

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

FORM 3-2  
8-7-58

15-005-20030-0000

**TYPE TEST:**  Deliverability  Open Flow      **TEST DATE:** June 23, 1988

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**COMPANY** Fairway Petroleum, Inc.      **LEASE** TEAGUE      **WELL NO.** 1

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**COUNTY** Atchison      **LOCATION** E 1/2 NE 1/4      **SECTION** 23      **TWP** 7S      **RNG** 21E      **ACRES** 107.66

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

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**COMPLETION DATE** 7/30/83      **PLUG BACK TOTAL DEPTH** 1570'      **PACKER SET AT**

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**CASINO SIZE**      **WT.**      **LD.** 4 1/2"      **SET AT** 1561'      **PERF.** 1422-1438      **TO**

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**TUBING SIZE**      **WT.**      **LD.**      **SET AT**      **PERF.**      **TO**

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**TYPE COMPLETION (Describe)** Perforated      **TYPE FLUID PRODUCTION** Water

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**PRODUCING THRU** 4 1/2" casing      **RESERVOIR TEMPERATURE F** 78°      **BAR. PRESS - P<sub>a</sub>** 14.4 Psia

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**GAS GRAVITY - G<sub>g</sub>** .5831      **% CARBON DIOXIDE** 0      **% NITROGEN** 8.1% est.      **API GRAVITY OF LIQUID**

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**VERTICAL DEPTH (ft)** 1561      **TYPE METER CONN.** Barton      **(METER RUN) (PROVER) SIZE** 2"

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**SHUT-IN PRESSURE; SHUT IN** June 19 86 AT 10 (AM)(PM) TAKEN June 5 19 88 AT 10 (AM)(PM)

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**FLOW TEST; STARTED** June 19 86 AT 10 (AM)(PM) TAKEN June 5 19 88 AT 10:30 (AM)(PM)

RECEIVED  
CORPORATION COMMISSION  
SEP 12 1988  
CONSERVATION DIVISION  
Topeka, Kansas

**OBSERVED DATA**      **DURATION OF SHUT-IN** 2 years

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 WELL-HEAD PRESS.		TUBING WELL-HEAD 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						327.0	341.4				
FLOW	0.500	211.0	-	78	-	211.0	225.4				

**RATE OF FLOW CALCULATIONS**

COEFFICIENT (F <sub>p</sub> )(F <sub>d</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_{mthw}}$	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	G <sub>m</sub>
4.388	225.4	-	1.3070	0.9825	1.0117	1287		

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

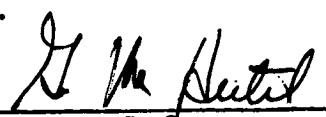
(P<sub>c</sub>)<sup>2</sup> = \_\_\_\_\_      (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_      P<sub>d</sub><sup>2</sup> = \_\_\_\_\_ %      (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_      (P<sub>w</sub>)<sup>2</sup> = 0.207      (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
CALCULATED BY IBM COMPUTER				0.85			2091

**OPEN FLOW** 2091      **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 23 day of June, 1988.

  
 For Company  
**L. C. CULBERTSON**  
 Checked by

Witness (if any) \_\_\_\_\_  
 For Completion \_\_\_\_\_