

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

FORM O-1  
8-7-58  
15-103-20200-0000  
5-23-89

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

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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:** 40

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**FIELD:** McLouth      **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      I.D. 4 1/2"      SET AT 1429      PERF. 1369-1378 & 1386-1388      TO

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**TUBING SIZE:** WT.      I.D. 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<sub>g</sub>:** 0.5912      **% CARBON DIOXIDE:** 0      **% NITROGEN:** 8.2      **API GRAVITY OF LIQUID:** 19.5

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**VERTICAL DEPTH (H):** 1429      **TYPE WATER CONN.:** none      **(METER RUN)(PROVER) SIZE:** 2"

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**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)

**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	CASINO 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						139	153.4			24	
FLOW	.50	89	--	79	79	69	83.4			1	

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (P <sub>b</sub> )(P <sub>d</sub> ) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P <sub>m</sub> h <sub>w</sub>	GRAVITY FACTOR P <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R / Mcfd	STATE CORPORATION COMMISSION RECEIVED MAY 22 1989 CONSERVATION DIVISION Wichita, Kansas
4.388	83.4	--	1.3142	0.9816	1.0045	474.2	

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

(P<sub>c</sub>)<sup>2</sup> = 23.5      (P<sub>w</sub>)<sup>2</sup> = 7.0      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> = \_\_\_\_\_

(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 x ANTILOG Mcfd
	16.5			0.85			661.9

**OPEN FLOW:** 661.9 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

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For Company

Witness (if any) \_\_\_\_\_

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Checked by