

15-103-20345-00-00  
**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 18, 1990

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

**COUNTY:** Leavenworth      **LOCATION:** SE NW SW      **SECTION:** 28      **TWP:** 8S      **RNG:** 22E      **ACRES:** 185

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

**COMPLETION DATE:** 6/18/85      **PLUG BACK TOTAL DEPTH:** 1370      **PACKER SET AT:**

**CASING SIZE:** WT. 4 1/2" I.D.      **SET AT:** 1370      **PERF.:** 1316      **TO:** 1328

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

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

**PRODUCING THRU:** 4 1/2" Casing      **RESERVOIR TEMPERATURE F:** 73°      **BAR. PRESS - P<sub>a</sub>:** 14.4 Psia

**GAS GRAVITY - G<sub>g</sub>:** 0.5857      **% CARBON DIOXIDE:** .2      **% NITROGEN:** 6.46      **API GRAVITY OF LIQUID:** 18.6

**VERTICAL DEPTH (H):** 1370      **TYPE WTEK CONN.:** Flange      **(METER RUN)(PROVER) SIZE:** 2"

**SHUT-IN PRESSURE:** SHUT IN April 15, 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 <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						292	306.4			24	
FLOW	(1).50	76	---	73	73	76	90.4			1	

(1) Well was tested to atmosphere RATE OF FLOW CALCULATIONS because well brought too much water to accurately gauge through a meter.

COEFFICIENT (F <sub>p</sub> )(F <sub>v</sub> ) Mc/d	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mc/d	GOR	G <sub>m</sub>
4.388(1)	90.4	-----	1.3067	0.9871	1.0102	516.9		

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

(P<sub>c</sub>)<sup>2</sup> = 93.9 ; (P<sub>w</sub>)<sup>2</sup> = 8.2 ; 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> = \_\_\_\_\_

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	$\frac{[P_c^2 - P_w^2]}{[P_c^2 - P_d^2]}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mc/d
	85.7			0.85			555.0

**OPEN FLOW** 555.0      **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.

Witness (if any)

*Chaffin*  
 \_\_\_\_\_  
 for Company  
 Checked by