

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

FORM O-1
8-7-58

15-103-20670-00-00
P9
5.23.89

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

COMPANY: Fairway Petroleum, Inc. **LEASE:** Ryan **WELL NO.:** 3

COUNTY: Leavenworth **LOCATION:** NE **SECTION:** 33 **TWP:** 8S **RNG:** 22E **ACRES:** 27

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

COMPLETION DATE: 7/7/86 **PLUG BACK TOTAL DEPTH:** 1261 **PACKER SET AT:**

CASING SIZE: WT. 4 1/2" I.D. 4 1/2" SET AT 1255 PERF. 1208 TO 1216

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

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

PRODUCING THRU: 4 1/2" Casing **RESERVOIR TEMPERATURE F:** 76° **BAR. PRESS - P_a:** 14.4 Psia

GAS GRAVITY - G_g: 0.5869 **% CARBON DIOXIDE:** N.A. **% NITROGEN:** N.A. **API GRAVITY OF LIQUID:**

VERTICAL DEPTH (H): 1261 **TYPE WTKR CONN.:** Flange **(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 20, 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 _w)(h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS		TUBING WELLHEAD PRESS		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						120.0	134.4			24	
FLOW	1.25	45.	6	76	76	93.0	107.4			24	

RATE OF FLOW CALCULATIONS

COEFFICIENT (P _w)(P _i)(P _c) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P _m h _w	GRAVITY FACTOR P _g	FLOWING TEMP. FACTOR P _t	DEVIATION FACTOR P _{pv}	RATE OF FLOW R Mcfd	RECEIVED CORPORATION COMMISSION
8.329	59.4	18.9	1.2985	0.9843	1.0045	202.1	MAY 22 1989

NATION DIVISION
Wichita, Kansas

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 18.0 ; (P_w)² = 11.5 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_w)² = 0.207 ; (P_d)² = _____

(P _c) ² - (P _w) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	$\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
	6.5			0.85			549

OPEN FLOW 549 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