

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE TEST: Deliverability Open Flow **TEST DATE:** April 22, 1990

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

COUNTY: Leavenworth **LOCATION:** SE NW NE **SECTION:** 13 **TWP:** 8S **RNG:** 21E **ACRES:** 40

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

COMPLETION DATE: 11/6/85 **PLUG BACK TOTAL DEPTH:** 1355 **PACKER SET AT:**

CASINO SIZE	WT.	I.D.	SET AT	PERF.	TO
		4 1/2"	1355	1286	1298
TUBING SIZE	WT.	I.D.	SET AT	PERF.	TO
		2 3/8"	1326		

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

PRODUCING THRU: 2 3/8" Tubing **RESERVOIR TEMPERATURE F:** 76° **BAR. PRESS - P_a:** 14.4 Psia

GAS GRAVITY - G_g: 0.5801 **% CARBON DIOXIDE:** 0 **% NITROGEN:** 4.23 **API GRAVITY OF LIQUID:** 23.4

VERTICAL DEPTH (H): 1355 **TYPE METER CONN.:** Flange **(METER RUN) (PROVER) SIZE:** 2"

SHUT-IN PRESSURE: SHUT IN April 2, 1990 10 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

FLOW TEST: STARTED April 16, 1990 10 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 Xh _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASED WELLHEAD PRESS.		TRENCH 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						81	95.4			24	
FLOW	.50	21	8	75.7	75.7	49	63.4			24	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _d) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
1.219	35.4	16.8	1.2899	0.9852	1.002	26.1		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 9.1 ; (P_w)² = 4.0 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_d)² = 0.207

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{[P_c^2 - P_w^2]}{[P_c^2 - P_d^2]}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
5.1				0.85			45.6

OPEN FLOW: 45.6 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 12 day of May, 1990.

STATE OF

Witness (if any)

MAY 29 1990

Geoffrey Y. Burt
 of Company

Checked by

CONSULTING DIVISION
 Wichita, Kansas