

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Well

No. 3

Operator Magnolia Petroleum Company

Lease Jicarilla "H"

Location

of Well: Unit A Sec. 13 Twp. 26N Rge. 3W County Rio Arriba

Name of Reservoir or Pool Pictured Cliffs Type of Prod. Gas Method of Prod. Flow Prod. Medium Tubing

|                  |                         |            |             |               |
|------------------|-------------------------|------------|-------------|---------------|
| Upper Completion | <u>Pictured Cliffs</u>  | <u>Gas</u> | <u>Flow</u> | <u>Tubing</u> |
| Lower Completion | <u>Blanco Mesaverde</u> | <u>"</u>   | <u>"</u>    | <u>"</u>      |

PRE-FLOW SHUT-IN PRESSURE DATA

|             |                                                       |                                      |                            |                                    |
|-------------|-------------------------------------------------------|--------------------------------------|----------------------------|------------------------------------|
| Upper Compl | Hour, date <u>11:00 A.M.</u><br>Shut-in <u>1/3/59</u> | Length of time shut-in <u>7 Days</u> | SI press. <u>1147</u> psig | Stabilized? <u>(Yes or No) Yes</u> |
| Lower Compl | Hour, date <u>11:00 A.M.</u><br>Shut-in <u>1/3/59</u> | Length of time shut-in <u>7 Days</u> | SI press. <u>1257</u> psig | Stabilized? <u>(Yes or No) No</u>  |

FLOW TEST NO. 1

|                                                      |                      |                  |                  |                    |                                                       |
|------------------------------------------------------|----------------------|------------------|------------------|--------------------|-------------------------------------------------------|
| Commenced at (hour, date)* <u>11:30 A.M. 1/10/59</u> |                      |                  |                  |                    | Zone producing ( <u>Upper</u> or Lower): <u>Lower</u> |
| Time (hour, date)                                    | Lapsed time since*   | Pressure         |                  | Prod. Zone Temp. F | Remarks                                               |
|                                                      |                      | Upper Compl.     | Lower Compl.     |                    |                                                       |
| <u>11:00 A.M. 1/10/59</u>                            | <u>Prior to Test</u> | <u>1147 psig</u> | <u>1257 psig</u> | <u>-</u>           | <u>None</u>                                           |
| <u>12:00 Noon 1/13/59</u>                            | <u>3 Days</u>        | <u>1151 psig</u> | <u>546 psig</u>  | <u>61°F</u>        | <u>"</u>                                              |
| <u>12:00 Noon 1/17/59</u>                            | <u>7 Days</u>        | <u>1150 psig</u> | <u>528 psig</u>  | <u>60°F</u>        | <u>"</u>                                              |
|                                                      |                      |                  |                  |                    |                                                       |
|                                                      |                      |                  |                  |                    |                                                       |
|                                                      |                      |                  |                  |                    |                                                       |

Production rate during test

Oil: - BOPD based on - Bbls. in - Hrs. - Grav. - GOR -  
Gas: 30 MCFPD; Tested thru (Orifice or Meter): Meter

MID-TEST SHUT-IN PRESSURE DATA

|             |                                      |                                      |                            |                                    |
|-------------|--------------------------------------|--------------------------------------|----------------------------|------------------------------------|
| Upper Compl | Hour, date <u>12:30 P.M. 1/17/59</u> | Length of time shut-in <u>7 Days</u> | SI press. <u>1150</u> psig | Stabilized? <u>(Yes or No) Yes</u> |
| Lower Compl | Hour, date <u>12:30 P.M. 1/17/59</u> | Length of time shut-in <u>7 Days</u> | SI press. <u>1165</u> psig | Stabilized? <u>(Yes or No) No</u>  |

FLOW TEST NO. 2

|                                                       |                      |                 |              |                    |                                                           |
|-------------------------------------------------------|----------------------|-----------------|--------------|--------------------|-----------------------------------------------------------|
| Commenced at (hour, date)** <u>12:15 P.M. 1/24/59</u> |                      |                 |              |                    | Zone producing (Upper or <del>Lower</del> ): <u>Upper</u> |
| Time (hour, date)                                     | Lapsed time since ** | Pressure        |              | Prod. Zone Temp. F | Remarks                                                   |
|                                                       |                      | Upper Compl.    | Lower Compl. |                    |                                                           |
| <u>12:30 P.M. 1/24/59</u>                             | <u>15 Min.</u>       | <u>262 psig</u> | <u>1165</u>  | <u>54°F</u>        | <u>Upper Zone open to</u>                                 |
| <u>12:45 P.M. 1/24/59</u>                             | <u>30 Min.</u>       | <u>158 psig</u> | <u>1160</u>  | <u>56°F</u>        | <u>air for 3 hours.</u>                                   |
| <u>1:00 P.M. 1/24/59</u>                              | <u>45 Min.</u>       | <u>105 psig</u> | <u>1160</u>  | <u>56°F</u>        |                                                           |
| <u>1:15 P.M. 1/24/59</u>                              | <u>60 Min.</u>       | <u>65 psig</u>  | <u>1160</u>  | <u>57°F</u>        |                                                           |
| <u>2:15 P.M. 1/24/59</u>                              | <u>2 Hrs.</u>        | <u>40 psig</u>  | <u>1160</u>  | <u>57°F</u>        |                                                           |
| <u>3:15 P.M. 1/29/59</u>                              | <u>3 Hrs.</u>        | <u>4 psig</u>   | <u>1161</u>  | <u>57°F</u>        |                                                           |

Production rate during test

Oil: - BOPD based on - Bbls. in - Hrs. - Grav. - GOR -  
Gas: 210 MCFPD; Tested thru (Orifice or Meter): 0.750" Choke

REMARKS: The Upper Zone is not connected to a pipeline and therefore, was tested to air for 3 Hrs.

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved: 2-20 1959  
New Mexico Oil Conservation Commission

By Emory C. Arnold

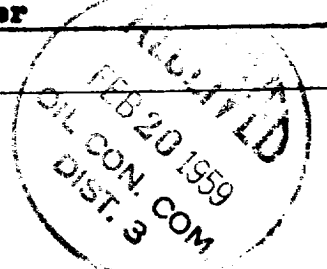
Title Supervisor Dist. # 3

Operator Magnolia Petroleum Company

By William A. Meyer

Title Jr. Gas Engineer

Date 2/17/59



1. If packer leakage test shall be completed on each multiple completion well within seven days after completion of the well and actually the test shall be completed on all multiple completion wells within seven days after completion and/or chemical or fracture treatment and whenever remedial work has been done on a well during which the casing or the tubing has been disturbed. Tests shall also be taken at any time that completion is suspected or when requested by the Commission.

2. At least 72 hours prior to the commencement of any packer leakage test the operator shall notify the Commission in writing of the exact time the test is to be commenced. Office operations shall also be so notified.

3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.

4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: (1) on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.

5. Following completion of Flow Test No. 1, the well shall again be shut-in in accordance with Paragraph 3 above.

6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.

7. Pressures shall be measured on each zone with a pressure gauge or pressure recorder as follows: 3-hour tests shall be recorded at fifteen-minute intervals during each flow period and at hourly intervals thereafter. For 24-hour tests, immediately prior to the commencement of the test, and at least once each hour during each flow period and immediately prior to the commencement of each flow period. Pressures may be taken as described in Paragraph 7 above in wells with previously shown questionable test zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges or pressure recorders which shall be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. In a well with gas oil or an oil-gas dual completion, the recording gauge shall be connected to the oil zone only, with deadweight pressures or recording pressure recorders connected to the gas zone.

8. The results of the above-described tests shall be filed in triplicate within 48 hours after completion of the test. Tests shall be filed with the District Office of the New Mexico Oil Conservation Commission on No. 1000 Form 5000, Packer Leakage Test Form Revised 11-1-58, with all data required thereon as well as the flowing temperatures (flowing temperature and GOR (oil zones only)). A pressure versus time curve for each test shall be constructed on the reverse side of the Packer Leakage Test Form with all deadweight pressure points plotted thereon. For oil zones, the pressure curve should also indicate all pressure changes which may be reflected by the recording gauge. In the case of gas zones, pressure changes should also be tabulated on the reverse side of the Packer Leakage Test Form.

| OIL CONSERVATION COMMISSION  |   |  |   |
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