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Energy, Minerals and Natural Resources Department

Form C-122  
Revised 4-1-91

# OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

## MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                        |                    |                                 |                                  |                                                    |                    |                                                  |  |                      |                                                 |  |  |
|------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------|----------------------------------|----------------------------------------------------|--------------------|--------------------------------------------------|--|----------------------|-------------------------------------------------|--|--|
| Operator<br><b>TEXACO EXPLORATION AND PRODUCTION INC.</b>                                                              |                    |                                 |                                  |                                                    |                    | Lease or Unit Name<br><b>N.M. H STATE NCT -2</b> |  |                      |                                                 |  |  |
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                    |                                 |                                  |                                                    |                    | Test Date<br><b>10-4-94 to 10-5-94</b>           |  |                      | Well No.<br><b>32</b>                           |  |  |
| Completion Date<br><b>10-5-94</b>                                                                                      |                    | Total Depth<br><b>3705</b>      |                                  | Plng Back TD<br><b>3635</b>                        |                    | Elevation<br><b>3515 G.L.</b>                    |  |                      | Unit Loc. Sec. TWP. Rge.<br><b>H 20-20S-37E</b> |  |  |
| Csg. Size<br><b>5 1/2</b>                                                                                              | Wt.<br><b>15.5</b> | d<br><b>4.950</b>               | Set At<br><b>3705</b>            | Perforations:<br>From: <b>3386</b> To: <b>3526</b> |                    |                                                  |  | County<br><b>LEA</b> |                                                 |  |  |
| Tbg. Size<br><b>2-3/8</b>                                                                                              | Wt.<br><b>4.7#</b> | d<br><b>1.995</b>               | Set At<br><b>3366</b>            | Perforations:<br>From: To:                         |                    |                                                  |  | Pool                 |                                                 |  |  |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br><b>single</b>                                               |                    |                                 |                                  | Packer Set At<br><b>none</b>                       |                    |                                                  |  | Formation            |                                                 |  |  |
| Producing Thru<br><b>186</b>                                                                                           |                    | Reservoir Temp. °F<br><b>95</b> |                                  | Mean Annual Temp. °F<br><b>60</b>                  |                    | Baro. Press - P <sub>a</sub><br><b>13.2</b>      |  |                      | Connection<br><b>PIPELINE</b>                   |  |  |
| L<br><b>3456</b>                                                                                                       | H<br><b>3456</b>   | Gg<br><b>.788</b>               | % CO <sub>2</sub><br><b>7.16</b> | % N <sub>2</sub><br><b>1.45</b>                    | % H <sub>2</sub> S | Prover                                           |  | 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. |                  |
| SI        |                  |   |              |                 |                      | <b>68</b>   | <b>99</b>       |             |                 |                  |
| 1.        |                  |   |              |                 |                      |             | <b>39</b>       |             |                 | <b>24 hrs</b>    |
| 2.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 3.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 4.        |                  |   |              |                 |                      |             |                 |             |                 |                  |
| 5.        |                  |   |              |                 |                      |             |                 |             |                 |                  |

  

| RATE OF FLOW CALCULATIONS |                                                   |                                                                                     |                         |                       |                    |                                           |                      |
|---------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------|-----------------------|--------------------|-------------------------------------------|----------------------|
| NO.                       | COEFFICIENT (24 HOUR)                             |  | Pressure P <sub>m</sub> | Flow Temp. Factor Ft. | Gravity Factor Fg. | Super Compress. Factor, F <sub>pv</sub> . | Rate of Flow Q, Mcfd |
| 1.                        |                                                   |                                                                                     |                         |                       |                    |                                           |                      |
| 2.                        |                                                   |                                                                                     |                         |                       |                    |                                           | <b>127</b>           |
| 3.                        |                                                   |                                                                                     |                         |                       |                    |                                           |                      |
| 4.                        | <b>RATE TAKEN OFF ELECTRONIC TOTAL FLOW METER</b> |                                                                                     |                         |                       |                    |                                           |                      |
| 5.                        |                                                   |                                                                                     |                         |                       |                    |                                           |                      |

  

| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z | Gas Liquid Hydrocarbon Ratio | Mcf/bbl.          |
|-----|----------------|----------|----------------|---|------------------------------|-------------------|
| 1.  |                |          |                |   | <b>DRY</b>                   |                   |
| 2.  |                |          |                |   | <b>DRY</b>                   |                   |
| 3.  |                |          |                |   | <b>DRY</b>                   | <b>XXXXXXXXXX</b> |
| 4.  |                |          |                |   | <b>DRY</b>                   | <b>XXXXXX</b>     |
| 5.  |                |          |                |   | <b>695</b>                   | <b>P.S.I.A.</b>   |
|     |                |          |                |   | <b>403</b>                   | <b>R</b>          |

  

| NO. | P <sub>i</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.  | <b>2.7</b>                  | <b>54.6</b>    | <b>3.0</b>                  | <b>9.6</b>                                                |
| 2.  |                             |                |                             |                                                           |
| 3.  |                             |                |                             |                                                           |
| 4.  |                             |                |                             |                                                           |
| 5.  |                             |                |                             |                                                           |

  

1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.310$

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 166$

(2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.310$

  

|                    |            |              |                  |            |          |              |
|--------------------|------------|--------------|------------------|------------|----------|--------------|
| Absolute Open Flow | <b>166</b> | Mcf @ 15.025 | Angle of Slope θ | <b>45°</b> | Slope, n | <b>1.000</b> |
|--------------------|------------|--------------|------------------|------------|----------|--------------|

  

Remarks:

  

|                           |                         |                |             |
|---------------------------|-------------------------|----------------|-------------|
| Approved By Division      | Conducted By:           | Calculated By: | Checked By: |
| <b>ORIGINAL SIGNATURE</b> | <b>PRO WELL TESTERS</b> | <b>KS</b>      | <b>BM</b>   |

SEP 28 1994