NEW MEXICO OIL CONSERVATION COMMISSION

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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JUN 27 1978
O. C. C.
ARTESIA, OFFICE

| | | | |
|---|---|---|---|
| Type Test: ☒ Initial ☐ Annual ☐ Special | Test Date: 6-20-78 | | |
| Company: Bass Enterprises Prod. Co. | | Unit | |
| Pool: Morrow | | Lease Name: Big Eddy | |
| Completion Date | Total Depth | Plug Back TD | Elevation |
| Csg. Size: 2 3/8 Wt. | d | Set At | Perforations: From To |
| Tbg. Size | Wt. | d | Set At |
| Type Well: Single – Bradenhead – G.G. or G.O. Multiple | | Packer Set At | Well No.: 53 |
| Producing Thru: | Reservoir Temp. °F: 188 | Mean Annual Temp. °F | Baro. Press. – $P_a$ |
| | | | Unit: — Sec.: 8 Twp.: 21-S Rge.: 28-E |
| | | | County: Eddy |
| | | | State: New Mexico |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | .63 | 0 | 0 | 0 | | 3.068 | Flange |

| NO. | FLOW DATA: Prover Line Size | X | Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | TUBING DATA: Press. p.s.i.g. | Temp. °F | CASING DATA: Press. p.s.i.g. | Temp. °F | Duration of Flow |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SI | | | | | | | 3665 | | | | |
| 1. | 3.068 | | 1.125 | 539 | 1.0 | 77 | 3366 | 72 | Packer | | 60 Min. |
| 2. | 3.068 | | 1.125 | 539 | 6.13 | 74 | 2575 | 72 | in Well | | 60 Min. |
| 3. | 3.068 | | 1.125 | 547 | 9.25 | 72 | 1967 | 73 | | | 60 Min. |
| 4. | 3.068 | | 1.125 | 547 | 11.05 | 72 | 1351 | 73 | | | 60 Min. |
| 5. | | | | | | | | | | | |

## RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Supercompress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | 6.0[illegible] | 23.50 | 552.2 | .9840 | 1.260 | 1.049 | |
| 2 | 6.0[illegible] | 58.18 | 552.2 | .9868 | 1.260 | 1.049 | |
| 3 | 6.0[illegible] | 71.99 | 560.2 | .9887 | 1.260 | 1.051 | 574 |
| 4. | 6.0[illegible] | 78.68 | 560.2 | .9887 | 1.260 | 1.051 | 628 |
| 5. | | | | | | | |

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| NO. | $P_r$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1 | .82 | 537 | 1.46 | .908 |
| 2 | .82 | 534 | 1.45 | .908 |
| 3 | .82 | 532 | 1.45 | .906 |
| 4 | | | | |
| 5 | | | | |

Gas Liquid Hydrocarbon Ratio: 77 to 1 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 52 Deg.
Specific Gravity Separator Gas: .63 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 670 P.S.I.A. P.S.I.A.
Critical Temperature: 368 R R

$P_c$ 467[illegible] $P_c^2$ 23807

| NO | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|
| 1 | 4460.2 | 19393 | 3914 |
| 2 | 3377.2 | 11405 | 12402 |
| 3 | 2672.2 | 7141 | 16666 |
| 4 | | | |
| 5 | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4285$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3286$

$\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 763$

Absolute Open Flow: 763 Mcfd @ 15.025 Angle of Slope θ: 51.5 Slope, n: .7968

Remarks: PW Substituted for PT measured with Amerada Instrument 35745 - Third rate used for Calculations

| Approved by Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | | | |