

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

FORM O-3
8-7-58

15-005-20041-0000

TYPE TEST: Deliverability Open Flow **TEST DATE:** June 16, 1988

COMPANY: Fairway Petroleum, Inc. **LEASE:** PERDUE **WELL NO.:** 11

COUNTY: Atchison **LOCATION:** SW NW NE **SECTION:** 24 **TWP:** 7S **RNG:** 21E **ACRES:** 310.5

FIELD: McLouth **PIPELINE CONNECTION:** LAGGS, Inc.

COMPLETION DATE: 9/30/84 **PLUG BACK TOTAL DEPTH:** 1418' **PACKER SET AT:**

CASING SIZE: WT. L.D. SET AT PERF. TO
4 1/2" 1418' 1379-1385

TUBING SIZE: WT. L.D. SET AT PERF. TO

TYPE COMPLETION (Describe): Perforation **TYPE FLUID PRODUCTION:** Water

PRODUCING THRU: 4 1/2" casing **RESERVOIR TEMPERATURE F:** 80° **BAR. PRESS - P_a:** 14.4 Psia

GAS GRAVITY - G_g: .5745 **CARBON DIOXIDE:** 0 **NITROGEN:** 4.8 **API GRAVITY OF LIQUID:**

VERTICAL DEPTH (H): 1418 **TYPE METER CONN.:** (METER RUN) (PROVER) SIZE 2"

SHUT-IN PRESSURE: SHUT IN 19 86 AT (AM) (PM) TAKEN June 16 1988 AT 10 (AM) (PM)

FLOW TEST: STARTED 19 AT 10 (AM) (PM) TAKEN June 16 1988 AT 10:40 (AM) (PM)

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STATE CORPORATION COMMISSION
SEP 12 1988
REGISTRATION DIVISION
Kansas

OBSERVED DATA DURATION OF SHUT-IN 2 years HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h _w Xh _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w X P _t X P _c) psia	psig	(P _w (P _t X P _c) psia		
SHUT-IN						380.0	394.4				
FLOW	0.500	331.0	-	80	0	331.0	345.4				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F ₁)(F ₂) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
4.388	345.4	-	1.3193	0.9807	1.0045	1972		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

$\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
CALCULATED BY IBM COMPUTER				0.85			6796

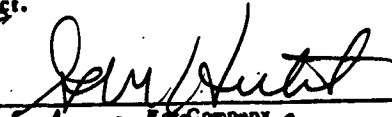
OPEN FLOW 6796 Mcfd @ 14.65 psia **DELIVERABILITY** Mcfd @ 14.65 psia

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 24 day of June, 1988.

Witness (if any)

For Completion


 J. Culbertson
 For Company
 Checked by