

CASE 4292: Appli. of CONTINENTAL  
FOR A NON-STANDARD GAS PRORATION  
UNIT, LEA COUNTY, NEW MEXICO.

Case Number

4292

Application

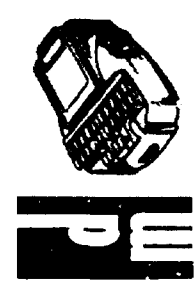
Transcripts.

Small Exhibits

ETC.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
January 7, 1970

EXAMINER HEARING

-----  
IN THE MATTER OF: )  
 )  
Application of Continental Oil Company ) Case No. 4292  
for a non-standard gas proration unit, )  
Lea County, New Mexico. )  
-----

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 4292.

MR. HATCH: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin appearing for the Applicant. We have Mr. Lyon as the witness in this case.

Will the record show that he has been sworn?

(Witness sworn).

(Whereupon, Applicant's Exhibit 1 through 3 were marked for identification).

VICTOR T. LYON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Victor T. Lyon.

Q Are you the same Mr. Lyon who testified in Case 4287, that was sworn?

A Yes, I am.

Q Mr. Lyon, what is proposed by the Applicant in Case 4292?

A Case 4292 is the application of Continental Oil Company for the consolidation of two non-standard gas proration units into one 320 acre non-standard gas proration units in the Eumont Gas Pool, to be dedicated jointly to our Lockhart "B" 1 Wells, No. 4 and 6, located in units G and P respectively, in Section 1, Township 22 South, Range 36 East, Lea County, New Mexico.

Q Now, referring to what has been marked as Exhibit No. 1, would you identify that exhibit?

A Exhibit No. 1 is a location and ownership plat showing by the cross hatched pattern the Lockhart "B" 1 Lease, which consist of the south half of the north half and the southeast quarter of Section 1, Township 22 South, Range 36 East.

This lease is also the proposed non-standard unit, which we have shown outlined in red. The two unit wells are circled in red.

Also shown, outlined in green, are the presently approved non-standard proration units assigned to these wells.

MR. HATCH: What order numbers authorize those previous ones? Do you have that?

MR. NUTTER: It's in the application. The 240 one is in SP 572 and the other one is in SP 573.

Q (By Mr. Kellahin) Now, referring to what has been marked as Exhibit No. 2, would you identify that exhibit?

A Exhibit No. 2 is a copy of the minimum contract test conducted and prepared by El Paso Natural Gas Company on Lockhart "B" 1, No. 4.

This test shows that on -- during this test, the well flowed at a rate of 885 MCF gas per day.

Q When was this test made?

A It was conducted during the week beginning June 13, 1969.

Q Exhibit No. 3; what does that show?

A Exhibit No. 3 is a copy of the minimum contract test run and prepared by El Paso Natural Gas Company on the Lockhart "B" 1, No. 6.

This test shows that the well produced at a rate of 299 MCF per day. Now, you will note that this test was conducted during the week of December 8, 1968.

The attempt to test the well in June of 1969 was unsuccessful because the well had insufficient pressure to produce into the line.

Q Now, what is the present status of these wells as to over or under production?

A As of November 1, 1969, well number 4 was under produced in the amount of one thousand two hundred ninety-five MCF.

MR. NUTTER: Those figures again Vic.

THE WITNESS: As of November 1 -- this is the December schedule. But, as of November 1, 1969; number 4 was under produced one thousand two hundred ninety-five MCF.

Number 6 was under produced fourteen thousand eight hundred seventy-eight MCF. And since number 6 has not been able to produce into the line, its allowable for November of two thousand and eighty-seven MCF and for December in the amount of five thousand and sixty-one MCF will have accrued for additional under production so that as of January 1, 1970, the well is under produced twenty-two thousand eight hundred twenty-six MCF.

Both of these wells entered the proration beginning July 1, 1969, in an over produced status; so, that this under production is not subject to cancelation at the end of the balancing period, December 31, 1969.

Q Now, in your opinion, is the number 4 well capable of producing the allowable on any accrued under production that would be assigned to this unit?

A In my opinion, it is.

Q That would be the allowable that would be assigned to the enlarged unit including the well number 6?

A Right?

Q But, you do propose to produce from the well number six; do you not?

A Yes, sir.

Q How would you allocate production from the two wells on this unit?

A Well, we would like to have authority to produce the allowable in between the two wells in any proration and the wells will be accounted for jointly on the Commission's records; but, I believe that the meter runs for the two wells will remain in place.

Q Now, what is the status of the number 4 well; is that a single completion?

A No, sir. Number 4 is a dual completion in the Eumont Gas and Arrowhead Oil Pools. One reason



that we would like to assign this acreage on a joint basis is that in the event that we should have difficulties with number 4, the fact that it is a dual completion will make it's repair considerably more complicated and expensive and we will then need to rely on well number 6 to help carry the burden until number 4 can be placed back on production.

Q Now, would the number 6 well be classified as marginal in the normal course of events?

A If it doesn't produce for a considerable period of time and in the absence of some explanatory information as to why it hasn't produced, the Commission normally reclassifies it to a marginal well and then it is accrued under production is canceled.

Of course, we would like to avoid this and we respectfully request that this under production not be canceled and that it be allocated to the wells jointly so that we may have the opportunity to make up the under production.

Q Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, they were.

MR. KELLAHIN: I offer in evidence Exhibits 1, 2 and 3 and that completes our testimony.

MR. NUTTER: Applicant's Exhibits 1 through 3 will be admitted in evidence.

MR. KELLAHIN: That's all I have, Mr. Nutter.

MR. NUTTER: Does anyone else have anything they wish to offer in Case 4294?

We will take the case under advisement and excuse the witness.

(Witness excused).

I N D E X

PAGE

WITNESS

VICTOR T. LYON

Direct Examination by Mr. Kellahin

2

E X H I B I T S

Applicant's Exhibits  
1 through 3

2

STATE OF NEW MEXICO )  
 ) ss  
 COUNTY OF BERNALILLO )

I, GLENDA BURKS, Court Reporter 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.

Glenda Burks  
 Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the Executive hearing of Case No. 1292  
 heard by me on 1/7, 1970.  
Glenda Burks, Executive  
 New Mexico Oil Conservation Commission



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. 4292  
Order No. R-3907

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR A NON-STANDARD GAS PRORATION UNIT,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 7, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of January, 1970, 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, Continental Oil Company, is the co-owner and operator of the Lockhart B-1 Lease consisting of the S/2 N/2 and SE/4 of Section 1, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That by Administrative Order NSP-572, the Commission approved a 240-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 N/2 and N/2 SE/4 of said Section 1 to be dedicated to the applicant's Lockhart B-1 Well No. 4, located in Unit G of said Section 1; and that by Administrative Order NSP-573, the Commission approved an 80-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 SE/4 of said Section 1 to be dedicated to the applicant's Lockhart B-1 Well No. 6, located in Unit F of said Section 1.

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CASE No. 4292

Order No. R-3907

(4) That the applicant now seeks the consolidation of the two existing non-standard gas proration units to form one 320-acre non-standard gas proration unit in the Eumont Gas Pool comprising the S/2 N/2 and SE/4 of said Section 1, to be simultaneously dedicated to the aforesaid Lockhart B-1 Wells Nos. 4 and 6.

(5) That the applicant further seeks authority to produce the allowable assigned to the unit from either of the aforesaid wells in any proportion.

(6) That the proposed non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid Lockhart B-1 Wells Nos. 4 and 6.

(7) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the Eumont Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, will avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

(8) That Administrative Orders NSP-572 and NSP-573 should be superseded.

IT IS THEREFORE ORDERED:

(1) That, effective February 1, 1970, a 320-acre non-standard gas proration unit in the Eumont Gas Pool comprising the S/2 N/2 and the SE/4 of Section 1, township 22 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby established and simultaneously dedicated to the Continental Oil Company Lockhart B-1 Well No. 4, located in Unit G of said Section 1, and the Continental Oil Company Lockhart B-1 Well No. 6, located in Unit P of said Section 1.

(2) That the allowable assigned to the above-described non-standard gas proration unit shall be based upon the unit size of 320 acres; that the operator may produce the allowable assigned to the unit from the subject wells in any proportion; that the status of said consolidated unit shall be the combined status, as of January 31, 1970, of the two units being consolidated.

(3) That Administrative Orders NSP-572 and NSP-573 are hereby superseded.

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CASE No. 4292

Order No. R-3907

(4) 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.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



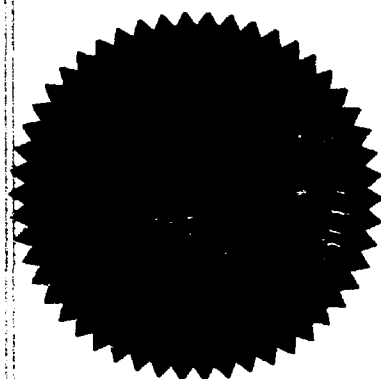
DAVID F. CARGÓ, Chairman



ALEX J. ARMIÑO, Member



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



esr/



Docket No. 1-10

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 7, 1970

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

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The following cases will be heard before Daniel S. Nutter, Examiner, or  
A. L. Porter, Jr., Alternate Examiner:

- CASE 4286: Application of Gulf Oil Corporation for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Littlefield "AB" Federal Lease, located in Section 22, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said lease in unlined surface pits in said Section 22.
- CASE 4287: Application of Continental Oil Company, for a waterflood expansion and unorthodox injection well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Forest Donahue Waterflood Project, Forest Pool, by the injection of water through one additional well located at an unorthodox location 1960 feet from the North line and 1450 feet from the West line of Section 35, Township 16 South, Range 29 East, Eddy County, New Mexico.
- CASE 4288: Application of Wood, McShane and Thams-COLORADO for an unorthodox oil well location and waterflood expansion, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to drill their Well No. 63, a producing oil well, at an unorthodox location 2740 feet from the South line and 1280 feet from the East line of Section 30, Township 22 South, Range 37 East, as an infill well in the Humble Oil & Refining Company State "M" Lease Waterflood Project, Langlie-Matrix Pool, Lea County, New Mexico. Applicants further seek to expand said project by the conversion to water injection of their Wells Nos. 27 and 39 located, respectively, in Units A and C of said Section 30. Applicants also seek a procedure whereby additional producing wells and injection wells at orthodox and unorthodox locations in said project may be approved administratively.

January 7, 1970 - Examiner Hearing

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Docket No. 1-70

CASE 4289: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Justis-Blinebry and Justis-Tubb Drinkard Pools in the wellbore of its State "BB" Well No. 2 located in Unit D of Section 2, Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 4290: Application of Getty Oil Company for a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard proration unit comprising the SE/4 NE/4 and the NE/4 SE/4 of Section 29, Township 18 South, Range 38 East, Hobbs-Drinkard Pool, Lea County, New Mexico, said unit to be dedicated to a well to be drilled at a standard location in the NE/4 SE/4 of said Section 29.

CASE 3993: (Reopened)

In the matter of Case No. 3993 being reopened pursuant to the provisions of Order No. R-3644, which order established 160-acre spacing units for the North Baum-Upper Pennsylvanian Pool, Lea County, New Mexico, for a one-year period. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre units and why the proportional factor of 4.77 assigned to the pool should or should not be retained.

CASE 4202: (Reopened)

In the matter of Case 4202 being reopened at the request of the applicant, Mobil Oil Corporation. Applicant, in the original hearing of this case, sought permission to institute a water-flood project in the Langlie Mattix Queen Unit Area, Langlie-Mattix Pool, by the injection of water into the Queen sand formation through 17 injection wells at orthodox and unorthodox locations in Sections 10, 11, 14, 15, 22, and 23, Township 25 South, Range 37 East, Lea County, New Mexico. The Commission, by Order No. R-3823, authorized the applicant to inject water through 16 wells and denied the applicant authority to inject water through the proposed injection Well No. 14 to be drilled 660 feet from the North line and 1220 feet from the West line of said Section 14. Applicant seeks authority to now complete said Well No. 14 as a water injection well, alleging that negotiations for the acquisition or inclusion of acreage offsetting said Well No. 14 have not been successful, that failure to inject water through the well will result in the loss of approximately 200,000 barrels of oil, and that said injection will not violate the correlative rights of the offset operation.

January 7, 1970 - Examiner Hearing

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Docket No. 1-70

CASE 4291: Application of Atlantic Richfield Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates formation in the perforated and open-hole interval from 2892 feet to 3164 feet in its W. F. Hanagan Well No. 4 located 2173 feet from the South and West lines of Section 12, Township 25 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 4292: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard gas proration units into one 320-acre non-standard unit comprising the S/2 N/2 and the SE/4 of Section 1, Township 22 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its Lockhart B-1 Wells Nos. 4 and 6, located in Units G and P, respectively, of said Section 1. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

CASE 4778: (Continued from the December 17th Examiner Hearing and will be dismissed).  
Application of Anne Burnett Windfohr, dba Windfohr Oil Company, for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Gissler B Wells Nos. 11 and 12, located, respectively, in Units J and I of Section 23, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said wells in unlined surface pits in the vicinity of said wells.

CASE 4279: (Continued from the December 17th Examiner Hearing and will be dismissed).  
Application of Anne Burnett Windfohr, dba Windfohr Oil Company, for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Gissler B Well No. 4 located in Unit B of Section 8, Township 17 South, Range 30 East, Grayburg-Jackson Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.



MINIMUM CONTRACT TEST

Form 15-20 (10-67)

Company Continental Oil Company					Lease Lockhart R-1 No. 4 Csg.		Start Date of Test June 13, 1969	
Unit G	Sec. 1	Twp. 22	Rge. 36	County Jes	Pool Edmont			
Type Well G. O. Drill	Producing Thru			Tubing	Casing X	Top of Pay 3372	Bar. Pressure 13.2	Compressor On
Date of Previous Minimum Contract Test 12-6-68		n <sub>t</sub> of Previous Back Pressure Test .642		Gravity .697	Meter Sta. No. 60-947		Acre Factor 1.500	

FLOW DATA					FLOWING PRESSURES, PSIA		DURATION OF FLOW HOURS	
Prover Line Size	X	Choke Orifice Size	Static Pressure Psig.	Diff. hw	Temp. °F	Tubing		Casing
			235				255.2	24

VOLUME CALCULATIONS

Coefficient (24 - Hour)	$\sqrt{h_w P_m}$	Pressure Psia.	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 Psia.
		VOLUME INTEGRATED BY MAIN OFFICE				885

$$D_i = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{n_t}$$

Pr	Temp. R	Tr	Z

SHUT-IN DATA, PSIA

DURATION	TUBING	CASING
24 Hour		483.2
48 Hour		501.2
72 Hour		503.2

LINE	ITEM	SOURCE	113.2	263.2	613.2	863.2
1	P <sub>c</sub> <sup>2</sup>		258.3			
2	P <sub>d</sub> <sup>2</sup>		12.8			
3	P <sub>t</sub> <sup>2</sup>		65.1			
4	P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup>	1 - 2	245.5			
5	P <sub>c</sub> <sup>2</sup> - P <sub>t</sub> <sup>2</sup>	1 - 3	193.2			
6	B	4 ÷ 5	1.271			
7	Log 6		.104146			
8	n <sub>t</sub>		.642			
9		7 x 8	.056862			
10	B <sup>n<sub>t</sub></sup>	Antilog 9	1.166			
11	Q-MCF/D		885			
12	D <sub>i</sub>	10 x 11	1,032			

- n<sub>t</sub> = Slope of Wellhead Deliverability Curve (P<sub>c</sub><sup>2</sup> - P<sub>t</sub><sup>2</sup> vs Q)  
 Q = Actual flow @ end of Flow Period at Wellhead Press., P<sub>t</sub>  
 P<sub>c</sub> = Maximum Shut-in Pressure, Psia Observed in a 72 Hour Period  
 P<sub>t</sub> = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), Psia  
 P<sub>d</sub> = Deliverability Pressure, Psia  
 D<sub>i</sub> = Wellhead Deliverability @ Deliverability Pressure (P<sub>d</sub>), MCF/Day

Witnessed By: (Name)	Tom Fey
Company:	Continental Oil Company
Tested By:	Don Read
Calculated By:	Don Read

BEFORE EXAMINER MUTTER  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. \_\_\_\_\_  
 CASE NO. \_\_\_\_\_

El Paso Natural Gas Company  
**MINIMUM CONTRACT TEST**  
 Form 15-30 (10-67)

EGS

Start Date of Test  
 December 6, 1968 ✓

Company <b>Continental Oil Company</b>					Lease <b>Lockhart B-1 No. 6</b>			
Unit <b>P</b>	Sec. <b>1</b>	Twp. <b>22</b>	Rge. <b>36</b>	County <b>Lea</b>	Pool <b>Eumont</b>			
Type Well <b>Single</b>		Producing Thru <b>X</b>		Tubing <b>X</b>	Casing	Top of Pay <b>2910</b>	Bar. Pressure <b>13.2</b>	Compressor <b>On</b>
Date of Previous Minimum Contract Test <b>6-14-68</b>			n <sub>t</sub> of Previous Back Pressure Test <b>.664</b>		Gravity <b>.717</b>	Meter Sta. No. <b>60-516</b>	Acre Factor <b>.500</b>	

FLOW DATA					FLOWING PRESSURES, PSIA		DURATION OF FLOW HOURS
Prover Line Size	X	Choke Orifice Size	Static Pressure P <sub>sig.</sub>	Diff. h <sub>w</sub>	Temp. °F	Tubing	
			235			313.2	24
						348.2	

**VOLUME CALCULATIONS**

Coefficient (24 - Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>sig.</sub>	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super. Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCF/D @ 15.025 P <sub>sig.</sub>
						299

VOLUME INTEGRATED BY MAIN OFFICE

$$D_t = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_t^2} \right]^{n_t}$$

Pr	Temp. R	Tr	Z

**SHUT-IN DATA, PSIA**

DURATION	TUBING	CASING
24 Hour	518.2	534.2
48 Hour	513.2	519.2
72 Hour	525.2	538.2

LINE	ITEM	SOURCE	113.2	263.2	613.2	863.2
1	P <sub>c</sub> <sup>2</sup>		289.7			
2	P <sub>d</sub> <sup>2</sup>		12.8			
3	P <sub>t</sub> <sup>2</sup>		98.1			
4	P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup>	1 - 2	276.9			
5	P <sub>c</sub> <sup>2</sup> - P <sub>t</sub> <sup>2</sup>	1 - 3	191.6			
6	B	4 ÷ 5	1.445			
7	Log 6		.159868			
8	n <sub>t</sub>		.664			
9		7 × 8	.106152			
10	B <sup>n<sub>t</sub></sup>	Antilog 9	1.277			
11	Q-MCF/D		299			
12	D <sub>t</sub>	10 × 11	382			

- n<sub>t</sub> = Slope of Wellhead Deliverability Curve (P<sub>c</sub><sup>2</sup> - P<sub>t</sub><sup>2</sup> vs Q)  
 Q = Actual flow @ end of Flow Period at Wellhead Press., P<sub>t</sub>  
 P<sub>c</sub> = Maximum Shut-in Pressure, P<sub>sig</sub>  
 Observed in a 72 Hour Period  
 P<sub>t</sub> = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), P<sub>sig</sub>  
 P<sub>d</sub> = Deliverability Pressure, P<sub>sig</sub>  
 D<sub>t</sub> = Wellhead Deliverability @ Deliverability Pressure (P<sub>d</sub>), MCF/Day

Witnessed By: (Name)	Tom Fay
Company:	Continental Oil Company
Tested By:	Bobby Boaz
Calculated By:	Bobby Boaz

BEFORE EXAMINER  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 111  
 CASE NO.



DEC 24 1969

# CONTINENTAL OIL COMPANY

P. O. Box 460

HOBBS, NEW MEXICO 88240

PRODUCTION DEPARTMENT  
HOBBS DIVISION

L. P. THOMPSON  
Division Manager

G. C. JAMIESON  
Assistant Division Manager

1001 NORTH TURNER  
TELEPHONE 393-4141

December 22, 1969

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

Attention of Mr. A. L. Porter, Jr.,  
Secretary Director

Gentlemen:

Subject: Application for NSP Unit Jointly Assigned to  
Lockhart B-1 Wells Nos. 4 and 6, Eumont Pool

Forwarded herewith is an application for approval of a 320-acre non-standard gas proration unit in the Eumont Pool to be assigned jointly to our Lockhart B-1 wells numbers 4 and 6. Please set this matter for hearing at your January 7, 1970 examiner hearing.

Yours very truly,

VTL-JS  
CC: RLA JJB JWK  
Enc.

*JMA*  
*file*  
*Core*  
*4292*

DOCKET MAILED

Date 12-24-69

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR APPROVAL  
OF A 320-ACRE NON-STANDARD GAS PRORATION  
UNIT IN THE EUMONT GAS POOL CONSISTING  
OF S/2 N/2 AND SE/4 SECTION 1, T-22S,  
R-36E, TO BE ASSIGNED JOINTLY TO  
APPLICANT'S LOCKHART B-1 WELLS NUMBERS  
4 AND 6, IN UNITS G AND P, RESPECTIVELY,  
OF SAID SECTION 1, LEA COUNTY, NEW MEXICO

A P P L I C A T I O N

COMES NOW Applicant, Continental Oil Company, and respectfully requests approval of a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of S/2 N/2 and SE/4 of Section 1, T-22S, R-36E, Lea County, New Mexico, to be assigned jointly to applicant's Lockhart B-1 Wells Nos. 4, and 6, located in Units G and H, respectively, of said Section 1 in Lea County, New Mexico and in support thereof would show:

1. Applicant is operator and co-owner of the Lockhart B-1 Lease which consists of S/2 N/2 and SE/4 of Section 1, T-22S, R-36E, Lea County, New Mexico.
2. Applicant has heretofore drilled and completed as Eumont gas wells its Lockhart B-1 Well No. 4, located 1980' from the north line and 2310' from the east line; and its Well No. 6, located 660' from the south line and 660' from the east line of said Section 1.
3. Administrative Order NSP-572 approved a 240-acre proration unit consisting of S/2 N/2 and N/2 SE/4 Section 1 for Well No. 4; and NSP-573 approved an 80-acre unit consisting of S/2 SE/4 of said Section 1 for Well No. 6.
4. Producing capacity of Well No. 6 has declined to the extent that it can no longer produce the allowable for the unit assigned by NSP-573.
5. In the interest of protecting its correlative rights, applicant proposes to form a 320-acre non-standard unit and allocate said unit jointly to the two said wells.



6. That the granting of this application is in the interest of preventing waste and protecting correlative rights.

WHEREFORE, Applicant respectfully prays that this matter be set for hearing before the Commission's duly appointed examiner and upon hearing, an order be entered approving the non-standard gas proration unit as described above.

Respectfully submitted,

  
L. P. Thompson  
Division Manager

VTL-JS



DRAFT

GMH/esr

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. 4292

Order No. R- 3907

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR A NON-STANDARD GAS PRORATION UNIT,  
LEA COUNTY, NEW MEXICO.

*JNA*

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 7, 19670, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of January, 19670, 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, Continental Oil Company, is the co-owner and operator of the Lockhart B-1 Lease consisting of the S/2 N/2 and SE/4 of Section 1, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That by Administrative Order NSP-572, the Commission approved a 240-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 N/2 and N/2 SE/4 of said Section 1 to be dedicated to the applicant's Lockhart B-1 Well No. 4, located in Unit G of said Section 1; and that by Administrative Order NSP-573, the Commission approved an 80-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 SE/4

of said Section 1 to be dedicated to the applicant's Lockhart B-1 Well No. 6, located in Unit P of said Section 1.

(4) That the applicant now seeks the consolidation of the two existing non-standard gas proration units to form one 320-acre non-standard gas proration unit in the Eumont Gas Pool comprising the S/2 N/2 and SE/4 of said Section 1, to be simultaneously dedicated to the aforesaid Lockhart B-1 Wells Nos. 4 and 6.

(5) That the applicant further seeks authority to produce the allowable assigned to the unit from either of the aforesaid wells in any proportion.

(6) That the proposed non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid Lockhart B-1 Wells Nos. 4 and 6.

(7) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the Eumont Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, will avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

(8) That Administrative Orders NSP-572 and NSP-573 should be superseded.

IT IS THEREFORE ORDERED:

(1) That, effective February 1, 1970, a 320-acre non-standard gas proration unit in the Eumont Gas Pool comprising the S/2 N/2 and the SE/4 of Section 1, Township 22 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby established and simultaneously dedicated to the Continental Oil Company <sup>well No. 4,</sup> Lockhart B-1<sub>^</sub> located in Unit G of said Section 1, and the Continental Oil Company Lockhart B-1 Well No. 6, located in Unit P of said Section 1.

(2) That the allowable assigned to the above-described non-standard gas proration unit shall be based upon the unit size of 320 acres; that the operator may produce the allowable assigned to the unit from the subject wells in any proportion; that the status of said consolidated unit shall be the combined status, as of January 31, 1970, of the two units being consolidated.

(3) That Administrative Orders NSP-572 and NSP-573 are hereby superseded.

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

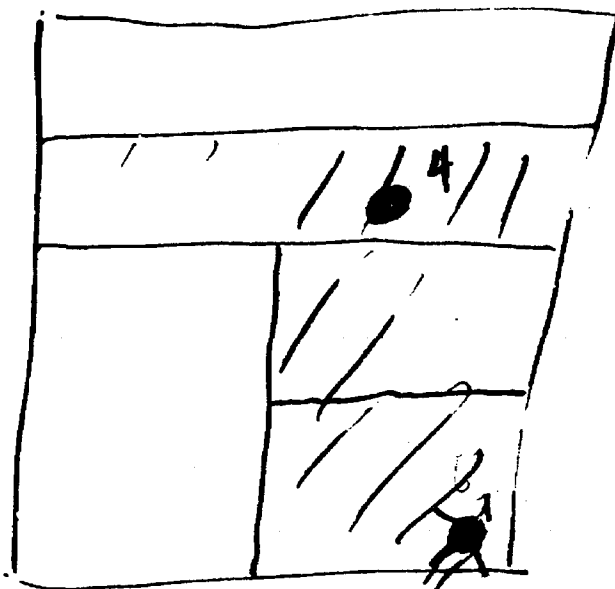
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

via Lyon

1980 N

2640  
1980  
660

2640  
2310  
330



2310 E

gas wells

160  
80  
240

160  
160  
320

320 acre -  
jointly dedi.

Sec 1 - T 22 S - R 36 E  
Carmont -  
Lockhart "B" - 1 well No. 4 loc.  
" " " " 746 loc  
660 FS 660 FE