

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

FORM O-2
8-7-58
12
5-23-89

15-005-20030-0005

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

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

COUNTY Atchison **LOCATION** E₁ NE₁ **SECTION** 23 **TWP** 7S **RNG** 21E **ACRES** 107.66

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

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

CASING SIZE WT. I.D. SET AT PERF. TO
4 1/2" 1561 1422 1438

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** 78° **BAR. PRESS - P_a** 14.4 Psia

GAS GRAVITY - G_g 0.5831 **% CARBON DIOXIDE** 0 **% NITROGEN** 8.1 **API GRAVITY OF LIQUID**

VERTICAL DEPTH (H) 1561 **TYPE METER 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)

OBSERVED DATA DURATION OF SHUT-IN Years 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						319	333.4			Years	
FLOW	.50	158	--	78	78	158	172.4			1	

RATE OF FLOW CALCULATIONS

COEFFICIENT (P _b)(P _e) / Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	STATE CORPORATION COMMISSION RECEIVED MAY 22 1989 CONSERVATION DIVISION Wichita, Kansas
4.388	172.4	--	1.3070	0.9825	1.0117	982.8	

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_e)² = 111.2, (P_w)² = 29.7, P_d = _____ % (P_c = 14.4) + 14.4 = _____ (P_e)² = 0.207 (P_d)² = _____

$\frac{(P_e)^2 - (P_d)^2}{(P_e)^2 - (P_w)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_e^2}{P_c^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
81.5				0.85			1,314

OPEN FLOW 1,314 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. J. Hartel For Company

Witness (if any) _____ Checked by _____