

Submit in duplicate to  
appropriate district office  
See Rule 401 & Rule 1122

State of New Mexico  
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>ORYX ENERGY                                                                                                   |                             |                                  |                                  |                                                           | Lease or Unit Name<br>BOGLE FLATS                                                                     |                                            |                         |                                          |                    |             |                        |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                                  |                                  |                                                           | Test Date<br>8-18-95                                                                                  |                                            | Well No.<br>77          |                                          |                    |             |                        |
| Completion Date<br>7-17-95                                                                                                |                             | Total Depth<br>7500              |                                  | Plug Back TD<br>7380                                      |                                                                                                       | Elevation                                  |                         | Unit Ltr. - Sec. - TWP - Rge.<br>5-22-23 |                    |             |                        |
| Csg. Size<br>7"                                                                                                           | Wt.<br>26                   | d                                | Set At<br>7500                   | Perforations:<br>From: 6940 To: 7040                      |                                                                                                       |                                            | County<br>EDDY          |                                          |                    |             |                        |
| Tbg. Size<br>3 1/2                                                                                                        | Wt.<br>9.3                  | d                                | Set At<br>6879                   | Perforations:<br>From: To:                                |                                                                                                       |                                            | Pool                    |                                          |                    |             |                        |
| Type Well - Single - Bradenhead - G.G. or G.O. Multiple<br>single                                                         |                             |                                  |                                  | Packer Set At<br>6879                                     |                                                                                                       | Formation<br>CISCO UPPER PENN              |                         |                                          |                    |             |                        |
| Producing Thru<br>T8G                                                                                                     |                             | Reservoir Temp. °F<br>143 @ 6879 |                                  | Mean Annual Temp. °F<br>60                                |                                                                                                       | Baro. Press - P <sub>a</sub><br>13.2       |                         | Connection<br>SALES LINE                 |                    |             |                        |
| L<br>6879                                                                                                                 | H<br>6879                   | Gg<br>.627                       | % CO <sub>2</sub><br>.63         | % N <sub>2</sub><br>.86                                   | % H <sub>2</sub> S                                                                                    | Prover                                     | Meter Run<br>4.026      | Taps<br>FLG.                             |                    |             |                        |
| FLOW DATA                                                                                                                 |                             |                                  |                                  |                                                           | TUBING DATA                                                                                           |                                            |                         |                                          |                    |             |                        |
| NO.                                                                                                                       | Prover<br>Line<br>Size      | X                                | Orifice<br>Size                  | Press.<br>p.s.i.g.                                        | Diff.<br>h <sub>w</sub>                                                                               | Temp.<br>°F                                | Press.<br>p.s.i.g.      | Temp.<br>°F                              | Press.<br>p.s.i.g. | Temp.<br>°F | Duration<br>of<br>Flow |
| SI                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            | 768                     |                                          |                    |             |                        |
| 1.                                                                                                                        | 4 X 2.000                   |                                  |                                  | 752                                                       |                                                                                                       |                                            | 752                     |                                          |                    |             | 24 hr.                 |
| 2.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             | 24 hr.                 |
| 3.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 4.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 5.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| RATE OF FLOW CALCULATIONS                                                                                                 |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| NO.                                                                                                                       | COEFFICIENT<br>(24 HOUR)    | $\sqrt{h_w P_m}$                 | Pressure<br>P <sub>m</sub>       | Flow Temp.<br>Factor Ft.                                  | Gravity Factor<br>Fg.                                                                                 | Super Compress.<br>Factor, F <sub>pv</sub> | Rate of Flow<br>Q, Mcfd |                                          |                    |             |                        |
| 1.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 2.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 3.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 4.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 5.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| VOLUME MEASURED BY TOTAL FLOW METER                                                                                       |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| NO.                                                                                                                       | P <sub>r</sub>              | Temp. °R                         | T <sub>r</sub>                   | Z                                                         | Gas Liquid Hydrocarbon Ratio <u>DRY GAS</u> Mcf/bbl.                                                  |                                            |                         |                                          |                    |             |                        |
| 1.                                                                                                                        |                             |                                  |                                  |                                                           | A.P. I. Gravity of Liquid Hydrocarbons <u>DRY</u> Deg.                                                |                                            |                         |                                          |                    |             |                        |
| 2.                                                                                                                        |                             |                                  |                                  |                                                           | Specific Gravity Separator Gas <u>.627</u> XXXXXXXXXXXX                                               |                                            |                         |                                          |                    |             |                        |
| 3.                                                                                                                        |                             |                                  |                                  |                                                           | Specific Gravity Flowing Fluid <u>XXXXX</u>                                                           |                                            |                         |                                          |                    |             |                        |
| 4.                                                                                                                        |                             |                                  |                                  |                                                           | Critical Pressure <u>671</u> P.S.I.A. P.S.I.A.                                                        |                                            |                         |                                          |                    |             |                        |
| 5.                                                                                                                        |                             |                                  |                                  |                                                           | Critical Temperature <u>365</u> R R                                                                   |                                            |                         |                                          |                    |             |                        |
| P <sub>c</sub> <u>781.2</u> P <sub>c</sub> <sup>2</sup> <u>610.3</u>                                                      |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 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) $\frac{P_c^2}{P_c^2 - P_w^2} = 24.976$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 24.976$ |                                            |                         |                                          |                    |             |                        |
| 1.                                                                                                                        |                             | 765.4                            | 585.8                            | 24.4                                                      |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 2.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 3.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 4.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| 5.                                                                                                                        |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| Absolute Open Flow <u>8,367</u> Mcfd @ 15.025 Angle of Slope $\theta$ Slope, n                                            |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| Remarks: <u>NO FLUID PRODUCED DURING TEST</u>                                                                             |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| <u>1 POINT TEST</u>                                                                                                       |                             |                                  |                                  |                                                           |                                                                                                       |                                            |                         |                                          |                    |             |                        |
| Approved By Division<br><i>[Signature]</i>                                                                                |                             |                                  | Conducted By:<br>PRO WELL TESTER |                                                           |                                                                                                       | Calculated By:<br>BM                       |                         |                                          | Checked By:<br>BM  |             |                        |

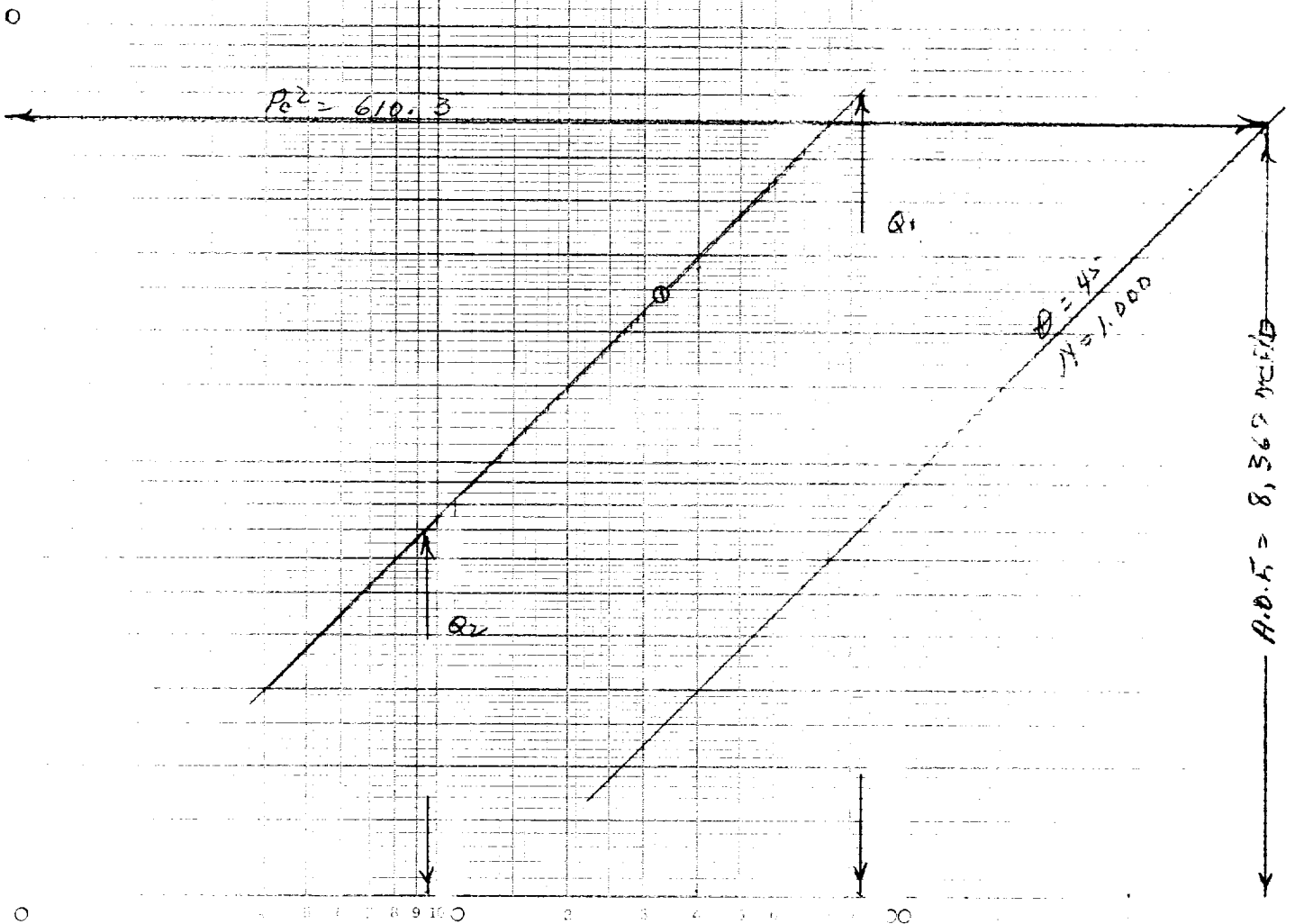
ORYX ENERGY  
 BOGLE FLATS, WELL # 11  
 5-22-23  
 EDDY COUNTY, NEW MEXICO  
 8-18-95

$$Q_1 = 950; \log = 2.977720$$

$$Q_2 = 95; \log = 1.977720$$

$$\text{SLOPE } N = 1.000$$

$P_{c2} - P_{w2}$  (thsnds)



Q MCF/DAY





# Laboratory Services, Inc.

1331 Tasker Drive  
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline  
Attention: Mr. Ray Ables  
P. O. Box 791  
Hobbs, New Mexico 88241

SAMPLE  
IDENTIFICATION: Bogle Flats #11  
COMPANY: Oryx  
LEASE:  
PLANT:

SAMPLE DATA: DATE SAMPLED: 08-18-95  
ANALYSIS DATE: 08-19-95  
PRESSURE - PSIG  
SAMPLE TEMP. °F  
ATMOS. TEMP. °F 90.00

GAS (XX) LIQUID ( )  
SAMPLED BY: Ray Ables  
ANALYSIS BY: Vickie Walker

REMARKS: Sampled @ Well Head.

## COMPONENT ANALYSIS

| COMPONENT        |       | MOL<br>PERCENT | GPM   |
|------------------|-------|----------------|-------|
| Hydrogen Sulfide | (H2S) |                |       |
| Nitrogen         | (N2)  | 0.86           |       |
| Carbon Dioxide   | (CO2) | 0.63           |       |
| Methane          | (C1)  | 90.66          |       |
| Ethane           | (C2)  | 5.02           | 1.340 |
| Propane          | (C3)  | 1.50           | 0.412 |
| I-Butane         | (IC4) | 0.26           | 0.085 |
| N-Butane         | (NC4) | 0.43           | 0.135 |
| I-Pentane        | (IC5) | 0.15           | 0.056 |
| N-Pentane        | (NC5) | 0.13           | 0.046 |
| Hexane Plus      | (C6+) | 0.36           | 0.149 |
|                  |       | 100.00         | 2.223 |

BTU/CU.FT. - DRY  
AT 14.650 DRY  
AT 14.650 WET  
AT 14.73 DRY  
AT 14.73 WET

1093  
1090  
1071  
1096  
1077

MOLECULAR WT. 18.1455

SPECIFIC GRAVITY -  
CALCULATED  
MEASURED

0.627