EW MEXICO OIL CONSERVATION C[illegible]ISSION
MULTIPOIN. AND ONE POINT BACK PRESSURE .EST FOR GAS WELL

Form C-122
Revised 10-1-65

RECEIVED
AUG 11 1982
O. C. D.
ARTESIA, OFFICE

| | | | | | |
|---|---|---|---|---|---|
| Type Test: ☒ Initial ☐ Annual ☐ Special | | | | Test Date: 7-28-82 | |
| Company: MESA PETROLEUM CO. | | Connection: UNCONNECTED | | | Unit |
| Pool: PECOS SLOPE ABO | | Formation: ABO | | | |
| Completion Date: 7-28-82 | Total Depth: 4200' | | Plug Back TD: 4124' | Elevation: 3601' | Farm or Lease Name: NEAL COM |
| Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 4200' | | | Perforations: From 3773' To 3875' | | Well No.: 1 |
| Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 3838' | | | Perforations: From OPEN ENDED To | | Unit: E / Sec.: 5 / Twp.: 7S / Rge.: 26E |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | | | Packer Set At: NONE | | County: CHAVES |
| Producing Thru: TUBING | Reservoir Temp. °F: 94° @ 4200' | Mean Annual Temp. °F: 60 | Baro. Press. – $P_a$: 13.2 | | State: NEW MEXICO |

| L | H | Gg | % $CO_2$ | % $N_2$ | % $H_2S$ | Prover | Meter Run | Taps |
|---|---|---|---|---|---|---|---|---|
| | | .65 | 1 | 1 | | 2" CRITICAL FLOW PROVER | | |

| | 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 | | | | | 865 | | 870 | | 72 HRS |
| 1. | 2" x .5" | 83 | | 76 | 130 | 76 | 150 | | 1 HR |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 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 | 4.279 | FLOW PROVER | 96 | .9850 | 1.24 | | 502 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

| NO. | $P_t$ | 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 _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

$P_c$ 883 $P_c^2$ 780

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | | 163 | 27 | 753 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0359$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0359$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 520$

Absolute Open Flow 520 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1

Remarks: Unable to run four flow rates due to low delivery of well.
Assumed N=1 and based calculations on one point test.

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | JAMES CRAIG | E.L. BUTTROSS, JR 8-9-82 | |

MESA PETROLEUM CO.
NEAL COM NO. 1
CHAVES CO., NM
7-28-82