

~~CONFIDENTIAL~~ REPORT  
NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

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|                                                                                                                           |                        |                           |                                        |                                       |                                         |
|---------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|----------------------------------------|---------------------------------------|-----------------------------------------|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                        |                           |                                        | Test Date<br>11-10-66                 |                                         |
| Company<br>PRM AMERICAN PET. CORP.                                                                                        |                        |                           | Connection<br>JELHI GAS PIPELINE CORP. |                                       |                                         |
| Pool<br>INDIAN BASIN                                                                                                      |                        |                           | Formation<br>CISCO CANYON              |                                       | Unit                                    |
| Completion Date<br>1-11-66                                                                                                |                        | Total Depth<br>7897       | Plug Back TD<br>7857                   | Elevation<br>4040 GL.                 | Farm or Lease Name<br>HOC FED. GAS COM. |
| Coq. Size<br>5 1/2"                                                                                                       | Wt.<br>14, 15, 17 1/2" | d<br>1.995                | Set At<br>7897                         | Perforations<br>From 7702 To 7798     | Well No.<br>1                           |
| Trg. Size<br>2"                                                                                                           | Wt.<br>4.7 #           | d<br>1.995                | Set At<br>7785                         | Perforations<br>From OPEN END To      | Unit Sec. Twp. Rge.<br>F 13 22 23       |
| Type Well - Single - Brdenhead - G.G. or G.O. Multiple<br>SINGLE                                                          |                        |                           |                                        | Packer Set At<br>7630                 | County<br>EDDY                          |
| Producing Thru<br>TURNING                                                                                                 |                        | Reservoir Temp. °F<br>131 | Mean Annual Temp. °F<br>70             | Baro. Press. - P <sub>a</sub><br>13.2 | State<br>N.M.                           |
| L<br>7785                                                                                                                 | H<br>7785              | G <sub>g</sub><br>0.634   | % CO <sub>2</sub><br>0.40              | % N <sub>2</sub><br>0.89              | % H <sub>2</sub> S<br>0.42              |
| Prover                                                                                                                    |                        | Meter Run<br>4.062" I.D.  | Taps<br>FLANGE                         |                                       |                                         |

  

| FLOW DATA |                  |   |              |                 |                      | TUBING DATA |                 | CASING DATA |                 | Duration of Flow Hrs |          |
|-----------|------------------|---|--------------|-----------------|----------------------|-------------|-----------------|-------------|-----------------|----------------------|----------|
| NO.       | Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. h <sub>w</sub> | Temp. °F    | Press. p.s.i.g. | Temp. °F    | Press. p.s.i.g. |                      | Temp. °F |
| SI        |                  |   |              |                 |                      |             | 2260            |             |                 |                      | 72       |
| 1.        | 4"               | * | 1.75"        | 800             | 9"                   | 83°         | 1930            | 71°         |                 |                      | 24       |
| 2.        | 4"               | * | 1.75"        | 810             | 11"                  | 82°         | 1750            | 71°         |                 |                      | 24       |
| 3.        | 4"               | * | 1.75"        | 805             | 14"                  | 83°         | 1555            | 72°         |                 |                      | 24       |
| 4.        | 4"               | * | 1.75"        | 810             | 21"                  | 83°         | 1340            | 72°         |                 |                      | 24       |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                      |          |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                       |                               |                                          |                      |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------------------|------------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft. | Gravity Factor F <sub>g</sub> | Super. Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 14.93                 | 86               | 813.2                   | 0.9786                | 1.256                         | 1.073                                    | 1695                 |
| 2                         | 14.93                 | 95               | 823.2                   | 0.9795                | 1.256                         | 1.075                                    | 1872                 |
| 3                         | 14.93                 | 107              | 818.2                   | 0.9786                | 1.256                         | 1.074                                    | 2110                 |
| 4                         | 14.93                 | 132              | 823.2                   | 0.9786                | 1.256                         | 1.075                                    | 2603                 |
| 5.                        |                       |                  |                         |                       |                               |                                          |                      |

  

|     |                |          |                |       |                                                 |
|-----|----------------|----------|----------------|-------|-------------------------------------------------|
| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</sub> | Z     | Gas Liquid Hydrocarbon Ratio 106.4 Mcf/bbl.     |
| 1.  | 1.21           | 543      | 1.49           | 0.868 | A.P.I. Gravity of Liquid Hydrocarbons 59.5 Deg. |
| 2.  | 1.23           | 542      | 1.49           | 0.866 | Specific Gravity Separator Gas 0.634 XXXXXXXXX  |
| 3.  | 1.22           | 543      | 1.49           | 0.867 | Specific Gravity Flowing Fluid XXXXX 0.661      |
| 4.  | 1.23           | 543      | 1.49           | 0.866 | Critical Pressure 671 P.S.I.A. 671 P.S.I.A.     |
| 5.  |                |          |                |       | Critical Temperature 364° R 374° R              |

  

|                     |                                  |                |                             |                                                           |
|---------------------|----------------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| P <sub>c</sub> 2946 | P <sub>c</sub> <sup>2</sup> 8679 |                |                             |                                                           |
| NO.                 | P <sub>t</sub> <sup>2</sup>      | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> |
| 1                   | 3725                             | 2477           | 6136                        | 2543                                                      |
| 2                   | 3063                             | 2268           | 5144                        | 3535                                                      |
| 3                   | 2418                             | 2043           | 4174                        | 4505                                                      |
| 4                   | 1796                             | 1834           | 3364                        | 5313                                                      |
| 5                   |                                  |                |                             |                                                           |

  

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} =$  \_\_\_\_\_

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3,360,000$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$  \_\_\_\_\_

  

|                                       |                       |              |
|---------------------------------------|-----------------------|--------------|
| Absolute Open Flow 3360 Mcfd @ 15.025 | Angle of Slope 63.435 | Slope, n 0.5 |
|---------------------------------------|-----------------------|--------------|

  

Remarks: CALCULATIONS WERE DONE BY COMPUTER. F<sub>p</sub>, F<sub>g</sub> & Z VARY SLIGHTLY TO FIT PROGRAMMED FACTORS

  

|                         |                                |                              |                           |
|-------------------------|--------------------------------|------------------------------|---------------------------|
| Approved By Commission: | Conducted By:<br>D.C. PEURIFOY | Calculated By:<br>A.M. LANDI | Checked By:<br>E.J. SNOOK |
|-------------------------|--------------------------------|------------------------------|---------------------------|