

FILE WORKING

OCT 16 1978

## MULTI-POINT BACK-PRESSURE TEST REPORT

|                                                                                                                         |       |                            |                        |                             |        |                               |             |                             |          |                    |          |                          |  |
|-------------------------------------------------------------------------------------------------------------------------|-------|----------------------------|------------------------|-----------------------------|--------|-------------------------------|-------------|-----------------------------|----------|--------------------|----------|--------------------------|--|
| Type Test: <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Special |       |                            |                        |                             |        |                               |             |                             |          | Test Date 4-17-78  |          | Lease No. or Serial No.  |  |
| Company CO <sub>2</sub> In Action                                                                                       |       |                            |                        |                             |        |                               |             |                             |          | Connection         |          | Allottee                 |  |
| Field Santa Rosa                                                                                                        |       |                            |                        |                             |        |                               |             |                             |          | Location           |          | Unit                     |  |
| Completion Date                                                                                                         |       | Total Depth 928            |                        | Plug Back TD (908 measured) |        | Elevation                     |             | Form or Lease Name Gonzales |          |                    |          |                          |  |
| Csg. Size 7"                                                                                                            | Wt. d | Set At 907'                | Perforations: From 908 |                             | To 928 |                               | Well No. #2 |                             |          |                    |          |                          |  |
| Tbg. Size                                                                                                               | Wt. d | Set At                     | Perforations: From     |                             | To     |                               | Sec. 9      |                             | Twp. 21N |                    | Rge. 30E |                          |  |
| Type Completion (Describe) Single (CO <sub>2</sub> )                                                                    |       |                            |                        |                             |        |                               |             |                             |          | Packer Set At      |          | County or Parish Harding |  |
| Producing Thru CSG.                                                                                                     |       | Reservoir Temp. F 80 @ 898 |                        | Mean Ground Temp. F 74      |        | Baro. Press. - P <sub>a</sub> |             | State New Mexico            |          |                    |          |                          |  |
| 898 L                                                                                                                   |       | 898 H                      |                        | 1.520 G                     |        | % CO <sub>2</sub> 100         |             | % N <sub>2</sub>            |          | % H <sub>2</sub> S |          |                          |  |
|                                                                                                                         |       |                            |                        |                             |        | Prover 2"                     |             | Meter Run                   |          | Taps               |          |                          |  |

| FLOW DATA |                    |                    |             |                      | TUBING DATA |             | CASING DATA |             | Duration of Flow, Hr. |         |
|-----------|--------------------|--------------------|-------------|----------------------|-------------|-------------|-------------|-------------|-----------------------|---------|
| NO.       | Prover Size XXXX X | Choke Orifice Size | Press. psig | Diff. h <sub>w</sub> | Temp. F     | Press. psig | Temp. F     | Press. psig |                       | Temp. F |
| SI        |                    |                    |             |                      |             |             |             | 38.4        |                       | 72+     |
| 1.        | 2" x 1/4           |                    | 37.8        |                      | 60          |             |             | 37.8        |                       | 3/4     |
| 2.        | 2" x 3/8           |                    | 37.0        |                      | 60          |             |             | 37.0        |                       | 3/4     |
| 3.        | 2" x 1/2           |                    | 36.0        |                      | 60          |             |             | 36.0        |                       | 3/4     |
| 4.        | 2" x 1             |                    | 29.1        |                      | 60          |             |             | 29.1        |                       | 3/4     |
| 5.        |                    |                    |             |                      |             |             |             |             |                       |         |

| 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.  | 1.115                 |                  | 50.3                    | 1.000                             | .8111                          | 1.000                                  | 45                   |
| 2.  | 2.439                 |                  | 49.5                    | 1.000                             | .8111                          | 1.000                                  | 98                   |
| 3.  | 4.388                 |                  | 48.5                    | 1.000                             | .8111                          | 1.000                                  | 173                  |
| 4.  | 17.53                 |                  | 41.6                    | 1.000                             | .8111                          | 1.000                                  | 591                  |
| 5.  |                       |                  |                         |                                   |                                |                                        |                      |

| NO. | P <sub>i</sub> | Temp. R | T <sub>i</sub> | Z     |
|-----|----------------|---------|----------------|-------|
| 1.  | .05            | 520     | .95            | 1.000 |
| 2.  | .04            | 520     | .95            | 1.000 |
| 3.  | .04            | 520     | .95            | 1.000 |
| 4.  | .04            | 520     | .95            | 1.000 |
| 5.  |                |         |                |       |

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ Mcf/bbl  
 API Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
 Specific Gravity Separator Gas 1.520  
 Specific Gravity Flowing Fluid x x x x x  
 Critical Pressure 1073 psia  
 Critical Temperature 548 R

P<sub>c</sub> 50.9 P<sub>c</sub><sup>2</sup> 2.591P<sub>i</sub> P<sub>i</sub><sup>2</sup>

| NO. | P <sub>i</sub> | P <sub>i</sub> <sup>2</sup> | P <sub>c</sub> <sup>2</sup> - 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> | P <sub>s</sub> | P <sub>s</sub> <sup>2</sup> | P <sub>i</sub> <sup>2</sup> - P <sub>s</sub> <sup>2</sup> |
|-----|----------------|-----------------------------|-----------------------------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|----------------|-----------------------------|-----------------------------------------------------------|
| 1.  |                |                             |                                                           | 50.3           | 2.530                       | .061                                                      |                |                             |                                                           |
| 2.  |                |                             |                                                           | 49.5           | 2.450                       | .141                                                      |                |                             |                                                           |
| 3.  |                |                             |                                                           | 48.5           | 2.352                       | .239                                                      |                |                             |                                                           |
| 4.  |                |                             |                                                           | 41.6           | 1.731                       | .860                                                      |                |                             |                                                           |
| 5.  |                |                             |                                                           |                |                             |                                                           |                |                             |                                                           |

ADF 1,700  
 n 1.000

Mcf/d

REC'D. - AMARILLO

APR 20 1978

BAKER &amp; TAYLOR

Commission

Company

Others

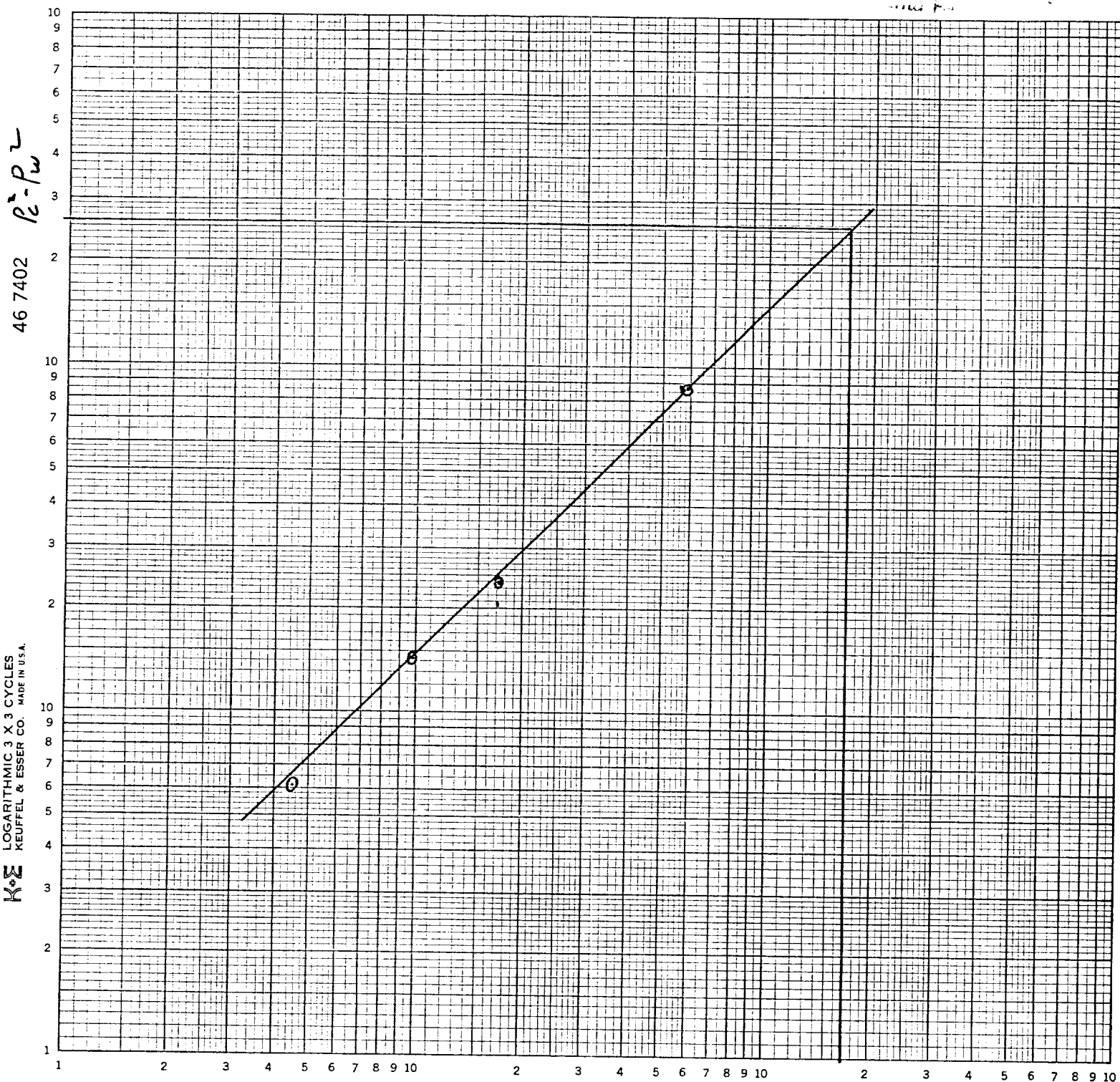
PRITCHARD-MCGLOTHLIN INC.

Form BPT 5

OPERATOR:  
LEASE:  
WELL NO.:  
DATE:

CO<sub>2</sub> IN ACTION  
Gonzales  
#2  
4-17-78

OCT 16 1978



K&S LOGARITHMIC 3 X 3 CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.

Q → MCF/D

AOB - 1,700 MCF/D  
θ - 45.0  
n - 1.000

100-1008000

| DATE<br>Time of<br>Reading                                                                                                                                                                                                                                                                                             | ELAP.<br>TIME<br>Hrs. | WELLHEAD WORKING PRESSURE |              |            | METER OR PROVER  |       |            |         | REMARKS<br>(Include liquid production data:<br>Type - API Gravity - Amount) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|--------------|------------|------------------|-------|------------|---------|-----------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                        |                       | Tbg.<br>Psig              | Csg.<br>Psig | Temp.<br>F | Pressure<br>Psig | Diff. | Temp.<br>F | Orifice |                                                                             |
|                                                                                                                                                                                                                                                                                                                        |                       |                           | 38.4         |            |                  |       |            |         |                                                                             |
|                                                                                                                                                                                                                                                                                                                        |                       |                           | 37.8         | 60         | 37.8             |       |            | 1/4"    | end 1st pt.                                                                 |
|                                                                                                                                                                                                                                                                                                                        |                       |                           | 37.0         | 600        | 37.0             |       |            | 3/8"    | end 2nd pt.                                                                 |
|                                                                                                                                                                                                                                                                                                                        |                       |                           | 36.0         | 100        | 36.0             |       |            | 1/2"    | end 3rd pt.                                                                 |
|                                                                                                                                                                                                                                                                                                                        |                       |                           | 29.1         | 600        | 29.1             |       |            | 1"      | end 4th pt. 650                                                             |
| <div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; transform: rotate(-45deg); font-size: 2em; font-weight: bold;">Show</div> <div style="position: absolute; top: 50%; left: 20%;">45 min</div> <div style="position: absolute; top: 30%; left: 40%;">flow</div> </div> |                       |                           |              |            |                  |       |            |         |                                                                             |