NEW MEXICO OIL CONSERVATION COMMISSION

HORSE OFFICE COC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Formation County

Eumont

| No. (Line) Size psig hw OF. psig O | Initia | al | A | .mnual | | Spe c : | ial_ | | Date of | Test 6-1 | 8 to 6-22-56 | |
|--|--|---|--|--|----------------|----------------|-------------------|------------------|--|--|--------------|--|
| Unit Sec. 10 No. 21S Rge. 368 Purchaser 28750 perf. 3620 rog 3620 | | | | | | | | | | | | |
| Casing Mt. 17 1.0 4.892 Set a 37750 Perf. 2895 To 3628 Tubing Wit. 4.7 1.5 1.995 Set at 3392 Perf. Nome To nome Tubing Zero 2895 To 3620 1 3392 Zero 6.680 GL 2307 Bar.Press. 13.2 Producing Thru: Casing Tubing Tubing Type Nell dingle Reservoir Temp. Type Tangs Tangs Tested Through The Type Tangs Tangs Tested Through The Type Tangs Tangs No. (Line) (Orifice) Press. Diff. Temp. Press. Temp. Press. Temp. Our Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Size Psig Diff. Temp. Press. Temp. Press. Temp. Our Size Size Size Psig Diff. Diff | Unit | J S | Sec | o lwp. 21 | S Rge | . 36E | Purc | haserK | L Paso Nat | tural Ga | s Company | |
| Tubing 2 Mt. 4.7 1.3. 1.995 Set at 3392 Perf. 1000 To | | | | | | | | | | | | |
| Cas Pay: From 2895 To 3620 3392 x0 6.680 Gl 2807 Bar.Press. 13.2 | | | | | | | | | | | | |
| Producing Thru: Casing | | | | | | | | | | | | |
| Date of Completion: 1-16-56 Packer 3332 Reservoir Temp. | Produc | ing Thrus | Casin | ıø | Tub | ing | * | Type We | ell si | ngle | | |
| Tested Through (Press Diff. Temp. Press. Temp. Durat Cline) (Orifice) Press. Diff. Temp. Press. Temp. Press. Temp. Durat Off. Size Size psig hw Off. psig Off. Of | Data | Re- | ion: 1 | -1 8- 56 | Packer | 339 | Sin | gle-Brade | enhead-G. | G. or G | .O. Dual | |
| Tested Through (Frover) (CHOKE) (Meter) Type Taps Flow Data Casing Data Casing Data Casing Data Casing Data Of F Of F Of F Of F Of F Of F Size | Date (| or compres | 1011. | | r acker | | | |) | | | |
| Flow Data | | | | | • . | OBSERVI | ED DATA | i | | 173 , | 2 764 | |
| No. (Line) (Crioke) Press Diff Temp. Press Temp. Press Temp. Of F | Tested | l Through | (Prover |) (Unoke) | (Meter) | | | | Type Tar | os | | |
| No. (Line) Size psig hw oF. psig oF. psig oF. hr. of F. psig oF. oF. oF. | | ALC: UNIVERSE | Flo | w Data | Diff | Temn. | | | | | Duration | |
| SI 1. 1.79 | No. | (Line) | (Orific | e) | | 1 | | 1 | | | of Flow | |
| 1. | ST | Size | Size | psig | n _w | -F• | 1018 | F. | harg | F • | - | |
| FLOW CALCULATIONS FLOW CALCULATIONS Flow Temp. Factor F | 1. | * | .] | 1 - | | | | | | | | |
| Provided Pressure Flow Temp. Factor Fa | | | | | | | 103 | ļ | | | 2 | |
| Proceeding | | 7 | | | 1 4 - 4 | | | | | | | |
| FLOW CALCULATIONS Flow Temp. Gravity Compress. Rate of Flow Temp. Factor | | | | | | | | | | | | |
| 1. 17.27 85.46 76.2 0.7762 0.7373 1.072 16.52 2. 17.27 127.6 602.2 6.7771 0.7373 1.072 2.407 3. 13.7 163.5 757.2 0.7761 0.7373 1.072 3166 4. 17.27 200.3 757.2 0.7761 0.7373 1.072 3166 5. PRESSURE CALCUIATIONS Cas Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity Flowing Fluid Pc 1031.2 pc 1031.4 Pc 1031.2 pc 1031 | No. | | | ressure Flow Te | | Temp. | Gravity Factor | Factor | | Q-MCFPD | | |
| 2. 17.27 12.6 102.2 0.77.1 0.7575 1.072 24.57 3. 13.27 103.5 375.2 0.77.21 0.7575 1.072 314.6 4. 17.27 200.5 375.2 0.77.21 0.7575 1.072 314.6 5. PRESSURE CALCUTATIONS as Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity Flowing Fluid Pc 1031.2 Pc 1031.2 Pc 1043.4 No. Pw Pt (psia) Pt FcQ (FcQ) ² (FcQ) ² Pw ² Pc ² -Pw Cal. Pw Fc 1. 36.2 36.2 36.2 36.2 36.2 36.2 36.2 36. | | | | | | | t F _g | | L | | 1 | |
| 3c |]. - | | | | | | | 0.7373 | | | 24.69 | |
| PRESSURE CALCULATIONS as Liquid Hydrocarbon Ratio cf/bbl. as Liquid Hydrocarbons deg. C | 3. | 1 | | | | 0.9941 | | 0.9393 | | | 3166 | |
| PRESSURE CALCUTATIONS Sas Liquid Hydrocarbon Ratio cf/bbl. Specific Gravity Separator Gas Specific Gravity Flowing Fluid Pc 1031.2 P2 1063.4 No. Pw Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Fc 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | 4. | L | | 200.3 | 589.2 | 0.9981 | | 0.9393 1.0 | | 68 | 3865 | |
| No. Pt (psia) Pt FcQ (FcQ)2 (FcQ)2 Pw2 Pc-Pw Cal. Pw Pc | as Lie | y of Liqui | d Hydrod | carbons | | cf/bbl. | | Spec: Spec: | ific Grav. | ity Flow | ring Fluid | |
| 1. 797.2 137.3 15.41 297.3 19.4 778.7 85.5 379.7 22. 115.2 374.4 43.4 43.4 43.4 43.4 43.4 43.4 43. | No. | | Pt ² | F _c Q | $(F_cQ)^2$ | (F | (cQ) ² | P _w 2 | P _c ² -P _w ² | Ca I | Pw Pc | |
| 3. 27.2 717.7 31.46 767.7 143.5 25.2 26.2 447.4 43.4 4. 765.2 525.5 38.40 1474.5 216.8 22.3 261.1 511.6 49.6 Absolute Potential: MCFPD; n COMPANY Humble Cit & Refining Company ADDRESS Box 2347, Hobbs, R.M. | 1. | | 737-3 | | 497.3 | 39. | | 772.7 | | 270 | 7 23.2 | |
| Absolute Potential: MCFPD; n COMPANY Humble Cil & Refining Company ADDRESS Box 2347, Nobbe, N.M. | | | | | · | 1 2 | | | | | | |
| Absolute Potential: MCFPD; n | | | | | | | | | | | | |
| Absolute Potential: MCFPD; n COMPANY Humble Cil & Refining Company ADDRESS Box 2347, Nobbe, E.M. | 77 0 | | | | | | | | | | | |
| WITNESSED LA PASO Natural Cascompany COMPANY El Paso Natural Cascompany Test No. 1, poor point alignment. See Test No. 2 | Absol COMPA ADDRE AGENT WITNE COMPA | NY Hau SS Do and TITLI SSED NY | while CAII x 2347, 2347, 24 Mark El Paso | Natural C | M. det | riet sy | perinte. | dent | | | | |

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve_shall be of at least three inch cycles.

NOMENCLATURE

- Q = Actual rate of flow at end of flow period at W. H. working pressure (P_W). MCF/da. @ 15.025 psia and 600 F.
- P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia
- PwT Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia
- Pt- Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia
- Pf Meter pressure, psia.
- hw Differential meter pressure, inches water.
- Fg Gravity correction factor.
- Ft Flowing température correction factor.
- F_{nv} Supercompressability factor.
- n I Slope of back pressure curve.

Note: If $P_{\rm W}$ cannot be taken because of manner of completion or condition of well, then $P_{\rm W}$ must be calculated by adding the pressure drop due to friction within the flow string to $P_{\rm t}$.