

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

FORM O-3  
8-7-58

15-005-20033-0000

D  
P2  
5-23-89

**TYPE TEST:**  Deliverability  Open Flow **TEST DATE:** April 20, 1989

**COMPANY** Fairway Petroleum, Inc. **LEASE** Pohl **WELL NO.** 2

**COUNTY** Atchison **LOCATION** SE<sup>1</sup>/<sub>4</sub> **SECTION** 23 **TWP** 7S **RNG** 21E **ACRES** 40

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

**COMPLETION DATE** 9/30/83 **PLUG BACK TOTAL DEPTH** 1490 **PACKER SET AT**

**CASING SIZE** WT. 9.5 I.D. 4 1/2" **SET AT** 1490 **PERF.** 1407-1410, 1416-1423 & 1430-1434 **TO**

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

**TYPE COMPLETION (Describe)** Perforation **TYPE FLUID PRODUCTION** oil

**PRODUCING THRU** 4 1/2" Casing **RESERVOIR TEMPERATURE F** 75° **BAR. PRESS - P<sub>a</sub>** 14.4 Psia

**GAS GRAVITY - G<sub>g</sub>** 0.5720 **% CARBON DIOXIDE** .44 **% NITROGEN** 1.63 **API GRAVITY OF LIQUID** 20.8

**VERTICAL DEPTH (H)** 1490 **TYPE WATER CONN.** none **(METER RUN)(PROVER) SIZE** 2"

**SHUT-IN PRESSURE: SHUT IN** April 12, 1989 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

**FLOW TEST: STARTED** April 19, 1989 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

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>i</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>i</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						318	332.4			Years	
FLOW	1.00	*42	--	75	75	42	56.4			1	

\*Pressure varied with fluid

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (P <sub>i</sub> )(P <sub>w</sub> ) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P <sub>m</sub> h <sub>w</sub>	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	STATE CORPORATION COMMISSION MAY 22 1989 CONSERVATION DIVISION Wichita, Kansas
17.53	56.4	--	1.3222	0.9852	1.0055	1,295	

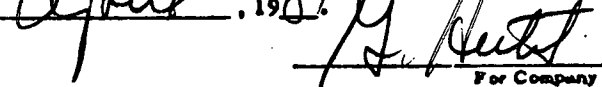
**(OPEN FLOW) (DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 110.5 ; (P<sub>w</sub>)<sup>2</sup> = 3.2 ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>c</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	$\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R = ANTILOG Mcfd
	107.3			0.85			1,307

**OPEN FLOW** 1,307 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 20 day of April, 1989.  For Company

Witness (if any) \_\_\_\_\_  
 \_\_\_\_\_  
 Checked by \_\_\_\_\_