

**STATE OF KANSAS - CORPORATION COMMISSION**  
**ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST** 15-103-20200-0000

FORM O-3  
8-7-58

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

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

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**COUNTY:** Leavenworth      **LOCATION:** NW 1/4      **SECTION:** 25      **TWP:** 7S      **RNG:** 21E      **ACRES:** 160

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

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**COMPLETION DATE:** 3/11/83      **PLUG BACK TOTAL DEPTH:** 1429'      **PACKER SET AT:**

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**CASINO SIZE:** WT. 9.5      LD. 4 1/2"      SET AT 1429      PERF. 1369-1378 TO 1386-1388

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**TUBING SIZE:** WT.      LD. 2 3/8"      SET AT 1410      PERF.      TO

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

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**PRODUCING THRU:** 2 3/8" tubing      **RESERVOIR TEMPERATURE F:** 79      **BAR. PRESS - P<sub>a</sub>:** 14.4 Psia

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**GAS GRAVITY - G:** .5912      **% CARBON DIOXIDE:**      **% NITROGEN:** 8.2      **API GRAVITY OF LIQUID:** 19.5

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**VERTICAL DEPTH (H):** 1429      **TYPE METER CONN.:** Barton      **(METER RUN) (PROVER) SIZE:** 2"

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**SHUT-IN PRESSURE:** SHUT IN \_\_\_\_\_ AT \_\_\_\_\_ (AM/PM) TAKEN \_\_\_\_\_ June 16 1988 AT 11 (AM/PM)

**FLOW TEST:** STARTED \_\_\_\_\_ AT 11 (AM/PM) TAKEN \_\_\_\_\_ June 16 1988 AT 11:50 (AM/PM)

**OBSERVED DATA**      DURATION OF SHUT-IN 3.5 months 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	CASINO 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						168.0	182.4				
FLOW	0.500	131.0	-	79	-	131.0	145.4				

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (F <sub>p</sub> )(F <sub>d</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P <sub>m</sub> h <sub>w</sub>	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	Q <sub>m</sub>
4.388	145.4	-	1.3142	0.9816	1.0045	828		

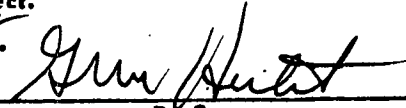
**(OPEN FLOW) (DELIVERABILITY) CALCULATIONS**

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

$\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
				0.85			1945

**OPEN FLOW** 1945      **Mcf/d @ 14.65 psia**      **DELIVERABILITY**      **Mcf/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 24 day of June, 1988.  
  
 G. Culbertson  
 F & Company  
 Checked by

Witness (if any)