

STATE OF KANSAS - CORPORATION COMMISSION

FORM O-2
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-103-209410-0000

TYPE TEST: Deliverability Open Flow TEST DATE: April 18, 1990

COMPANY: Fairway Petroleum, Inc. LEASE: Guss WELL NO.: 2

COUNTY: Leavenworth LOCATION: NE NE SE SECTION: 27 TWP: 7S RNG: 21E ACRES: 40

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

COMPLETION DATE: 12/16/87 PLUG BACK TOTAL DEPTH: 1494 Packer Set At

CASINO SIZE: WT. 9.5 I.D. 4 1/2" SET AT 1493 PERF. 1396 TO 1396

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

TYPE COMPLETION (Describe): Perforation TYPE FLUID PRODUCTION: None

PRODUCING THRU: 4 1/2" Casing RESERVOIR TEMPERATURE F: 79 BAR. PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: 0.5824 % CARBON DIOXIDE: 0 % NITROGEN: 4.5 API GRAVITY OF LIQUID

VERTICAL DEPTH (H): 1493 TYPE METER CONN.: None (METER RUN)(PROVER) SIZE

SHUT-IN PRESSURE: SHUT IN April 16, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

FLOW TEST: STARTED April 16, 1990 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	CASED WELL-HEAD PRESS		TUBING WELL-HEAD PRESS		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _i)(P _c) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT-IN						501	515.4			Years	
FLOW	.50	346	----	79	79	346	360.4			1	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _b)(F _p) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √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
4.388	360.4	----	1.310	0.9822	1.027	2,089.7		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_e)² = 265.6 ; (P_w)² = 129.9 ; P_d² = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_e)² = 0.207 ; (P_d)² = _____

$\frac{(P_e)^2 - (P_w)^2}{(P_e)^2 - (P_d)^2}$	$(P_e)^2 - (P_w)^2$	$\frac{P_e^2 - P_d^2}{P_e^2 - P_w^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
	135.7	=		0.85			4,008.3

OPEN FLOW 4,008.3 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

Witness (if any) _____ MAY 29 1990

[Signature]
Checked by

CORPORATION DIVISION
Wichita, Kansas