

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name <b>Undesignated P.C. &amp; Blanco H.V.</b>		County <b>Rio Arriba</b>	Date <b>9-16-58</b>
Operator <b>Magnolia Petroleum Company</b>		Lease <b>Monrillo "D"</b>	Well No. <b>7</b>
Location of Well <b>H</b>	Unit <b>13</b>	Township <b>26N</b>	Range <b>34</b>

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 ☒ NO ☐

2. If answer is yes, identify one such instance: Order No. **DC-160**; Operator, Lease, and Well No.:

**Magnolia Petroleum Company**  
**Monrillo "D" #3**

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	<b>Pictured Cliffs</b>	<b>Mesa Verde</b>
b. Top and Bottom of Pay Section (Perforations)	<b>3809 - Top 3875 - Bottom</b>	<b>5534 - Top 5985 - Bottom</b>
c. Type of production (Oil or Gas)	<b>Gas</b>	<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>	<b>Flowing</b>

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.
- Yes** 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.\*
- Yes** 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.

**Hess Oil Corp., P. O. Box 1371, Midland, Texas**

**Humble Oil & Refining Co., P. O. Box 1600, Midland, Texas**

**Northwest Production Co., Sierra Bldg., Albuquerque, New Mexico**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO ☐ . If answer is yes, give date of such notification **9-16-58**.

CERTIFICATE: I, the undersigned, state that I am the **authorized agent** of the **Magnolia Petroleum** (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]*  
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 simultaneously with this application.

NEW MEXICO  
OIL CONSERVATION COMMISSION

8-15-56

PACKER LEAKAGE TEST (SAN JUAN BASIN)

Operator Magnolia Petroleum Company Pool (Upper Completion) Pictured Cliffs  
Lease Jicarilla "D" Well # 7 Pool (Lower Completion) Mesaverte  
Location: Unit M, S. 13, T. 26N, R. 3W, Rio Arriba County, N. Mex.

Pre-Test Shut-In

	Upper Completion	Lower Completion
Shut-in (date). . . . .	<u>8-26-58</u>	<u>8-26-58</u>
Pressure Measured (Dwt.) (date). . . . .	<u>9-2-58</u>	<u>9-2-58</u>

Flow Test No. 1

Test commenced at (hour, date) 9:35 A.M. 9-2-58 Choke size 0.750"  
Completion producing Mesaverte Completion shut-in Pictured Cliffs

	Upper Completion	Lower Completion
Pressure at beginning of test. . . . .	<u>955</u> psi	<u>1565</u> psi
Maximum pressure during test. . . . .	<u>962</u> psi	<u>1565</u> psi
Minimum pressure during test. . . . .	<u>955</u> psi	<u>260</u> psi
Pressure at end of test. . . . .	<u>960</u> psi	<u>260</u> psi
Maximum pressure change during test. . . . .	<u>7</u> psi	<u>1305</u> psi
Oil flow rate during test: <u>-</u> BOPD based on BO in <u>-</u> hours.		
Gas Flow rate during test:		

Choke volume 3241 MCFD: Meter volume - mcf.

Mid-Test Shut-In

	Upper Completion	Lower Completion
Shut-in (date). . . . .	<u>9-2-58</u>	<u>9-2-58</u>
Pressure measured (Dwt) (date). . . . .	<u>9-2-58</u>	<u>9-2-58</u>

Flow Test No. 2

Test commenced at (hour, date) 12:00 A.M. 9-2-58 Choke size 0.750"  
Completion producing Pictured Cliffs Completion shut-in Mesaverte

	Upper Completion	Lower Completion
Pressure at beginning of test. . . . .	<u>961</u> psi	<u>1577</u> psi
Maximum pressure during test. . . . .	<u>961</u> psi	<u>1579</u> psi
Minimum pressure during test. . . . .	<u>193</u> psi	<u>1577</u> psi
Pressure at end of test. . . . .	<u>193</u> psi	<u>1579</u> psi
Maximum pressure change during test. . . . .	<u>- 768</u> psi	<u>2</u> psi
Oil flow rate during test: <u>-</u> BOPD based on <u>-</u> BO in <u>-</u> hrs.		
Gas flow rate during test:		

Choke volume 22% MCFD: Meter volume - mcf.

Test performed by William A. Morgan Title Jr. Gas Engineer  
Witnessed by \_\_\_\_\_ Title \_\_\_\_\_

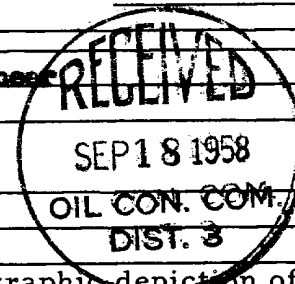
REMARKS: \_\_\_\_\_

NOTE: Recording gauge pressure charts, test data sheet, and a graphic depiction of all phases of the test shall be submitted with this report.

AFFIDAVIT:

I HEREBY CERTIFY that all conditions prescribed by the Oil Conservation Commission of the State of New Mexico for this packer leakage test were complied with and carried out in full, and that all dates and facts set forth in this form and all attached material are true and correct.

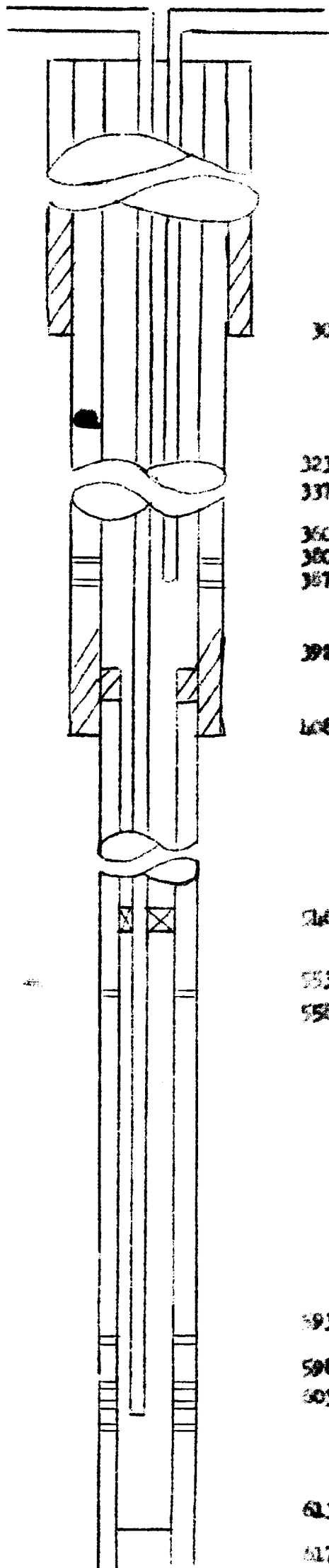
William A. Morgan For Magnolia Petroleum Company  
(Representative of Company Making Test) (Company Making Test)



## INSTRUCTIONS

### (NORTHWEST NEW MEXICO ONLY)

1. At least seventy-two hours prior to the commencement of this test, the operator shall have notified the Aztec Office of the Oil Conservation Commission in writing of the exact time said test is to be commenced.
2. The packer leakage test shall commence with both sides of the completion shut-in. Both sides of the completion must be shut-in at least seven days. This shut-in must show on the charts of the pressure recorder and also must appear on the data sheets.
3. For Flow Test No. 1, one side of the dual completion shall be produced with the other side shut-in. Such test shall be continued for seven days, and shall be at a rate of flow approximating the normal rate of flow for the zone being produced. Note: Where gas is flowed to the atmosphere in taking the initial packer test, the well shall be flowed for three hours.
4. Following the completion of flow test No. 1, the well will again be shut-in for seven days.
5. Flow Test No. 2 shall be performed with the previously shut-in side of the dual completion flowing and with the flowing side of the completion used in Flow Test No. 1, remaining shut-in. This test shall be conducted exactly as outlined under Flow Test No. 1, and must be performed even though no leak was indicated by Flow Test No. 1.
6. All pressures, throughout the entire test, must be continuously measured and recorded with recording pressure gauges.
7. The accuracy of the recording gauges shall be checked at regular intervals throughout the test with a dead weight test gauge (Dwt), and such readings shall be recorded on the test data sheet provided.
8. This form must be completed and filed in duplicate with the Aztec Office of the Oil Conservation Commission within 15 days following the completion of the testing, and must be accompanied by:
  - a. all of the charts, or copies thereof, used on the pressure recorders during the test.
  - b. The test data-sheet (s), or copies thereof, required under paragraph 7 above.
  - c. a graph depicting the pressures and their changes, for both sides of the completion over the entire test.
9. This packer leakage test shall be performed upon the dual completion of any new wells so approved by the Commission. This test shall also be required each year during the annual deliverability test on gas wells. This test shall be required until such time as the Commission has sufficient information on testing dual completions in San Juan Basin on which to base a simplified packer leakage test. The Commission may also request packer leakage tests at any time they feel that a new test is desirable.



303' - 10-1/4" Csg. set w/240 sacks cement

Perforated 7-5/8" Csg.  
w/2 Shots Per foot

3017 - 40

3064 - 73

3230' - Top of Cement

3370' - Top of Alamo

3607' - Top of Kirtland Fruitland

3609' - Top of Pictured Cliffs

3675' - Bottom 2" Tubing & Top of Lewis

3924' - Top of Liner & Top of Cement

4085' - Bottom 7-5/8" Csg. set w/120 sacks cement

5164' - Baker Special "B" Production Liner

Perforated 5" Liner  
w/2 Shots Per foot

5358 - 72

5534' - Top of Cliff House

5930 - 62

5587' - Top of Kansas

6000 - 05

6011 - 15

6042 - 18

5930' - Top of Joint Lockout

5985' - Top of Kansas

6034' - Bottom 2" Tubing

6136' - Planned Back Total Depth

6175' - Total Depth and Bottom 5" Liner set w/225 sacks cement





NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

6-1-56

PACKER-SETTING AFFIDAVIT  
(Dual Completions)

STATE OF NEW MEXICO )  
County of SAN JUAN ) ss

G. W. WALKER, being first duly sworn according to law, upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Magnolia Petroleum Company in the capacity of Production Foreman and as such is its authorized agent.

That on August 17, 19 58, he personally supervised the setting of a Baker Model "D" in Magnolia Petroleum Company's  
(Make and Type of Packer) (Operator)

Jicarilla "D" Well No. 7, located in Unit  
(lease)  
Letter 14, Section 13, Township 16N, Range 3W, NMPM,  
Rio Arriba County, New Mexico.

That said packer was set at a subsurface depth of 5484 feet,  
said depth measurement having been furnished by Lane Wells Company.

That the purpose of setting this packer was to effect a seal in the annular space between the two strings of pipe where the packer was set so as to prevent the commingling, within the well-bore, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer. That this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

MAGNOLIA PETROLEUM COMPANY

(Company)

G. W. Walker  
(its Agent) G. W. Walker

Subscribed and sworn to before me this the 18th day of Aug, AD, 19 58.

Louis D. Bryant  
Notary Public in and for the County  
of San Juan

My Commission Expires 3-7-62.

