MULTIP[illegible]IT AND ONE POINT BACK PRESSU[illegible] TEST FOR GAS WELL

Revised 9-1-65

RECEIVED BY
SEP 11 1985
O. C. D.
ARTESIA, OFFICE

| | | | | | |
|---|---|---|---|---|---|
| Type Test: [X] Initial FOUR POINT [ ] Annual [ ] Special | | | | Test Date: 1-30-85 | |
| Company: ANADARKO PRODUCTION CO. | | | Connection: TO AIR NEW WELL | | |
| Pool: WILDCAT | | | Formation: LOCO HILLS | | Unit: |
| Completion Date: 01-29-85 | Total Depth: 11075 | | Plug Back T.D.: 3100 | Elevation: 3481 | Farm or Lease Name: NM AA STATE |
| Csg. Size: 4.500 / Wt.: 11.0 / d: 4.052 / Set At: 3100 | | | Perforations: From 2180 To 2186 | | Well No.: #1 |
| Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 2142 | | | Perforations: From 0 To 0 | | Unit: [ ] Sec.: 35 Twp.: 18S Rge.: 28E |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | | | Packer Set At: 2120 | | County: EDDY |
| Producing Thru: TUBING | Reservoir Temp. °F: 90°@ 2120 | | Mean Annual Temp. °F: 60,0 | Baro. Press. – $P_a$: 13.2 | State: NEW MEXICO |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| 2183 | 2183 | 0.707 | 0.68 | 1.54 | 1.11 | 0 | 2.1 | FLANGE |

| | FLOW DATA | | | | TUBING DATA | | B.H.P. 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. | CHOKE | Duration of Flow |
| SI | | | | | 417 | | 771 | | 72.0 |
| 1. | 2.07 X 1.500 | 103 | 20.0 | 42 | 575 | | 695 | 14/64 | 2.0 |
| 2. | 2.07 X 1.500 | 104 | 35.0 | 42 | 535 | | 663 | 17/64 | 1.0 |
| 3. | 2.07 X 1.500 | 102 | 55.0 | 42 | 482 | | 631 | 21/64 | 1.0 |
| 4. | 2.07 X 1.500 | 102 | 76.0 | 42 | 425 | | 602 | 25/64 | 1.0 |
| 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 | 12.76 | 48.21 | 116.2 | 1.0178 | 1.1895 | 1.0147 | 756. |
| 2 | 12.76 | 64.05 | 117.2 | 1.0178 | 1.1895 | 1.0148 | 1004. |
| 3 | 12.76 | 79.60 | 115.2 | 1.0178 | 1.1895 | 1.0145 | 1247. |
| 4 | 12.76 | 93.57 | 115.2 | 1.0178 | 1.1895 | 1.0145 | 1466. |
| 5 | | | | | | | |

| NO. | $P_t$ | Temp. °R | $T_r$ | Z |
|---|---|---|---|---|
| 1 | 0.17 | 502. | 1.29 | .971 |
| 2 | 0.17 | 502. | 1.29 | .971 |
| 3 | 0.17 | 502. | 1.29 | .972 |
| 4 | 0.17 | 502. | 1.29 | .972 |
| 5 | | | | |

Gas Liquid Hydrocarbon Ratio 10.2 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 31.3 Deg.
Specific Gravity Separator Gas 0.707 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.974
Critical Pressure 674. P.S.I.A. 661. P.S.I.A.
Critical Temperature 388. R 472. R

$P_c$ 701.3 $P_c^2$ 492.

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | 502. | 637. | 406. | 86. |
| 2 | 457. | 610. | 372. | 120. |
| 3 | 415. | 582. | 339. | 153. |
| 4 | 378. | 557. | 310. | 182. |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.7071$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.4141$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3540.0$

Absolute Open Flow 3540.0 Mcfd @ 15.025 Angle of Slope @ 48.5 Slope, n 0.885

Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENTS BY B&C WIRE LINE.

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | BENNETT&CATHEY INC. | BENNETT & CATHEY INC | RICHARD TOWNLEY |