

NEW MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT, AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122  
Revised 9-1-65

**RECEIVED**

SEP 4 1975

|                                                                                                                        |             |                                |                   |                                   |                    |                                    |           |                                   |          |
|------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------|-------------------|-----------------------------------|--------------------|------------------------------------|-----------|-----------------------------------|----------|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |             |                                |                   |                                   |                    | Test Date 8-25-75                  |           |                                   |          |
| Company Hanagan Petroleum Corporation                                                                                  |             |                                |                   |                                   |                    | Connection None                    |           | O.C.C. ARTESIA, OFFICE            |          |
| Pool Avalon Morrow                                                                                                     |             |                                |                   |                                   |                    | Formation Morrow                   |           | Unit                              |          |
| Completion Date 9/2/75                                                                                                 |             | Total Depth 11148              |                   | Plug Back TD 11104                |                    | Elevation 3271 KB                  |           | Farm or Lease Name Ocotillo Hills |          |
| Csg. Size 5.5                                                                                                          | Wt. 17 & 20 | d 4.892                        | Set At 11148      | Perforations: From 10850 To 10965 |                    | Well No. 2                         |           |                                   |          |
| Thq. Size 2 7/8                                                                                                        | Wt. 6.5     | d 2.441                        | Set At 10730      | Perforations: From To             |                    | Unit G                             | Sec. 21   | Twp. 21S                          | Rge. 26E |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single                                                         |             |                                |                   |                                   |                    | Packer Set At 10740-747            |           | County Eddy                       |          |
| Producing Thru Tubing                                                                                                  |             | Reservoir Temp. °F 185 @ 10725 |                   | Mean Annual Temp. °F 60           |                    | Baro. Press. - P <sub>a</sub> 13.2 |           | State New Mexico                  |          |
| L 10908                                                                                                                | H 10908     | Gg 0.600                       | % CO <sub>2</sub> | % N <sub>2</sub>                  | % H <sub>2</sub> S | Prover Pos ck                      | Meter Run | Taps                              |          |

  

| FLOW DATA |                  |   |              |                 |                      |          | TUBING DATA     |          | CASING DATA     |          | Duration of Flow |
|-----------|------------------|---|--------------|-----------------|----------------------|----------|-----------------|----------|-----------------|----------|------------------|
| 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        | 120 hrs.         |   |              |                 |                      |          | 3636            |          | Pkr             |          |                  |
| 1.        | 2                | X | 8/64         | 3615            |                      | 84       | 3615            | 84       |                 |          | 60 min.          |
| 2.        | 2                | X | 10/64        | 3592            |                      | 87       | 3592            | 87       |                 |          | 60 min.          |
| 3.        | 2                | X | 13/64        | 3535            |                      | 88       | 3535            | 88       |                 |          | 60 min.          |
| 4.        | 2                | X | 16/64        | 3447            |                      | 88       | 3447            | 88       |                 |          | 60 min.          |
| 5.        |                  |   |              |                 |                      |          |                 |          |                 |          |                  |

  

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                                  |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor F <sub>t</sub> | Gravity Factor F <sub>g</sub> | Super Compress. Factor, F <sub>pv</sub> | Rate of Flow Q, Mcfd |
| 1                         | 0.2618                |                  | 3628.2                  | .9777                            | 1.291                         | 1.093                                   | 1310.4               |
| 2                         | 0.4173                |                  | 3605.2                  | .9750                            | 1.291                         | 1.092                                   | 2067.9               |
| 3                         | 0.7208                |                  | 3548.2                  | .9741                            | 1.291                         | 1.095                                   | 3521.8               |
| 4                         | 1.1120                |                  | 3460.2                  | .9741                            | 1.291                         | 1.099                                   | 5317.8               |
| 5                         |                       |                  |                         |                                  |                               |                                         |                      |

  

| NO. | P <sub>t</sub> | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio Mcf/bbl. | A.P.I. Gravity of Liquid Hydrocarbons Deg. |
|-----|----------------|----------|----------------|-------|---------------------------------------|--------------------------------------------|
| 1   | 5.41           | 544      | 1.52           | 0.837 | 0.600                                 | XXXXXXX                                    |
| 2   | 5.37           | 547      | 1.53           | 0.838 | XXXXX                                 |                                            |
| 3   | 5.29           | 548      | 1.53           | 0.834 | 671                                   | P.S.I.A.                                   |
| 4   | 5.16           | 548      | 1.53           | 0.828 | 358                                   | R                                          |
| 5   |                |          |                |       |                                       |                                            |

  

| P <sub>f</sub> 4705.2 P <sub>f</sub> 22139 |                             |                             |                                                           | $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 12.767589$ $(2) \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6.170624$ |  |
|--------------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--|
| NO.                                        | P <sub>t</sub> <sup>2</sup> | P <sub>s</sub> <sup>2</sup> | P <sub>s</sub> <sup>2</sup> - P <sub>t</sub> <sup>2</sup> |                                                                                                             |  |
| 1                                          | 4682.2                      | 21923                       | 216                                                       |                                                                                                             |  |
| 2                                          | 4655.2                      | 21671                       | 468                                                       |                                                                                                             |  |
| 3                                          | 4597.2                      | 21134                       | 1005                                                      |                                                                                                             |  |
| 4                                          | 4517.2                      | 20405                       | 1734                                                      |                                                                                                             |  |
| 5                                          |                             |                             |                                                           |                                                                                                             |  |

  

|                                                                            |  |                               |                             |                  |
|----------------------------------------------------------------------------|--|-------------------------------|-----------------------------|------------------|
| Absolute Open Flow 32,814.1 Mcfd @ 15.025                                  |  |                               | Angle of Slope @ 54° 27'    | Slope, n .714513 |
| Remarks: BHP measured with Amerada RPG-3 gauge Serial No. 9383N 0-6050 psi |  |                               |                             |                  |
| Approved By Commission:                                                    |  | Conducted By: Tefteller, Inc. | Calculated By: G. W. Taylor | Checked By:      |