

3 - NMOCD 2 - Pioneer 1 - EPN (Clark)

1 - File

## OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-122  
Revised 10-1-78STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

|                                                                                                                           |              |                         |                     |                                    |                    |                                    |           |                              |  |
|---------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|---------------------|------------------------------------|--------------------|------------------------------------|-----------|------------------------------|--|
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |              |                         |                     |                                    |                    | Test Date<br>2-27-81               |           |                              |  |
| Company<br>Pioneer Production Corp.                                                                                       |              |                         |                     | Connection                         |                    |                                    |           |                              |  |
| Pool<br>Basin Dakota                                                                                                      |              |                         |                     | Formation<br>Dakota                |                    |                                    |           | Unit                         |  |
| Completion Date<br>2-21-81                                                                                                |              | Total Depth<br>6260'    |                     | Plug Back TD<br>6261'              |                    | Elevation<br>6250'                 |           | Farm or Lease Name<br>Dustin |  |
| Coq. Size<br>4 1/2"                                                                                                       | Wt.<br>11.6# | d<br>4.000              | Set At<br>6299' RKB | Perforations:<br>From 6073 To 6181 |                    | Well No.<br>1E                     |           |                              |  |
| Tbg. Size<br>1 1/4"                                                                                                       | Wt.<br>2.3#  | d<br>1.380              | Set At<br>5959'     | Perforations:<br>From open end To  |                    | Unit Sec. Twp. Rge.<br>J 6 29N 12W |           |                              |  |
| Type Well - Single - Bradenhead - G.C. or G.O. Multiple<br>dual: gas/gas                                                  |              |                         |                     |                                    |                    | Packer Set At<br>2766' cu.ft.      |           | County<br>San Juan           |  |
| Producing Thru<br>tbg.                                                                                                    |              | Reservoir Temp. °F<br># |                     | Mean Annual Temp. °F               |                    | Baro. Press. - P <sub>a</sub>      |           | State<br>NM                  |  |
| L                                                                                                                         | H            | Gg                      | % CO <sub>2</sub>   | % N <sub>2</sub>                   | % 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        |                                                              |   |              |                 |                      |             |                 |             |                 |                  |
| 1.        | See attached report for details of 8 hr. back pressure test. |   |              |                 |                      |             |                 |             |                 |                  |
| 2.        |                                                              |   |              |                 |                      |             |                 |             |                 |                  |
| 3.        |                                                              |   |              |                 |                      |             |                 |             |                 |                  |
| 4.        |                                                              |   |              |                 |                      |             |                 |             |                 |                  |
| 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                         |                       |                  |                         |                                  |                               |                                         |                      |
| 2                         |                       |                  |                         |                                  |                               |                                         |                      |
| 3                         |                       |                  |                         |                                  |                               |                                         |                      |
| 4                         |                       |                  |                         |                                  |                               |                                         |                      |
| 5                         |                       |                  |                         |                                  |                               |                                         |                      |

| NO. | P <sub>t</sub> | Temp. °R | T <sub>t</sub> | Z | Gas Liquid Hydrocarbon Ratio | A.P.I. Gravity of Liquid Hydrocarbons | Specific Gravity Separator Gas | Specific Gravity Flowing Fluid | Critical Pressure | Critical Temperature |
|-----|----------------|----------|----------------|---|------------------------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| 1   |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 2   |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 3   |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 4   |                |          |                |   |                              |                                       |                                |                                |                   |                      |
| 5   |                |          |                |   |                              |                                       |                                |                                |                   |                      |

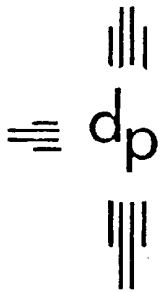
  

| NO. | P <sub>t</sub> | P <sub>w</sub> | P <sub>c</sub> | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ | (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ |
|-----|----------------|----------------|----------------|-----------------------------------------------------------|-------------------------------------|------------------------------------------------------|
| 1   |                |                |                |                                                           |                                     |                                                      |
| 2   |                |                |                |                                                           |                                     |                                                      |
| 3   |                |                |                |                                                           |                                     |                                                      |
| 4   |                |                |                |                                                           |                                     |                                                      |
| 5   |                |                |                |                                                           |                                     |                                                      |

|                                                                                       |  |  |  |                        |  |                |  |
|---------------------------------------------------------------------------------------|--|--|--|------------------------|--|----------------|--|
| Absolute Open Flow _____ Mcfd @ 15.025                                                |  |  |  | Angle of Slope @ _____ |  | Slope, n _____ |  |
| Remarks: _____                                                                        |  |  |  |                        |  |                |  |
| Approved by Division _____ Conducted by: _____ Calculated by: _____ Checked by: _____ |  |  |  |                        |  |                |  |





# dugan production corp.

Pioneer Production Corporation  
Dustin #1E

## BACK PRESSURE TEST

### Dakota Formation

2" Critical Flow Prover

3/4" Plate

| <u>2-27-81</u> | <u>Dakota<br/>Tubing</u> | <u>Chacra<br/>Casing</u> | <u>Prover Pressure</u> |
|----------------|--------------------------|--------------------------|------------------------|
| Shut In        | 1120                     | 750                      |                        |
| 7:40 a.m.      | ON                       |                          |                        |
| 8:00 a.m.      | 610                      | 750                      | 132                    |
| 8:30 a.m.      | 540                      | 750                      | 116                    |
| 9:30 a.m.      | 265                      | 750                      | 80                     |
| 10:30 a.m.     | 175                      | 750                      | 55                     |
| 11:30 a.m.     | 145                      | 750                      | 55                     |
| 12:30 p.m.     | 135                      | 750                      | 55                     |
| 1:30 p.m.      | 110                      | 750                      | 45                     |
| 2:30 p.m.      | 110                      | 750                      | 45                     |
| 3:30 p.m.      | 105                      | 750                      | 45                     |



Tank 1" - oil produced, 1.68 bbls.

Q = 696 MCFPD

CAOF = 702 MCFPD

