

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

FORM O-3  
8-7-58

15-103-20219-0000

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

COMPANY: Fairway Petroleum, Inc. LEASE: WILKES WELL NO. 1

COUNTY: Leavenworth LOCATION: SE SE NE SECTION: 26 TWP: 7S RNG: 21E ACRES: 240

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

COMPLETION DATE: 8/16/83 PLUG BACK TOTAL DEPTH: 1528' PACKER SET AT: \_\_\_\_\_

CASING SIZE: WT. 9.5 LD. 4 1/2" SET AT 1528' PERF. 1400-1414 TO \_\_\_\_\_

TUBING SIZE: WT. 2 3/8" LD. 2 3/8" SET AT 1435' PERF. \_\_\_\_\_ TO \_\_\_\_\_

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

PRODUCING THRU: 2 3/8" tubing RESERVOIR TEMPERATURE: 76° BAR. PRESS - P<sub>a</sub>: 14.4 Psia

GAS GRAVITY - G<sub>g</sub>: .600 % CARBON DIOXIDE: \_\_\_\_\_ W/NITROGEN: 4.67 API GRAVITY OF LIQUID: \_\_\_\_\_

VERTICAL DEPTH (H): 1528 TYPE METER CONN.: Barton (METER RUN (PROVER) SIZE) 2"

SHUT-IN PRESSURE: SHUT IN June 14 1988 AT 9:30 (AM)(PM) TAKEN June 16 1988 AT 3 (AM)(PM)

FLOW TEST: STARTED June 14 1988 AT 3:00 (AM)(PM) TAKEN June 16 1988 AT 3:45 (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN: 53.5 hr.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						192.0	206.4				
FLOW	0.50	110.0	-	76	-	110.0	124.4				

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR P <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
4.388	124.2	-	1.2910	0.9843	1.0081	701		

**(OPEN FLOW) (DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = \_\_\_\_\_ (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ (P<sub>w</sub>)<sup>2</sup> = 0.207 (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$\frac{(P_c)^2 - P_d^2}{(P_c)^2 - P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
CALCULATED BY IBM COMPUTER				0.85			1025

OPEN FLOW 1025 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) \_\_\_\_\_

Checked by L. Albertson