3-NMOCC 1-File

NEW MEXICO OIL CONSERVATION COMMSSION

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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OIL CON. COM.
DIST. 3

| | | | | |
|---|---|---|---|---|
| Type Test: [X] Initial [ ] Annual [ ] Special | | | Test Date: 10-24-72 | |
| Company: Dugan Production Corp. | Connection: | | | |
| Pool: Undesignated P.C. | Formation: Pictured Cliffs | | | Unit: |
| Completion Date: 10-14-72 | Total Depth: 667 | Plug Back TD: 667 | Elevation: 5658 GR | Farm or Lease Name: Pet. Inc. |
| Csg. Size: 2 7/8" O.D. / Wt.: 5.9# / d: / Set At: 667 | | Perforations: From 616 To 667 | | Well No.: 6 |
| Tbg. Size: / Wt.: / d: / Set At: | | Perforations: From To | | Unit: B / Sec.: 36 / Twp.: 28N / Rge.: 15W |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single - Gas | | Packer Set At: | | County: San Juan |
| Producing Thru: | Reservoir Temp. °F @ | Mean Annual Temp. °F | Baro. Press. – $P_a$ | State: New Mexico |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | .62 | | | | | | |

| | FLOW DATA | | | | TUBING DATA | | CASING DATA | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | Duration of Flow |
| SI | | | | | 75 | | | | 7 days |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| 3. | 5/8" Pos. Choke | 39 | | 60° | | | | | 3 hrs |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

## RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2. | | | | | | | |
| 3. | 8.5417 | | 51 | 1.000 | .9837 | 1.000 | 429 |
| 4. | | | | | | | |
| 5. | | | | | | | |

| NO. | $P_r$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

$P_c$ 87 $P_c^2$ 7569

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | 2601 | 4968 |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5236$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^{n=.85} = 1.4303$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 614$

Absolute Open Flow 614 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n .85

Remarks: Pt = Pw Friction Negligible

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | Jim L. Jacobs | Jim L. Jacobs | |