

STATE OF KANSAS - CORPORATION COMMISSION

FORM O-3
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-103-20986-0000

TYPE TEST: Deliverability Open Flow TEST DATE: April 11, 1990

COMPANY: Fairway Petroleum, Inc. LEASE: Stuckey WELL NO.: 2-1

COUNTY: Leavenworth LOCATION: SW SW SW SECTION: 29 TWP: 9S RNG: 23E ACRES: 40

FIELD: Reservoir McLouth PIPELINE CONNECTION: None

COMPLETION DATE: 3/30/88 PLUG BACK TOTAL DEPTH: 1210 PACKER SET AT:

CASINO SIZE: WT. I.D. 4 1/2" SET AT 1210 PERF. 1132 TO 1133

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: 72° BAR. PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: 0.593 % CARBON DIOXIDE: 0 % NITROGEN: 1.9 API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): 1210 TYPE METER CONN.: None (METER RUN)(PROVER) SIZE: 2"

SHUT-IN PRESSURE: SHUT IN April 2, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)
FLOW TEST: STARTED April 2, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN: Months 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	CASED 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						382	396.4			Months	
FLOW	.50	294	-----	72	72	292	306.4			1	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _p)(F _e) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_{R1}h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	O _m
4.388	306.4	-----	1.299	0.9887	1.015	1,753		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_e)² = 157.1 ; (P_w)² = 93.9 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_w)² = 0.207 (P_d)² = _____

$\frac{(P_e)^2 - (P_w)^2}{(P_e)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
	63.2			0.85			4,270.4

OPEN FLOW 4,270.4 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 this report is true and correct.

Executed this the 12 day of May, 1990.

[Signature]
For Company

Witness (if any) 05-29-90

Checked by