

DOCKET: EXAMINER HEARING NOVEMBER 6, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1541: Application of Continental Oil Company for a 320-acre non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the S/2 of Section 33, Township 22 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Meyer B-33 No. 1 Well, located 660 feet from the South and West lines of said Section 33.

CASE 1542: Application of Atlantic Refining Company for an exception to Rule 309 (a) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from all wells now completed or hereafter drilled in the Horseshoe-Gallup Oil Pool on the following described lands in San Juan County, New Mexico:

TOWNSHIP 31 NORTH, RANGE 16 WEST  
All of Sections 29, 30, 31 and 32,  
and all of those portions of Sections  
28 and 33 lying within the Navajo  
Indian Reservation.

CASE 1543: Application of Drilling and Exploration Company, Inc. for an exception to the casing requirements for the potash-oil area in Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an exception to the shallow-zone casing requirements for the potash-oil area as set forth in Order No. R-111-A for its Ballard No. 1 Well located 1980 feet from the North and West lines of Section 27, Township 20 South, Range 34 East, Lea County, New Mexico. Applicant proposes to drill with cable tools to an approximate depth of 3,700 feet adjacent to the Lynch Pool.

It is proposed to use the following casing program in lieu of the program prescribed for cable tool holes by Order R-111-A:

1. 13 3/8 inch casing to be cemented at approximately 70 feet.
2. 10 3/4 inch casing to be landed at approximately 700 feet.
3. 8 5/8 inch casing to be landed at approximately 1250 feet.
4. 5 1/2 inch casing to be cemented at the top of the producing formation with 50 sacks cement for testing purposes.
5. 10 3/4 inch casing and 8 5/8 inch casing to be pulled.
6. In the event commercial production is obtained, 5 1/2 inch casing to be perforated and cement circulated to surface.

11/15/58 11:32  
JASON W. KELLAHIN  
ROBERT E. FOX

KELLAHIN AND FOX  
ATTORNEYS AT LAW  
54½ EAST SAN FRANCISCO STREET  
POST OFFICE BOX 1713  
SANTA FE, NEW MEXICO

TELEPHONES  
YUCCA 3-9396  
YUCCA 2-2266

Nov. 15, 1958

Mr. Daniel S. Nutter  
Oil Conservation Commission of  
New Mexico  
P. O. Box 871  
Santa Fe, New Mexico

Re: OCC Case No. 1541


Dear Dan:

In the presentation of the above case, leave was asked and granted to file an amended exhibit in place of Exhibit No. 4 presented at the hearing.

Enclosed is the amended Exhibit No. 4 for filing in Case No. 1541, being a copy of the deliverability test on Contiantal Oil Company's Meyer B-33 Well No. 1, dated March 7 and March 14, 1958.

With thanks for your consideration in this matter.

Yours very truly,



Jason W. Kellahin

JWK:ss  
Encl.

NEW MEXICO OIL CONSERVATION COMMISSION  
One-point Back Pressure Test for Gas Wells  
(Deliverability)

Form C-122-C  
4-1-54

Pool Jalmat Formation Yates County Lea  
Initial Annual X Special        Date of test 3-7/3-14-58  
Company Continental Oil Company Lease Meyer B-33 Well No. 1  
Unit M Sec. 33 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company  
Casing 5 1/2 Wt. 14 I.F. 5.012 Set at 3508 Perf. 3056 To 3180  
Tubing 2 1/2 Wt. 6.5 I.D.        Set at        Perf.        To         
Gas Pay: From 3056 To 3180 L 2903 x G .680 = GL 1974 Bar.Press. 13.2  
Producing Thru: Casing        Tubing X Type Well Single  
Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started		Taken		Duration Hours	Type Taps	Line Size	Orifice Size	Static Press.	Differ- ential	Flow Temp.
Date	time	Date	time							
3-7	8:00 AM	3-10	8:00 AM	24	Flg	4"	1.500	477	9.00	60
	PM		PM							

FLOW CALCULATIONS

Static Pressure P <sub>f</sub>	Differ- ential h <sub>w</sub>	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff- icient	Gravity Factor F <sub>g</sub>	Temp. Factor F <sub>t</sub>	Compress- ability F <sub>pv</sub>	Rate of Flow MCF/Da. @ 15.025 psia Q
490.2	9.00	66.42	13.99	.9393	1.000	1.058	924

SHUT-IN DATA

Shut-in		Press. Taken		Duration Hours	Wellhead Pressure (P <sub>c</sub> ) psia		W.H. Working Pressure (P <sub>w</sub> ) and (P <sub>t</sub> ) psia	
Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
3-11	8:00 AM	3-14	8:00 AM	72	598.2		491.2	
	PM		PM					

FRICTION CALCULATIONS(if necessary)

$$P_w \left[ (491.2)^2 \div (5.866 \times 924)^2 (.127) \right]^{1/2} = 495.0$$

DELIVERABILITY CALCULATIONS

P<sub>w</sub> 495.0 P<sub>c</sub> 598.2 P<sub>w</sub> + P<sub>c</sub> .8274

$$1 - \frac{P_w}{P_c} \cdot \frac{1 + \frac{P_w}{P_c} \left( 1 - \frac{P_w}{P_c} \right) \left( 1 + \frac{P_w}{P_c} \right)}{.36 + M} = \frac{1.8274}{1.141} \left( 1 - \frac{P_w}{P_c} \right) \left( 1 + \frac{P_w}{P_c} \right) = M \cdot .3154$$

.36 + M 1.141 Log 0.0572856 x (n) .771 = 0.0441671 +

SUMMARY

P<sub>c</sub> = 598.2 psia  
Q = 924 MCF/Da.  
P<sub>w</sub> = 495.0 psia  
P<sub>d</sub> = 478.6 psia  
D = 1,023 MCF/Da.

COMPANY Continental Oil Company  
ADDRESS Box 68, Eunice, New Mexico  
AGENT and TITLE         
WITNESSED         
COMPANY       

Log Q = 2.9656720  
Log D = 3,0098391  
Antilog = 1,023 = D

REMARKS

*Corrected test  
submitted after the hearing  
as an amended Exhibit*

NEW MEXICO OIL CONSERVATION COMMISSION  
One-point Back Pressure Test for Gas Wells  
(Deliverability)

Form C-122-C  
4-1-54

Pool Jalmat Formation Yates County Lea  
Initial Annual X Special \_\_\_\_\_ Date of test 3-7/3-14-58  
Company Continental Oil Company Lease Meyer B-33 Well No. 1  
Unit M Sec. 33 Twp. 22 Rge. 36 Purchaser El Paso Nat. Gas Company  
Casing 5 1/2 Wt. 14 I.D. 5.012 Set at 3508 Perf. 3056 To 3180  
Tubing 2 1/2 Wt. 6.5 I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 3056 To 3180 L 2903 x G .680 = GL 1974 Bar.Press. 13.2  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well Single  
Single- Bradenhead-G.G. or G.O. Dual

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Date	Time	Date	Time		Tubing	Casing	Tubing	Casing
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FRICTION CALCULATIONS(if necessary)

$$P_w \left[ (491.2)^2 \div (5.866 \times 924)^2 (.127) \right]^{1/2} = 495.0$$

DELIVERABILITY CALCULATIONS

P<sub>w</sub> 495.0 P<sub>c</sub> 598.2 P<sub>w</sub> + P<sub>c</sub> .8274

$$1 - \frac{P_w}{P_c} \cdot \frac{P_w}{P_c} \cdot \frac{1 - \frac{P_w}{P_c}}{1 + \frac{P_w}{P_c}} = M$$

$\frac{.1726}{.36 + M} \cdot \frac{1.8274}{\log 0.0572856} \cdot \frac{.3154}{.771} = 0.0441671 +$

SUMMARY

P<sub>c</sub> = 598.2 psia  
Q = 924 MCF/Da.  
P<sub>w</sub> = 495.0 psia  
P<sub>d</sub> = 478.6 psia  
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COMPANY Continental Oil Company  
ADDRESS Box 68, Eunice, New Mexico  
AGENT and TITLE \_\_\_\_\_  
WITNESSED \_\_\_\_\_  
COMPANY \_\_\_\_\_

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Log D = 3,0098391  
Antilog = 1,023 = D

REMARKS

Case 1541



# CONTINENTAL OIL COMPANY

825 PETROLEUM BUILDING  
ROSWELL, NEW MEXICO

R. L. ADAMS  
DIVISION SUPERINTENDENT  
OF PRODUCTION  
NEW MEXICO DIVISION

October 7, 1958

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

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

Gentlemen:

Attached are three copies of Continental Oil Company's application for an exception to Rule 5 (a) of the Special Rules and Regulations for the Jalmat Gas Pool, contained in Order No. R-520, for the enlargement of the presently approved 160-acre unit to a non-standard gas proration unit of 320 acres, consisting of the S/2 of Section 33, T-22S, R-36E, NMPM, Lea County, New Mexico, to be allocated to its Meyer B-33 Well No. 1.

It is respectfully requested that this matter be set for hearing at the earliest convenient date.

Yours very truly,

*R. L. Adams*

RLA-JC

*Docket Mailed  
10-7-58 BP*