

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

|                                                        |   |                             |                               |                        |                                                          |                                       |  |                                                               |      |
|--------------------------------------------------------|---|-----------------------------|-------------------------------|------------------------|----------------------------------------------------------|---------------------------------------|--|---------------------------------------------------------------|------|
| Operator<br><b>Williams Production Company</b>         |   |                             |                               |                        | Lease or Unit Name<br><b>Rosa Unit</b>                   |                                       |  |                                                               |      |
| Test Type<br><b>X Initial      Annual      Special</b> |   |                             | Test Date<br><b>11/3/2005</b> |                        | Well Number (API #)<br><b>#232A (API # 30-039-29507)</b> |                                       |  |                                                               |      |
| Completion Date<br><b>11/3/2005</b>                    |   | Total Depth<br><b>3396'</b> |                               | Plug Back TD           |                                                          | Elevation<br><b>6416'</b>             |  | Unit    Sec    Twp    Rng<br><b>J      20      31N    05W</b> |      |
| Casing Size<br><b>5 1/2"</b>                           |   | Weight<br><b>17#</b>        |                               | Set At<br><b>3385'</b> |                                                          | Perforations:<br><b>3140' - 3298'</b> |  | County<br><b>Rio Arriba</b>                                   |      |
| Tubing Size<br><b>2 7/8"</b>                           |   | Weight<br><b>6.5#</b>       |                               | Set At<br><b>3353'</b> |                                                          | Perforations:                         |  | Pool<br><b>Basin</b>                                          |      |
| Type Well - Single-Bradenhead-GG or GO Multiple        |   |                             |                               | Packer Set At          |                                                          | Formation<br><b>Fruitland Coal</b>    |  |                                                               |      |
| Producing Thru<br><b>Tubing</b>                        |   | Reservoir Temp. oF          |                               | Mean Annual Temp. oF   |                                                          | Barometer Pressure - Pa               |  | Connection                                                    |      |
| L                                                      | H | Gq<br><b>0.6</b>            | %CO2                          | %N2                    | %H2S                                                     | Prover<br><b>3/4"</b>                 |  | Meter Run                                                     | Taps |

  

| FLOW DATA |                  |                |                  |                | TUBING DATA      |                | CASING DATA      |                |                  |
|-----------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|
| NO        | Prover Line Size | X Orifice Size | Pressure p.s.i.g | Temperature oF | Pressure p.s.i.g | Temperature oF | Pressure p.s.i.g | Temperature oF | Duration of Flow |
| SI        | <b>2" X 3/4"</b> |                |                  |                | <b>300</b>       | <b>68</b>      | <b>750</b>       |                | <b>0</b>         |
| 1         |                  |                |                  |                | <b>225</b>       | <b>68</b>      | <b>625</b>       |                | <b>0.5 hr</b>    |
| 2         |                  |                |                  |                | <b>225</b>       | <b>62</b>      | <b>500</b>       |                | <b>1.0 hr</b>    |
| 3         |                  |                |                  |                | <b>25</b>        | <b>62</b>      | <b>420</b>       |                | <b>1.5 hrs</b>   |
| 4         |                  |                |                  |                | <b>20</b>        | <b>53</b>      | <b>300</b>       |                | <b>2.0 hrs</b>   |
| 5         |                  |                |                  |                | <b>15</b>        | <b>53</b>      | <b>300</b>       |                | <b>3.0 hrs</b>   |

  

| RATE OF FLOW CALCULATION |                        |  |  |      |             |                      |                   |                             |                      |
|--------------------------|------------------------|--|--|------|-------------|----------------------|-------------------|-----------------------------|----------------------|
| NO                       | Coefficient (24 Hours) |  |  | hwPm | Pressure Pm | Flow Temp. Factor Fl | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
| 1                        | <b>9.604</b>           |  |  |      | <b>27</b>   | <b>1.0068</b>        | <b>1.29</b>       | <b>1.002</b>                | <b>337</b>           |
| 2                        |                        |  |  |      |             |                      |                   |                             |                      |
| 3                        |                        |  |  |      |             |                      |                   |                             |                      |
| 4                        |                        |  |  |      |             |                      |                   |                             |                      |

  

| NO | Pr | Temp. oR | Tr | Z | Gas Liquid Hydrocarbon Ration               | Mcf/bbl.      |
|----|----|----------|----|---|---------------------------------------------|---------------|
| 1  |    |          |    |   | A.P.I Gravity of Liquid Hydrocabrons _____  | Deq.          |
| 2  |    |          |    |   | Specific Gravity Separator _____            | XXXXXX        |
| 3  |    |          |    |   | Specific Gravity Flowing Fluid xxxxxxxxxxxx |               |
| 4  |    |          |    |   | Critical Pressure _____ p.s.i.a.            | ____ p.s.i.a. |
| 5  |    |          |    |   | Critical Temperature _____ R                | ____ R        |

  

| NO | Pt1 | Pw         | Pw2          | Pc2-Pw2       | (1) Pc2 =<br>Pc2-Pw2 | (2) Pc2^n =<br>Pc2-Pw2 |
|----|-----|------------|--------------|---------------|----------------------|------------------------|
| 1  |     | <b>312</b> | <b>97344</b> | <b>483300</b> | <b>1.2014153</b>     | <b>1.1475454</b>       |
| 2  |     |            |              |               |                      |                        |
| 3  |     |            |              |               |                      |                        |
| 4  |     |            |              |               |                      |                        |

  

|                                  |  |              |                      |                         |
|----------------------------------|--|--------------|----------------------|-------------------------|
| Absolute Open Flow<br><b>387</b> |  | Mcf @ 15.025 | Angle of Slope _____ | Slope, n<br><b>0.75</b> |
|----------------------------------|--|--------------|----------------------|-------------------------|

  

|                         |                                     |                                     |             |
|-------------------------|-------------------------------------|-------------------------------------|-------------|
| Remarks:                |                                     |                                     |             |
| Approved By Commission: | Conducted By:<br><b>Mark Lepich</b> | Calculated By:<br><b>Tracy Ross</b> | Checked By: |