

15-103-20406-00-00
STATE OF KANSAS - CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM O-2
8-7-58

TYPE TEST: Deliverability Open Flow **TEST DATE:** April 9, 1990

COMPANY Fairway Petroleum, Inc. **LEASE** Trujillo **WELL NO.** 1

COUNTY Leavenworth **LOCATION** NW SW SE **SECTION** 12 **TWP** 8S **RNG** 21E **ACRES** 36

FIELD McLouth **RESERVOIR** **PIPELINE CONNECTION** LAGGS, INC.

COMPLETION DATE 12/18/85 **PLUG BACK TOTAL DEPTH** 1332 **PACKER SET AT**

CASING SIZE WT. 4 1/2" **I.D.** 4 1/2" **SET AT** 1332 **PERF.** 1235 **TO** 1245

TUBING SIZE WT. 2 3/8" **I.D.** 2 3/8" **SET AT** 1268 **PERF.** **TO**

TYPE COMPLETION (Describe) Perforation **TYPE FLUID PRODUCTION** Oil

PRODUCING THRU 2 3/8" Tubing **RESERVOIR TEMPERATURE F** 77° **BAR. PRESS - P_a** 14.4 Psia

GAS GRAVITY - G_g 0.5957 **% CARBON DIOXIDE** 0 **% NITROGEN** 6.95 **API GRAVITY OF LIQUID** 23.1

VERTICAL DEPTH (H) 1332 **TYPE WTER CONN.** Flange **(METER RUN)(PROVER) SIZE** 2"

SHUT-IN PRESSURE: SHUT IN March 29, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

FLOW TEST: STARTED April 3, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN 24 HR.

| SHUT-IN OR FLOW | ORIFICE SIZE in. | (METER) (PROVER) PRESSURE psig | DIFF. in. (h _w)(h _d) | FLOWING TEMP. t | WELL-HEAD TEMP. t | CASING WELLHEAD PRESS. | | TUBING WELLHEAD PRESS. | | DURATION HOURS | LIQUID PROD. Bbls. |
|-----------------|------------------|--------------------------------|--|-----------------|-------------------|------------------------|--|------------------------|--|----------------|--------------------|
| | | | | | | psig | (P _w)(P _t)(P _c) psia | psig | (P _w)(P _t)(P _c) psia | | |
| SHUT-IN | | | | | | 106 | 120.4 | | | 24 | |
| FLOW | .75 | 43 | 14.5 | 76.7 | 76.7 | 91 | 95.4 | | | 24 | |

RATE OF FLOW CALCULATIONS

| COEFFICIENT (F _p)(F _d) Mc/d | (METER) (PROVER) PRESSURE psia | EXTENSION √P _{res} h _w | GRAVITY FACTOR P _g | FLOWING TEMP. FACTOR F _L | DEVIATION FACTOR F _{pv} | RATE OF FLOW R Mc/d | GOR | Q _m |
|---|--------------------------------|--|-------------------------------|-------------------------------------|----------------------------------|---------------------|-----|----------------|
| 2.779 | 57.4 | 28.8 | 1.3003 | 0.9862 | 1.002 | 102.8 | | |

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

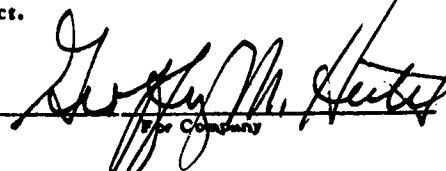
(P_c)² = 1445 (P_w)² = 9.1 P_d² = _____ % (P_c - 14.4) + 14.4 = _____ (P_w)² = 0.207 (P_d)² = _____

| (P _c) ² - (P _w) ² or (P _c) ² - (P _d) ² | (P _c) ² - (P _w) ² | $\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$ or $\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$ | LOG [] | "n" | n x LOG [] | ANTILOG | OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mc/d |
|--|---|--|---------|------|-------------|---------|--|
| | 5.4 | | | 0.85 | | | 270.5 |

OPEN FLOW 270.5 Mc/d @ 14.65 psia **DELIVERABILITY** Mc/d @ 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 12 day of May, 1990.



 For Company

Witness (if any) _____

CONSERVATION DIVISION
Wichita, Kansas

Checked by _____