

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

45P  
File  
Form C-122  
Revised 9-1-65

|                                                                                                                        |  |                                |  |                                |  |                                           |  |                                                                  |  |                                                              |  |
|------------------------------------------------------------------------------------------------------------------------|--|--------------------------------|--|--------------------------------|--|-------------------------------------------|--|------------------------------------------------------------------|--|--------------------------------------------------------------|--|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |  |                                |  |                                |  | Test Date 7/14/83                         |  | RECEIVED BY<br><b>SEP 01 1983</b><br>G. C. D.<br>ARTESIA, OFFICE |  |                                                              |  |
| Company <b>Getty Oil Company</b> ✓                                                                                     |  |                                |  |                                |  | Connection <b>None</b>                    |  |                                                                  |  |                                                              |  |
| Pool <b>Pecos Slope</b> <i>abo</i>                                                                                     |  |                                |  |                                |  | Formation <b>Abo</b>                      |  |                                                                  |  |                                                              |  |
| Completion Date <b>4/21/83</b>                                                                                         |  | Total Depth <b>4200'</b>       |  | Plug back TD <b>4117'</b>      |  | Elevation <b>3757.3 GR</b>                |  |                                                                  |  |                                                              |  |
| Csg. Size <b>5 1/2</b>                                                                                                 |  | Wt. <b>14#</b>                 |  | Set At <b>5.012</b>            |  | Set At <b>4200</b>                        |  | Perforations: <b>From 3774 To 4030</b>                           |  | Well No. <b>2</b>                                            |  |
| Tkg. Size <b>2 3/8</b>                                                                                                 |  | Wt. <b>4.7</b>                 |  | Set At <b>1.995</b>            |  | Set At <b>3703</b>                        |  | Perforations: <b>From open To ended</b>                          |  | Unit <b>A</b> Sec. <b>7</b> Twp. <b>T6S</b> Rge. <b>R26E</b> |  |
| Type Well - Single - Prodenhead - G.G. or G.O. Multiple <b>Single</b>                                                  |  |                                |  |                                |  | Packer Set At <b>None</b>                 |  | County <b>Chaves</b>                                             |  |                                                              |  |
| Producing Thru <b>tbq.</b>                                                                                             |  | Reservoir Temp. °F <b>4200</b> |  | Mean Annual Temp. °F <b>60</b> |  | Baro. Press. - P <sub>a</sub> <b>13.2</b> |  | State <b>New Mexico</b>                                          |  |                                                              |  |
| L <b>3703</b>                                                                                                          |  | H <b>3703</b>                  |  | Gg <b>0.74</b>                 |  | % CO <sub>2</sub> <b>8</b>                |  | % N <sub>2</sub> <b>11</b>                                       |  | % H <sub>2</sub> S <b>-</b>                                  |  |
| Prover                                                                                                                 |  | Meter Run <b>3"</b>            |  | Flange <b>flange</b>           |  |                                           |  |                                                                  |  |                                                              |  |

| 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. | Temp. °F |                  |          |
| 1.        | 3"               | 1.0 | 300          | 7               | 72                   | 980      | 71°             | 945      | 910             | 877      | 839              | 0.75 hr. |
| 2.        | "                | "   | "            | 20              | 71                   | 895      | "               | 910      | "               | "        | "                | 0.50 "   |
| 3.        | "                | "   | "            | 28              | 71                   | 860      | "               | 877      | "               | "        | "                | 0.75 "   |
| 4.        | "                | "   | "            | 52              | 70                   | 820      | "               | 839      | "               | "        | "                | 1.25 "   |

| RATE OF FLOW CALCULATIONS |                       |                  |                         |                       |                               |                                         |                      |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------------------|-----------------------------------------|----------------------|
| NO.                       | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P <sub>m</sub> | Flow Temp. Factor Ft. | Gravity Factor F <sub>g</sub> | Super. Compens. Factor, F <sub>pv</sub> | Rate of Flow Q, Mscf |
| 1                         | 4.801                 | 46.82            | 313.2                   | 0.9887                | 0.74                          | 1.026                                   | 265.0                |
| 2                         | "                     | 79.15            | "                       | 0.9896                | 0.74                          | 1.026                                   | 448.3                |
| 3                         | "                     | 109.09           | "                       | 0.9896                | 0.74                          | 1.026                                   | 617.9                |
| 4                         | "                     | 127.62           | "                       | 0.9905                | 0.74                          | 1.026                                   | 724.2                |

|     |                |          |                |       |                                                                                                                                                                                                                                                     |
|-----|----------------|----------|----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NO. | P <sub>r</sub> | Temp. °R | T <sub>r</sub> | Z     | Gas Liquid Hydrocarbon Ratio _____ Mol/mol.<br>A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.<br>Specific Gravity Separator Gas _____<br>Specific Gravity Flowing Fluid _____<br>Critical Pressure _____ P.S.I.A.<br>Critical Temperature _____ R |
| 1   | 0.459          | 532      | 1.47           | 0.950 |                                                                                                                                                                                                                                                     |
| 2   | "              | 531      | 1.47           | 0.950 |                                                                                                                                                                                                                                                     |
| 3   | "              | 531      | 1.47           | 0.950 |                                                                                                                                                                                                                                                     |
| 4   | "              | 530      | 1.47           | 0.949 |                                                                                                                                                                                                                                                     |

|     |                |                |                             |                                                           |                                                                                                                                                                       |
|-----|----------------|----------------|-----------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NO. | P <sub>r</sub> | P <sub>w</sub> | P <sub>w</sub> <sup>2</sup> | P <sub>r</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | (1) $\frac{P_r^2}{P_r^2 - P_w^2} = 4.932$<br>(2) $\left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4.561$<br>(3) $\left[ \frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2,919$ |
| 1   |                | 958.2          | 918.1                       | 68.3                                                      |                                                                                                                                                                       |
| 2   |                | 923.2          | 852.3                       | 134.1                                                     |                                                                                                                                                                       |
| 3   |                | 890.2          | 792.5                       | 193.9                                                     |                                                                                                                                                                       |
| 4   |                | 852.2          | 726.2                       | 260.2                                                     |                                                                                                                                                                       |

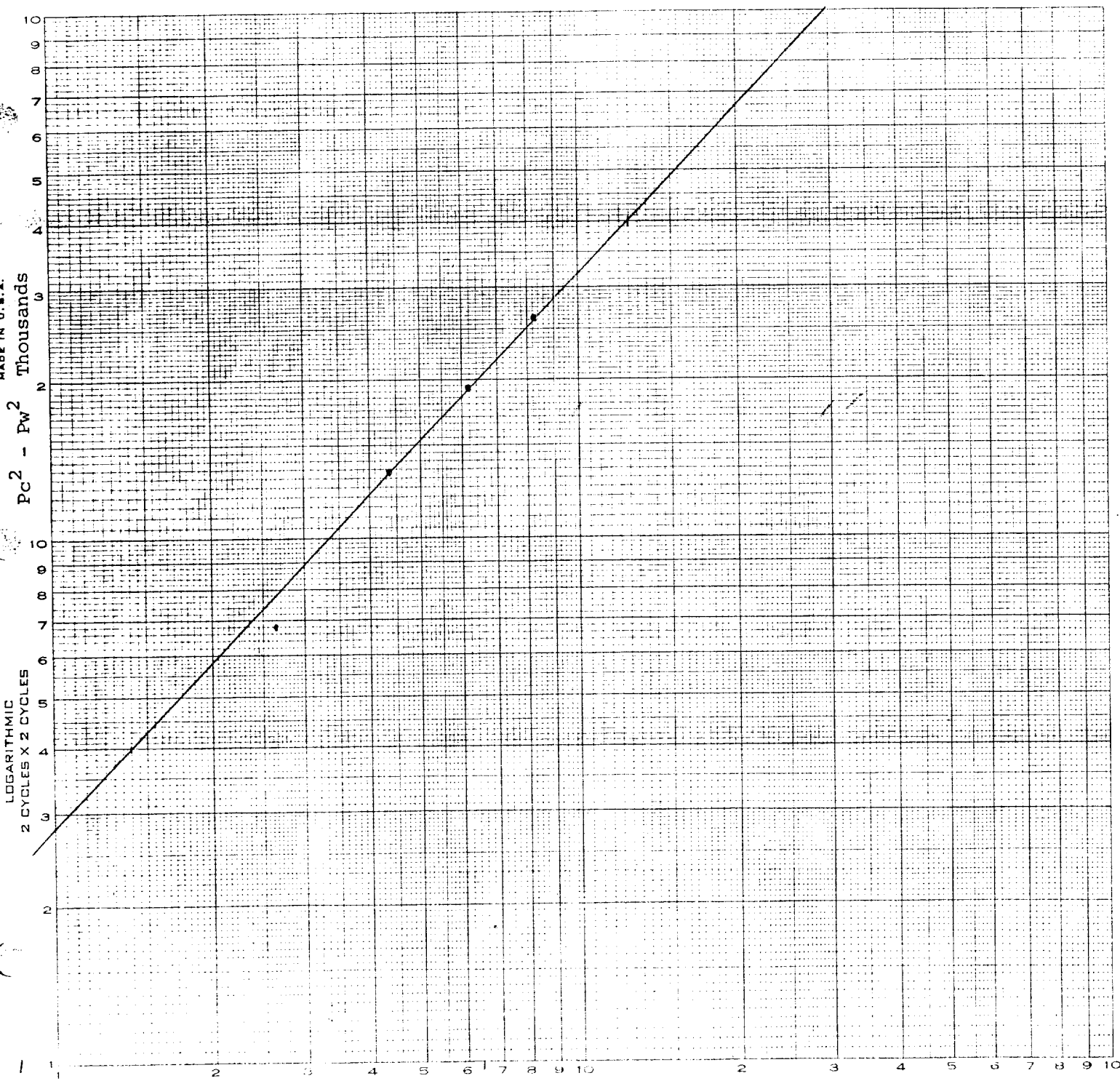
  

|                                |  |                                  |  |                               |  |
|--------------------------------|--|----------------------------------|--|-------------------------------|--|
| Absolute Open Flow <b>2919</b> |  | Btu/lb. 15,625                   |  | Angle of Slope <b>0.951</b>   |  |
| Remarks:                       |  |                                  |  |                               |  |
| Approved By Commission:        |  | Conducted By: <b>Bill Krafft</b> |  | Checked By: <b>Phil Smith</b> |  |

*Post FD-2  
9-2-83  
Comp + Bk.*

DIETZGEN CORPORATION  
MADE IN U.S.A.

NO. 340-L22 DIETZGEN GRAPH PAPER  
LOGARITHMIC  
2 CYCLES X 2 CYCLES



Q, Mcfd  
Q1 - 1250 Mcfd;      Log Q1 = 3.097  
Q2 - 140 Mcfd;      Log Q2 = 2.146

n = 0.951

# NEW-TEX LAB

PHONE 505/393-3561

P. O. BOX 1161

611 W. SNYDER

HOBBS, NEW MEXICO 88240

## ANALYSIS CERTIFICATE

CLIENT: GETTY OIL CO.  
ADDRESS: BOX 730  
CITY, STATE: HOBBS NEW MEXICO 88240

ANALYSIS NUMBER: 999  
DATE OF RUN: 07/15/83  
DATE SECURED: 07/14/83

SAMPLE IDENT: GETTY GC FED. COM #2  
SAMPLING PRESS: SAMPLING TEMP:

REMARKS: ABO GAS

### \*\*\*\*\* GAS ANALYSIS \*\*\*\*\*

|                | MOLE<br>PERCENT | GAL/<br>MCF |
|----------------|-----------------|-------------|
| NITROGEN       | 11.316          |             |
| CARBON DIOXIDE | 7.523           |             |
| METHANE        | 73.176          |             |
| ETHANE         | 4.697           | 1.253       |
| PROPANE        | 1.759           | 0.483       |
| ISO-BUTANE     | 0.290           | 0.095       |
| NORMAL BUTANE  | 0.590           | 0.185       |
| ISO-PENTANE    | 0.172           | 0.063       |
| NORMAL PENTANE | 0.181           | 0.065       |
| HEXANES        | 0.114           | 0.047       |
| HEPTANES PLUS  | 0.182           | 0.084       |
| TOTAL          | 100.000         | 2.275       |

|              |      |                    |      |
|--------------|------|--------------------|------|
| PROPANE GPM: | 0.48 | BUTANES GPM:       | 0.28 |
| ETHANE GPM:  | 1.25 | PENTANES PLUS GPM: | 0.26 |

SPECIFIC GRAV (CALC): 0.7402  
MOLE WEIGHT: 21.46

| PPV-BTU/CU FT | PRESSURE (PSIA) | WET | DRY |
|---------------|-----------------|-----|-----|
| 14.596        |                 | 929 | 925 |
| 14.650        |                 | 936 | 922 |
| 14.735        |                 | 941 | 927 |
| 14.775        |                 | 944 | 937 |

RH HAMILTON



RECEIVED  
AUG 26 1983  
C.C.O.  
HUBBS OFFICE