WELL		DRY HOLE
						Sub.	Total	
<b>TUBULAR GOODS</b>								
Surface Casing	120	Ft.	10 3/4	Inch.	3.75	\$/Ft.	\$ 450.00	
Int. Casing	3800	Ft.	7 5/8	Inch.	3.14	\$/Ft.	11,932.00	
Prod. Casing		Ft.		Inch.		\$/Ft.		
	2050	Ft.	5 1/2	Inch.	1.88	\$/Ft.	3,854.00	
		Ft.		Inch.		\$/Ft.		
Tubing	5770	Ft.	2 3/8	Inch.	0.71	\$/Ft.	3,941.00	
		Ft.		Inch.		\$/Ft.		
							20,177.00	
<b>WELLHEAD EQUIPMENT:</b>							1,826.00	
<b>OTHER EQUIPMENT:</b>							287.00	
Liner Hangers and Production Packers								
<b>CONTRACT COSTS:</b>								
Footage	5600	Ft.			4.45	\$/Ft.	24,920.00	
Daywork	5	Day			800	\$/Day	4,000.00	
Daywork		Day				\$/Day		
Daywork		Day				\$/Day		
							28,920.00	
<b>CEMENTING: (Cement and Pump Trucks)</b>								
Surface								
Intermediate								
Production								
Liner								
Liner								
Sq. Job.								
							3,108.00	
<b>FORMATION TREATMENT:</b>								
Acidizing								
Fracturing Equipment								
Fluid Gal. Oil								
Gal. Water								
Sand Lbs.								
Tank Rental								
							6,457.00	
<b>SPECIAL SERVICES: (Surveys and Tests)</b>								
Perforating								
Mud Logging								
Electric and Radioactive Logging								
Drill Stem Tests								
Cores								
							4,495.00	
<b>MATERIALS:</b>								
Drilling Mud and Chemicals							2,500.00	
Drilling Gas or Air								
Water							250.00	
Bits							250.00	
Fuel							700.00	
Cement Equipment (shoes, collars, etc.)							500.00	
Bridge Plugs and Retainers							1,500.00	5,700.00
Miscellaneous (welding, hauling, rental of tongs, etc.)								
<b>ACCESS AND LOCATION:</b>								
Tubing less cost \$17,605.00 less than Standard, or 23 % Saving							1,000.00	1,000.00
Total Direct Cost								71,970.00
Plus 5 % Contingency								3,599.00
<b>ESTIMATED TOTAL COST</b>						\$	\$ 75,569.00	\$
<b>WORKING INTEREST:</b>						<b>ESTIMATED COST ONLY --</b> Each participating owner to pay proportionate share of actual well cost subject to operating agreement.		
El Paso Natural Gas Company								
Others								
Date 5-26-60						PARTNER'S APPROVAL:		
Prepared By E. S. Oberly						Date		
Approved By						By		



Form 22-32 (Rev. 4-59)

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 2

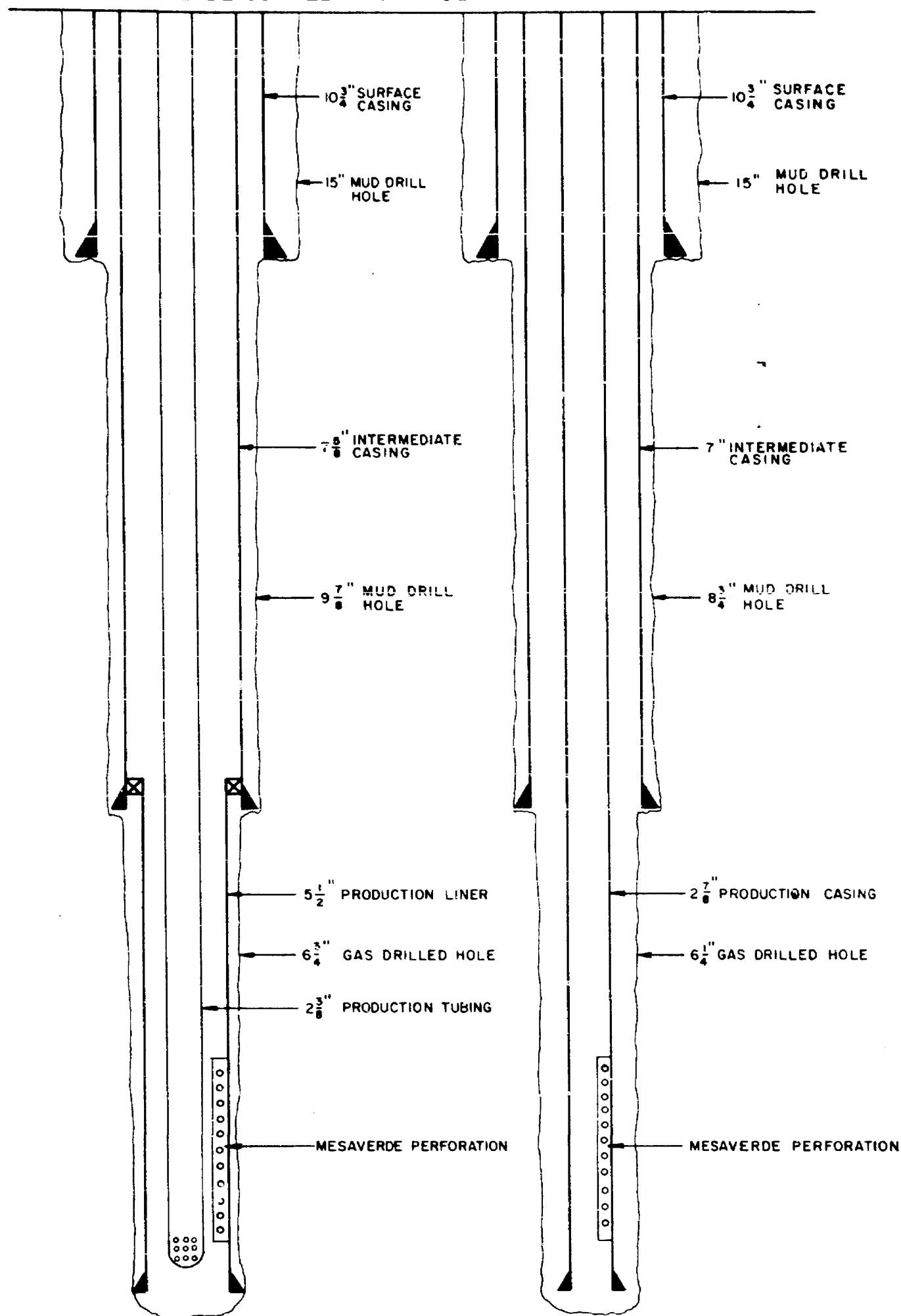
Feb 22

[illegible]

# WELL BORE EXHIBIT #3

STANDARD MESAVERDE COMPLETION

SLIM HOLE MESAVERDE COMPLETION



BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 3  
CASE NO. 1981

EL PASO NATURAL GAS CO.  
RESERVOIR ENGINEERING  
FARMINGTON DIVISION

DATE  
5-27-60

SCALE  
None

DRAWN BY  
EDL

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
June 1, 1960

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas Company for  
an order amending the special pool rules for the  
Blanco-Mesaverde Gas Pool. Applicant, in the  
above-styled cause, seeks an order amending the  
special pool rules for the Blanco-Mesaverde Gas  
Pool, Rio Arriba and San Juan Counties, New Mexico,  
to authorize district supervisors to approve  
"slim hole" completions in the Blanco-Mesaverde  
Gas Pool, regardless of depth.

Case  
1981

BEFORE:

Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 1981.

MR. PAYNE: Application of El Paso Natural Gas Company  
for an order amending the special pool rules for the Blanco-Mesa-  
verde Gas Pool.

MR. HANNAHS: Fred Hannahs, Seth & Montgomery; Garrett  
Whitworth, for El Paso Natural Gas Company.

(Witness sworn.)

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, for  
Caulkins Oil Company.

MR. UTZ: Other appearances? You may proceed.



EDWARD OBERLY

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

DIRECT EXAMINATION

BY MR. WHITWORTH:

Q Please state your name, by whom and in what capacity you are employed.

A Edward Oberly; I am division petroleum engineer for El Paso Gas in Farmington.

Q Mr. Oberly, have you ever testified before this Commission as an expert witness?

A No, sir.

Q Would you state briefly to the Examiner your scholastic training, and experience?

A I was graduated from Marietta College at Marietta, Ohio, in 1950, as a petroleum engineer; Bachelor of Science, Petroleum Engineering, and since that time I have been actively engaged in engineering for approximately eight and a half years, six of which have been with El Paso Natural Gas Company.

MR. WHITWORTH: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir.

Q (By Mr. Whitworth) Mr. Oberly, you are familiar with El Paso's application in this case, aren't you?

A Yes, sir.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

PAGE 3

Q What does El Paso seek by this application?

A They seek to amend the pool rules of the Blanco-Mesaverde pool.

Q Since this application was filed, the pool rules have been consolidated; is that right?

A That's right.

Q Do you happen to know the Order Number?

A Order No. R-1670.

Q So we seek an amendment or an addition to this particular order, to allow for what?

A To allow for the drilling of a slim hole Mesaverde gas well.

Q What particular section of that order are we concerned with? Is that Section 8?

A Yes, sir; it is Section 8, Special Rules for the Blanco-Mesaverde Gas Pool.

Q What addition do we wish to make to this particular section?

A We wish to add to this section -- we wish to change the limitation of state-wide rule concerning slim holes.

Q In what respect?

A The Commission district supervisors, or their representatives, should have the authority to approve a slim hole completion without the necessity for administrative approval or notice and



hearing when the following conditions exist: In the past there was a limitation of 5000 feet on a slim hole by Rule 107; we wish to stipulate the following conditions:

1. The well is to be completed with total depth which shall not exceed the base of the Mesaverde formation;
2. The well is not a wildcat; it is not more than one mile from the existing well producing from the same common source of supply to which it is projected;
3. No known corrosive or pressure problems exist which might make the slim hole method of completion undesirable;
4. The well will not be a dual completion;
5. The tubing used as a substitute for casing will be either 2-3/8 O.D. or 2-7/8 O.D.

Q If these qualifications are added to the special rules, it will not be necessary to amend the state-wide rules; is that right?

A That's right.

Q Would you tell us, Mr. Oberly, what are the advantages of drilling and completing a slim hole?

A A slim hole creates a saving in drilling a well on the initial cost and also creates a saving in the working-over of such a well at a later date. It is a more economical method of obtaining reserves.

Q In that respect, do you have an exhibit to show the



average cost of a normal Blanco-Mesaverde well?

A Yes, sir; Exhibit 1 shows the approximate cost that a standard Mesaverde well, single Mesaverde well, would cost us at this time. It is a price schedule of the accepted practices in the San Juan Basin for drilling and completing a Mesaverde well.

Q Would you explain that exhibit?

A It calls for surface pipe, cemented to the surface; intermediate string or production string, which would cover shallower gas pays and water zones to the top of the Mesaverde or into the Lewis shales. This is a protection string against, mainly, water and upper gas production so we can afford to go ahead and gas drill the remainder of the hole. Once gas drilling through the Mesaverde, we seat a 5-1/2 liner through this intermediate string, or production string, as you might call it, and utilize both strings as production strings.

Q What is the cost, now, of drilling and completing a normal Mesaverde well?

A In the neighborhood of \$75,000.

Q Do you have an exhibit to show the cost of drilling and completing the slim hole in the Mesaverde?

A Yes, sir; Exhibit 2.

Q Would you explain the exhibit?

A Exhibit 2, the slim hole Mesaverde well cost, utilizes the same surface hole size and casing, and we go into our less expen-



sive intermediate casing by reducing hole size, and also the casing size, and we proceed with the drilling in the pay zone in the same as the standard.

Q What is the total cost of drilling and completing a slim hole?

A Approximately \$57,900.

Q That is a difference of about how much?

A \$17,600 or around 23% saving.

Q Now, on what items do you save in your slim hole that account for the lower cost?

A The drilling cost is roughly the same, even though the hole sizes are reduced, but the material savings is the greatest, and also we save with our general services at completion, such as perforating equipment, fracing equipment, et cetera.

Q In your opinion, Mr. Oberly, would a slim hole do the job just as well as a normal hole drilled to that depth?

A Yes, it would.

Q Do you know of any adverse results to the reservoir from drilling a slim hole and completing it to that depth?

A There wouldn't be any change in the reservoir conditions or any greater risk involved.

Q What is the deepest, or the greatest depth to the base of the Mesaverde that you know of in the Blanco?

A 6300 feet.





Q Are you familiar with El Paso's drilling program in the Mesaverde?

A Yes, sir.

Q What effect would the granting of this application have on that drilling program?

A It would give El Paso the opportunity to drill Mesaverde acreage within the Blanco-Mesaverde pool that heretofore has been considered marginal and possibly not commercial.

Q In other words, it would increase development, would it not?

A It would improve development in the general area.

Q In your opinion, would the granting of this application prevent waste and protect correlative rights?

A Yes, sir; just as much as a standard well.

Q Do you have an exhibit, which is Exhibit No. 3, El Paso's Exhibit No. 3 showing how El Paso proposes to drill and complete the slim hole wells?

A Yes; Exhibit No. 3 shows the schematic of hole size and casing size for a standard Mesaverde as in comparison with a slim hole Mesaverde completion. The size surface casing is the same in both instances, 10-3/4 surface casing; that can be reduced on the slim hole well, but when you have a lot of 10-3/4 casing you use it up before you buy smaller diameter pipe. The hole size cost for that surface would be roughly the same, the 15-inch hole size.



We go to the intermediate casing to shut off shallow water zones and gas pays in the Farmington, Fruitland, Pictured Cliff, and what have you, and we reduce our casing size to 7 inches from the standard well. Cementing procedures remain the same; instead of running a 5-1/2 production liner as in the standard, 2-7/8 casing is used in the slim hole set in a 6-1/4 gas-drilled hole.

Q Is there anything else you'd like to say about that exhibit?

A I would say that the cementing of your 2-7/8 would be nothing out of the ordinary. There is only a saving in material and reduction in the hole size in comparison between the two wells. We have the equipment available to perforate and frac the slim hole satisfactorily and obtain potentials equivalent to standard completion methods, which I believe is important.

Q Were El Paso's Exhibits 1, 2 and 3 prepared by you or under your direct supervision?

A Yes, sir.

MR. WHITWORTH: We ask that these exhibits be admitted into evidence.

MR. UTZ: Without objection Exhibits 1, 2 and 3 will be admitted into evidence.

Q (By Mr. Whitworth) Do you have anything to add to your testimony, Mr. Oberly?

A No, other than that I believe that, generally speaking,



PHONE CH 3-6691

Inc.

DEARNLEY-MEIER REPORTING SERVICE,

ALBUQUERQUE, NEW MEXICO

PAGE 9

in the Mesaverde field, El Paso and other operators, if they can adopt this policy of slim hole in the Mesaverde, if they can see their way clear to have a good material saving in the original investment they are going to be drilling quite a few more holes, for sure.

Q Do you know of a well that has been drilled to the base of the Mesaverde, at least that deep, in this area with a slim hole?

A Past the Mesaverde; yes, sir.

Q What well?

A Johnston and Shear well, Jicarilla reservation, slim completion; drilled to Dakota with a 2-7/8 casing, and 1 to the Gallup, and 1 to the Chacra. Gas zones stimulated and completed satisfactorily, and when they get their fishing job cleaned up on the Gallup I believe they will make a good oil well.

Q They haven't started producing yet?

A I don't believe so. In our company we have several slim hole Pictured Cliffs completed this year very satisfactorily, and we have no production from them at this time, however. They haven't been tied in yet.

MR. WHITWORTH: That is all we have.

CROSS EXAMINATION

BY MR. UTZ:

Q How many Pictured Cliffs slim hole completions have you completed, approximately?



A Around 20.

Q I notice that you have run 7-inch to 3800 feet; what is the purpose of that?

A To give us the opportunity to utilize gas drilling in the lower part of the hole. The hole for the 7-inch, 8-3/4 for the 7-inch casing was mud-drilled, and the Mesaverde is too bad a circulation zone to continue with mud drilling. That was the cause of gas drilling many years ago up there. Seven-inch casing itself is strictly to protect the Pictured Cliff and Fruitland, and also to hold back any water that might come into the hole when we are gas drilling.

Q In order to gas drill you need that large casing for that depth?

A Yes, we do. Now, in one instance, smaller casing was used for that same purpose. I might explain that well in Colorado, Johnston and Shear drilled at Ignacio with 5-1/2 casing instead of 7-inch. The 5-1/2 forced them to drill with a 4-3/4 bit. They did it satisfactorily, but it is our company's belief that the proper 4-3/4 bit hasn't been designed yet to withstand the drilling that we would encounter with gas drilling. Our most economical bit sizes stop in the neighborhood of six inches. Your smaller sizes become very uneconomical. I hope this will change as the bit manufacturers catch up with us.

Q As I understand your recommendation, you propose to change



Section 5 of the R1670 to permit the approval in a District Office of slim completions drilled to the base of the Mesaverde that are not wildcats, are not duals, and use 2-3/8 and 2-7/8, with a maximum depth of 6300 feet.

Q To depths greater than 5000 feet; not 5000 feet as stipulated in the state-wide rule at this time in Rule 107.

MR. PAYNE: All you are proposing to change insofar as Rule 107 will relate to Mesaverde is the depth?

A Depth limitation of 5000 feet.

MR. UTZ: Any other questions?

BY MR. PAYNE:

Q Mr. Oberly, do you know what your depth of the discovery well in the Mesaverde was?

A No, sir; I sure don't.

Q It was less than 6000, wasn't it?

A I believe it is over in an area where I believe you will find the Mesaverde in the neighborhood of 4800 to 5000 feet.

Q So that if you wanted to look at the discovery well as being the criterion for the pool as a whole you really wouldn't have to have this amendment? Rule 107 says the well shall not be deeper than 5000 feet; in many cases you look at the discovery well, do you not, such as determining an allowable for all the wells in the pool?

A I am not familiar with that.



Q All I am trying to point out -- your recommendation is not anything radical. Do you know of any corrosion or pressure problems in the Mesaverde that would make this type of completion undesirable?

A No, sir; I don't.

MR. PAYNE: Thank you.

MR. UTZ: Any other questions? Witness may be excused.

Any statements in this case?

MR. KELLAHIN: Caulkins Oil Company, Jason Kellahin. Caulkins Oil Company supports the application of El Paso Natural Gas Company in this case. We feel that the Blanco-Mesaverde pool is particularly suited to slim hole completions, and we have a situation in this pool where, in some areas, it would be possible to make a slim hole completion under the state-wide rules, and other areas where it would not, and yet it is in the same pool and should be treated the same. Caulkins has some wells less than 5000; most in the vicinity of 5500 feet or deeper, and we support the application and feel that it would encourage further drilling in areas which might be subject to question at the present time.

MR. UTZ: Case will be taken under advisement.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

I, JUNE PAIGE, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 10th day of June, 1960.

*June Paige*  
Notary Public-Court Reporter

My commission expires:

May 13, 1964

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1981, heard by me on June 1, 1960.

*Wm. A. [Signature]*  
Examiner  
New Mexico Oil Conservation Commission

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1981, heard by me on June 1, 1960.  
Examiner  
New Mexico Oil Conservation Commission

