

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Cotton Petroleum Corporation Lease Apache Well No. 29  
Location of Well: Unit C Sec. 14 Twp. 24 Rge. 4 County Rio Arriba

|                  | Name of Reservoir or Pool | Type of Prod.<br>(Oil or Gas) | Method of Prod.<br>(Flow or Art. Lift) | Prod. Medium<br>(Tbg. or Csg.) |
|------------------|---------------------------|-------------------------------|----------------------------------------|--------------------------------|
| Upper Completion | So. Blanco Pictured Cliff | Gas                           | Flow                                   | Casing                         |
| Lower Completion | Undesignated Chacra       | Gas                           | Flow                                   | Tubing                         |

PRE-FLOW SHUT-IN PRESSURE DATA

|             |                    |        |                        |        |                |     |                            |     |
|-------------|--------------------|--------|------------------------|--------|----------------|-----|----------------------------|-----|
| Upper Compl | Hour, date Shut-in | 8-4-80 | Length of time shut-in | 7 days | SI press. psig | 785 | Stabilized?<br>(Yes or No) | Yes |
| Lower Compl | Hour, date Shut-in | 8-4-80 | Length of time shut-in | 7 days | SI press. psig | 621 | Stabilized?<br>(Yes or No) | Yes |

FLOW TEST NO. 1

| Commenced at (hour, date)* |                       |              |              | Zone producing (Upper or Lower): |                                 |
|----------------------------|-----------------------|--------------|--------------|----------------------------------|---------------------------------|
| 8-11-1980                  |                       |              |              | Lower                            |                                 |
| Time<br>(hour, date)       | Lapsed time<br>since* | Pressure     |              | Prod. Zone<br>Temp.              | Remarks                         |
|                            |                       | Upper Compl. | Lower Compl. |                                  |                                 |
| 8-11-1980                  | 0 days                | 785          | 621          |                                  | Lower zone flow to atmosphere   |
| 8-11-1980                  | 15 min                | 786          | 34           |                                  | for 3 hours; Upper zone shut-in |
|                            | 30 min                | 786          | 21           |                                  |                                 |
| 8-11-1980                  | 45 min                | 786          | 18           |                                  |                                 |
| 8-11-1980                  | 1 hour                | 786          | 12           |                                  |                                 |
| 8-11-1980                  | 2 hours               | 786          | 11           |                                  |                                 |
| 8-11-1980                  | 3 hours               | 786          | 9            |                                  |                                 |

Production rate during test  
Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hrs. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_  
Gas Est. 260 MCFPD; Tested thru (Orifice or Meter): 3/4 inch adjustable choke

MID-TEST SHUT-IN PRESSURE DATA

|             |                    |           |                        |         |                |     |                            |     |
|-------------|--------------------|-----------|------------------------|---------|----------------|-----|----------------------------|-----|
| Upper Compl | Hour, date Shut-in | 8-4-1980  | Length of time shut-in | 14 days | SI press. psig | 840 | Stabilized?<br>(Yes or No) | Yes |
| Lower Compl | Hour, date Shut-in | 8-11-1980 | Length of time shut-in | 7 days  | SI press. psig | 645 | Stabilized?<br>(Yes or No) | Yes |

FLOW TEST NO. 2

| Commenced at (hour, date)** |                         |              |              | Zone producing (Upper or Lower): |                                |
|-----------------------------|-------------------------|--------------|--------------|----------------------------------|--------------------------------|
| 8-18-1980                   |                         |              |              | Upper                            |                                |
| Time<br>(hour, date)        | Lapsed time<br>since ** | Pressure     |              | Prod. Zone<br>Temp.              | Remarks                        |
|                             |                         | Upper Compl. | Lower Compl. |                                  |                                |
| 8-18-1980                   | 0 days                  | 840          | 645          |                                  | Upper zone flow 3 hrs. to      |
| 8-18-1980                   | 15 min                  | 281          | 645          |                                  | atmosphere. Lower zone shut-in |
|                             | 30 min                  | 148          | 645          |                                  |                                |
| 8-18-1980                   | 45 min                  | 100          | 645          |                                  |                                |
| 8-18-1980                   | 1 hr                    | 89           | 645          |                                  |                                |
| 8-18-1980                   | 2 hrs                   | 78           | 645          |                                  |                                |
| 8-18-1980                   | 3 hrs                   | 70           | 645          | 60°                              |                                |

Production rate during test  
Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hrs. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: 986 MCFPD; Tested thru (Orifice or Meter): 3/4" positive Choke (Potential

REMARKS: Lower zone (Chacra) had been produced as a single zone prior to completing the

Pictured Cliff formation.

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

Approved: AUG 22 1980 19  
New Mexico Oil Conservation Commission  
By Original Signed by CHARLES GHOLSON  
Title DEPUTY OIL & GAS INSPECTOR, DIST. #1

Operator Cotton Petroleum Corporation  
By [Signature]  
Title Agent  
Date 8-20-1980

1. The following is a list of the intervals used for each flow zone:
- a. The first flow zone is sampled at the following 3-hour intervals during the first 18 hours of each flow period, at fifteen-minute intervals during the first hour thereafter, at hourly intervals thereafter including one prestake measurement immediately prior to the conclusion of each flow period. Sampling is immediately prior to the beginning of each flow period, at the end of the time during each flow period, at approximately the midway point, and immediately prior to the conclusion of each flow period. Other prestakes may be taken as desired, or may be requested on wells which have previously shown questionable test data.

- \* The child was never told to stop answering, throughout the entire test

1. The first two methods are based on the assumption that the data are normally distributed. The first method is based on the assumption that the data are normally distributed with a constant variance. The second method is based on the assumption that the data are normally distributed with a constant variance and a constant mean. The third method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The fourth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The fifth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The sixth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The seventh method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The eighth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The ninth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean. The tenth method is based on the assumption that the data are normally distributed with a constant variance and a constant mean, and that the data are also normally distributed with a constant variance and a constant mean.

- [illegible]

- [illegible]

10. The following provisions of the S should also be tabulated on the same page:

