

CAULKINS OIL COMPANY

BOX 967

FARMINGTON, NEW MEXICO

June 12, 1959



New Mexico Oil Conservation Commission  
1000 Rio Brazos Road  
Aztec, New Mexico

Attention: Mr. Emory Arnold

Gentlemen:

Herewith are final reports on the completion of our Breech well, PMD-224, located in the NE $\frac{1}{4}$  of Section 13, 26N, 7W. As shown on data previously submitted to your office this well is a Pictured Cliffs, Mesa Verde and Greenhorn producer.

This is to request permission to produce from the Mesa Verde zone until such time as approval of multiple can be obtained.

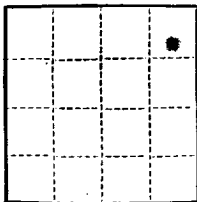
Yours very truly,

CAULKINS OIL COMPANY

By   
Frank Gray

FG:w





(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYLand Office Santa FeLease No. NH 03733

Unit \_\_\_\_\_

**RECEIVED**

JUN 18 1959

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 15, 19 59

Well No. PHE-224 is located 865 ft. from [N] line and 1140 ft. from [E] line of sec. 13NE NE 13  
(1/4 Sec. and Sec. No.)26N  
(Twp.)7W  
(Range)NMPM  
(Meridian)South Platte  
(Field)Rio Arriba  
(County or Subdivision)New Mexico  
(State or Territory)The elevation of the derrick floor above sea level is 6463 ft. KL

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

**2-7-59 - Perforated Dakota as follows:**

7099 - 7122	29'	2 jets per foot	46 holes
7143 - 7166	18'	4 jets per foot	72 holes
7172 - 7176	4'	4 jets per foot	16 holes
7204 - 7216	12'	4 jets per foot	48 holes
7224 - 7236	12'	2 jets per foot	24 holes

fractured with 97,600 gallons water and 80,000# 40-60 sand.  
Breakdown pressure 2200#; treating pressure 2200 to 2050#;  
final pressure 2000#. Pressure decreased from 2400# to 1900#  
in one hour. Average injection rate 353 IPH. Used 410 bbls for  
flush. Dropped 61 rubber covered nylon balls after 21,000 gallons;  
dropped 40 more after 82,000 gallons. Well unloaded after in-  
stalling flow line valve. (Over)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

**Caulkins Oil Company**

Company \_\_\_\_\_

Address Box 967Armonington, New MexicoBy Frank Gray  
Field Superintendent

Title \_\_\_\_\_

- 2-8-59 - Perforated Greenhorn 7010 to 7030 with 2 jets per foot. Killed well with water to run retrievable bridge plug. Ran measuring line to check sand in hole and found it at 7004'. Well unloaded water used to kill it.
- 2-9-59 - Blew well dry with gas and cleaned out sand to 7289.
- 2-10-59 - Set bridge plug at 7050'.
- 2-11-59 - Fractured Greenhorn 7010' to 7030' with 20,000# 40-60 sand using 3 AMCO's. Used 35,805 gallons water and flushed with 16,640 gallons water. Breakdown pressure 3000#; treating pressure 3000 to 2600 to 3000#; final pressure 2200# which decreased to 1800# in 2 1/2 hours. Set Baker Magnesium bridge plug at 6980' under pressure. Perforated Greenhorn 6900 to 6940 with 75 shaped charges. Fractured 6900 to 6940 with 20,000# 40-60 sand and 34,660 gallons water. Flushed with 16,500 gallons water. Breakdown pressure 3000#; treating pressure 3000# to 2900# to 3125#; final pressure 2550# which decreased to 1975# in four hours. During next 2 1/2 hours pressure did not decrease so bled well off through 1/2" nipple.
- 2-14-59 - Set Bridge Plug at 5180'. Perforated Point Lookout as follows:
- |              |                 |
|--------------|-----------------|
| 4996 to 5002 | 2 jets per foot |
| 5006 to 5014 | 2 jets per foot |
| 5024 to 5048 | 2 jets per foot |
| 5054 to 5068 | 2 jets per foot |
| 5092 to 5146 | 2 jets per foot |
- 2-15-59 - Fractured 4996 to 5146 with 100,000# 20-40 sand and 58,862 gallons water. Flushed with 8,200 gallons. Dropped 45 rubber balls after 20,000#, 45 more after 40,000# and 25 more after 60,000#. Breakdown pressure 1100#; treating pressure 1100# to 275#. Sand screened out leaving approximately 10,000# in casing. Average rate of injection 56.9 BPM. Perforated Pictured Cliffs 2716 to 2754 with 2 jets per foot. Fractured with 30,000# 10-20 sand and 45,088 gallons water. Flushed with 9,800 gallons water. Dropped 30 rubber balls after 30,000#. Breakdown pressure 1200#, treating pressure 1200# to 1800#. Final pressure 1250#. Average rate of injection 75.6 BPM.
- 2-22-59 - Fishing to 3-14-59.
- 3-14-59 to 4-12-59 - Shut down.
- 4-13-59 to 5-17-59 - Fishing operations.
- 6-1-59 - Initial Potential and Packer Leakage Test Mesa Verde side of well on 3 hrs. Pictured Cliffs Deadweight pressure 588# - remained the same throughout the test. Mesa Verde Deadweight pressure at beginning of test 823#-after 3 hrs pressure at choke 142#. Well produced 2 1/2 bbls oil - 1/10% B.S. corrected gravity 58. Rate of flow 2123 MCF. AOR 2233.
- 6-8-59 - Initial Potential and Packer Leakage Test Pictured Cliffs side of well on 3 hrs. Mesa Verde Deadweight pressure 798-remained the same throughout test. Pictured Cliffs Deadweight pressure at beginning of test 597#-after 3 hrs pressure at choke 103#. Rate of flow 1608 MCF. AOR 2537.

CAULKINS OIL COMPANY

BOX 967

FARMINGTON, NEW MEXICO

13-26-7

June 16, 1959



Mr. Emery Arnold  
New Mexico Oil Conservation Commission  
1000 Rio Brazos Road  
Aztec, New Mexico

Dear Emery:

Below is bottomhole pressure information on our Breech PMD-224:

Mesa Verde	
Tested May 29, 1959	
Shut in time 240 hours	
Pressure at 5150' ( <del>4</del> 1313')	1036 psig
Greenhorn	
Tested May 28, 1959	
Shut in time 96 hours	
Pressure at 5000'	1525 psig
" " 5150' ( <del>4</del> 1313')	1541
Calculated pressure at 6900' the top of Greenhorn ( <del>4</del> 37')	1727

We recently requested permission to produce the Mesa Verde zone of this multiple completion until such time as the multiple completion is approved by the Commission.

Yours very truly,

CAULKINS OIL COMPANY

By *Frank Gray*

*Approved  
Emery Arnold  
June 16, 1959*