



BACK PRESSURE TEST FOR NATURAL GAS WELLS

TEST: INITIAL ANNUAL RETEST OAC 165:10-17-6

DATE OF TEST: _____ DATE OF 1ST SALES: _____

| | | | | | | | | | |
|---------------------------------------|--|-----|-----|-----|-----------------------|-----|--------------|-----|-----------------------|
| Operator | | | | | | | Operator # | | |
| Address | | | | | City | | ST | ZIP | |
| E-mail | | | Ph | | Fax | | Well Name/# | | |
| Gas Volumes to be Reported to OCC by: | | | | | Gas Volume Reporter # | | API # | | |
| Producing Zone | | | | | | | OTC Lease # | | |
| Surface Location | | 1/4 | 1/4 | 1/4 | 1/4 | Sec | Twp | Rge | (OCC use) Allowable # |
| Zone Location (if different) | | 1/4 | 1/4 | 1/4 | 1/4 | Sec | Twp | Rge | County |
| Field | | | | | | | Spacing Size | | |

COMPLETION: Single Multiple Zone Commingled Recompletion Date of Completion _____

| | | | | | | | | |
|-------------|---|-----------------|------------------|-------------------|-----------------------|------------------|-----------|------|
| Total Depth | | Plug Back Depth | | Packer Set Depth | | Elevation | | |
| Csg Size | | WT | d | Depth Set | | Perfs. | | |
| Tbg Size | | WT | d | Depth Set | | Perfs. | | |
| Prod. Thru | | Res. Temp. F @ | | Mean Grd. Temp. F | | Atm. Press. PSIA | | |
| L | H | G _g | %CO ₂ | %N ₂ | H ₂ S(ppm) | Prover | Meter Run | Taps |

| SHUT-IN DATA | | FLOW DATA | | | | | | TUBING DATA | | CASING DATA | | BHP DATA | | FLOW (HRS) |
|--------------|-------|-----------|---|--------------|--------------|------------------|----------|--------------|----------|--------------|----------|--------------|----------|------------|
| PRESS | (HRS) | PROVER | | | DIFF | | | PRESS (PSIG) | TEMP (F) | PRESS (PSIG) | TEMP (F) | PRESS (PSIG) | TEMP (F) | |
| | | LINE SIZE | X | ORIFICE SIZE | PRESS (PSIG) | (INCHES) (ROOTS) | TEMP (F) | | | | | | | |
| | | | | | | | | | | | | | | |

RATE OF FLOW CALCULATIONS

| | | | | | | |
|-----------------------|------------------|-------------------------|----------------------------------|-------------------------------|---------------------------------------|-----------------------|
| COEFFICIENT (24 HOUR) | $\sqrt{h_w P_m}$ | PRESSURE P _m | FLOW TEMP. FACTOR F _t | GRAVITY FACTOR F _g | SUPER COMPRESS FACTOR F _{pv} | RATE OF FLOW (Q) MCFD |
| | | | | | | |

| | | | |
|----------------|---------|----------------|---|
| P _r | TEMP. R | T _r | Z |
| | | | |

| | | |
|------------------------------------|------|--------------------------------|
| Gas/Liquid Hydrocarbon Ratio | | MCF/BBL |
| API Gravity of Liquid Hydrocarbons | | Deg. |
| Specific Gravity Separator Gas | | Specific Gravity Flowing Fluid |
| Critical Pressure | PSIA | Critical Pressure |
| Critical Temperature | R | Critical Temperature |

P_c _____ (PSIA) P_c² _____

| | | |
|----------------|-----------------------------|---|
| P _w | P _w ² | P _c ² - P _w ² |
| | | |

[1] $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{\quad}{\quad}$ (Not to exceed 5.263) [2] $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{\quad}{\quad}$ WHAOF=Q $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{\quad}{\quad}$

Calculated wellhead open flow MCFD @ 14.65 Angle of Slope _____ Slope, n _____

Remarks _____

Approved by Commission: _____ Conducted by: _____ Calculated by: _____ Checked by: _____

WITNESSED - OCC FIELD STAFF: Y N NAME: _____ DATE: _____

IF THE ALLOWABLE FOR THIS WELL HAS BEEN ADJUSTED BY COMMISSION ORDER, PLEASE GIVE THE ORDER NUMBER(S) IN ONE OR MORE OF THE CATEGORIES BELOW:

INCREASED DENSITY _____ LOCATION EXCEPTION* _____

COMMINGLING _____ MULTIPLE ZONE _____

SEPARATE OR SPECIAL ALLOWABLE* _____

OTHER PENALTY ORDER(S)* _____

* FOR THESE ORDER TYPES, PLEASE DESCRIBE ALLOWABLES AND/OR PENALTIES:

I declare that I have knowledge of the contents of this report and am authorized by my organization to make this report, which was prepared by me or under my supervision and direction, with the data and facts stated herein to be true, correct and complete to the best of my knowledge and belief.

SIGNATURE

TITLE

COMPANY

DATE

PHONE NO.

- Pc SHUT-IN PRESSURE, PSIA (LENGTH OF SHUT-IN MINIMUM OF 24 HOURS).
- Pw STATIC COLUMN WELLHEAD PRESSURE CORRESPONDING TO THE FLOWING WELLHEAD PRESSURE, PSIA (TO BE RECORDED AT END OF EACH FLOW RATE.) THE VALUE OF Pw SHOULD NOT EXCEED 90% OF Pc.
- Gg SPECIFIC GRAVITY OF SEPARATOR GAS (AIR = 1.000).
- L LENGTH OF THE FLOW STRING FROM THE MIDDLE OF THE PRODUCING FORMATION TO THE PRESSURE POINT AT WELLHEAD, FEET.
- H VERTICAL DEPTH CORRESPONDING TO L, FEET.
- Q 24 HOUR RATE OF FLOW, MCF/D.
- d INSIDE DIAMETER, INCHES.
- R DEGREES, RANKINE (DEGREES FAHRENHEIT ABSOLUTE).
- Pr REDUCED PRESSURE, DIMENSIONLESS.
- Tr REDUCED TEMPERATURE, DIMENSIONLESS.
- Z COMPRESSIBILITY FACTOR, DIMENSIONLESS.