

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

FORM O-2
8-7-58

15-103-20898-000

TYPE TEST: Deliverability Open Flow **TEST DATE:** April 19, 1990

COMPANY: Fairway Petroleum, Inc. **LEASE:** Campbell **WELL NO.:** 1

COUNTY: Leavenworth **LOCATION:** NW NW NE **SECTION:** 12 **TWP:** 10S **RNG:** 22E **ACRES:** 40

FIELD: McLouth **RESERVOIR:** McLouth **PIPELINE CONNECTION:** Fairmont Pipelining System

COMPLETION DATE: 2/6/88 **PLUG BACK TOTAL DEPTH:** 1133 **PACKER SET AT:**

CASING SIZE: **WT.:** **LD.:** 4 1/2" **SET AT:** 1132 **PERF.:** 1042 **TO:** 1046

TUBING SIZE: **WT.:** **I.D.:** **SET AT:** **PERF.:** **TO:**

TYPE COMPLETION (Describe): Perforation **TYPE FLUID PRODUCTION:** None

PRODUCING THRU: 4 1/2" Casing **RESERVOIR TEMPERATURE F:** 73° **BAR. PRESS - P₀:** 14.4 Psia

GAS GRAVITY - G_g: 0.571 **% CARBON DIOXIDE:** 0 **% NITROGEN:** 2.4 **API GRAVITY OF LIQUID:**

VERTICAL DEPTH (H): 1132 **TYPE WTER CONN.:** Flange **(METER RUN)(PROVER) SIZE:** 2"

SHUT-IN PRESSURE: SHUT IN April 16, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

FLOW TEST: STARTED April 17, 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 _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						117	131.4			24	
FLOW	.75	55	6	73	73	89	103.4			24	

RATE OF FLOW CALCULATIONS

COEFFICIENT (P ₀) ² / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P _m h _w	GRAVITY FACTOR γ _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
2.779	69.4	20.4	1.3234	0.9871	1.027	76.1		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P₀)² = 17.3 ; (P_w)² = 10.7 ; P_d = _____ % (P_c = 14.4) + 14.4 = _____ ; (P_w)² = 0.207 ; (P_d)² = _____

(P _w) ² - (P ₀) ² / (P _w) ² - (P _d) ²	(P _c) ² - (P _w) ² / (P _c) ² - (P _d) ²	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R = ANTILOG Mcfd
	6.6		0.85			195.5

OPEN FLOW 195.5 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 12 day of May, 1990

Joseph M. Hest

of Company

Witness (if any)

MAY 29 1990
05-29-90
CORPORATION DIVISION
STATE OF KANSAS

Checked by