

P140
3-5-81

STATE OF KANSAS - CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM 0-2
8-7-58

15-023-20061-0000

TYPE TEST: Deliverability Open Flow TEST DATE: 2-14-81

COMPANY: Murphy Dalg. Co. LEASE: N. Jenkins WELL NO.: 1-31-

COUNTY: Cheyenne LOCATION: SECTION 31 TWP 4 RNG 39 ACRES 6.40

FIELD: Cherry Creek RESERVOIR: Neohoran PIPELINE CONNECTION: Cheyenne Nat. Pipe Line

COMPLETION DATE: 1-15-80 PLUG BACK TOTAL DEPTH: 1384 PACKER SET AT: _____

CASING SIZE: 4 1/2 WT. _____ I.D. _____ SET AT: 1432 PERF. TO: 1786

TUBING SIZE: _____ WT. _____ I.D. _____ SET AT: _____ PERF. TO: 1315

TYPE COMPLETION (Describe): Single gas TYPE FLUID PRODUCTION: _____

PRODUCING THRU: Opening RESERVOIR TEMPERATURE F: _____ BAR. PRESS - P_a: 14.4

GAS GRAVITY - G_g: 5.80 % CARBON DIOXIDE: _____ % NITROGEN: _____ API GRAVITY OF LIQUID: _____

VERTICAL DEPTH (H): _____ TYPE METER CONN.: fls (METER RUN) (PROVER) SIZE: 2

SHUT-IN PRESSURE: SHUT IN 2-14 1981 AT _____ (AM)(PM) TAKEN 2-17 1981 AT _____ (AM)(PM)

FLOW TEST: STARTED 2-17 1981 AT _____ (AM)(PM) TAKEN 2-18 1981 AT _____ (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN _____ HR.

| SHUT-IN OR FLOW | ORIFICE SIZE in. | (METER) (PROVER) PRESSURE psig | DIP ^h in. (h _w)(h _d) | FLOWING TEMP. t | WELL-HEAD TEMP. t | CASINO WELLHEAD PRESS | | TUBING WELLHEAD PRESS | | DURATION HOURS | LIQUID PROD. Bbls. |
|-----------------|------------------|--------------------------------|---|-----------------|-------------------|-----------------------|--|-----------------------|--|----------------|--------------------|
| | | | | | | psig | (P _w)(P _i)(P _c) psia | psig | (P _w)(P _i)(P _c) psia | | |
| SHUT-IN | | | | | | 188.7 | 203.1 | | | | |
| FLOW | 3/8 | 70.0 | 9.0 | | | 177.5 | 191.9 | | | | |

RATE OF FLOW CALCULATIONS

| COEFFICIENT (F _p)(F _d) Mcfd | (METER) (PROVER) PRESSURE psia | EXTENSION $\sqrt{P_m \times h_w}$ | GRAVITY FACTOR F _g | FLOWING TEMP. FACTOR F _t | DEVIATION FACTOR F _{pv} | RATE OF FLOW R Mcfd | GOR | G _m |
|---|--------------------------------|-----------------------------------|-------------------------------|-------------------------------------|----------------------------------|---------------------|-----|----------------|
| .6860 | 84.4 | 27.561 | 1.313 | 1.000 | 1.000 | 25.0 | | |

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 41.2; (P_w)² = 36.8; P_d = _____ % (P_c - 14.4) + 14.4 = _____; (P_w)² = 0.207; (P_d)² = _____

| (P _c) ² - (P _w) ² or (P _c) ² - (P _d) ² | (P _c) ² - (P _w) ² | $\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$ | LOG [] | "n" | n x LOG [] | ANTILOG | OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd |
|--|---|---------------------------------------|---------|------|-------------|---------|--|
| 41.0 | 4.4 | 9.3182 | .9693 | .820 | .7949 | 6.2352 | 156 |

OPEN FLOW 156 Mcfd @ 14.65 psia DELIVERABILITY 156 Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the _____ day of _____, 19____.

Witness (if any)
Clyde Wiley
For Commission

For Company _____
Checked by _____

STAT. FEB 25 1981