

STATE OF KANSAS - CORPORATION COMMISSION

FORM O-2
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-103-20224-0000

TYPE TEST: Deliverability Open Flow TEST DATE: April 19, 1990

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

COUNTY: Leavenworth LOCATION: NW N SW SECTION: 25 TWP: 7S RNO: 21E ACRES: 40

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

COMPLETION DATE: 9/13/83 PLUG BACK TOTAL DEPTH: 1511 PACKER SET AT: []

CASINO SIZE: 9.5 WT. I.D. 4 1/2" SET AT: 1511 PERF. 1404 TO: 1411

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

TYPE COMPLETION (Describe): Perforation TYPE FLUID PRODUCTION: Oil & Water

PRODUCING THRU: 4 1/2" Casing RESERVOIR TEMPERATURE F: 78° BAR. PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: 0.5810 % CARBON DIOXIDE: .02 % NITROGEN: 5.10 API GRAVITY OF LIQUID: 19.9

VERTICAL DEPTH (H): 1511 TYPE WTR. CONN.: None (METER RUN) (PROVER) SIZE: 2"

SHUT-IN PRESSURE: SHUT IN April 14, 1990 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

FLOW TEST: STARTED April 14, 1990 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

OBSERVED DATA

DURATION OF SHUT-IN ^{Years} []

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 WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						137	151.4			Years	
FLOW	.50	51	----	78	78	51	65.4			1	

RATE OF FLOW CALCULATIONS

COEFFICIENT (P _c) ² / (P _d) ² 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	65.4	----	1/3119	0.9825	1.0066	372.3		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 22.9 ; (P_w)² = 4.3 ; P_d = [] % (P_c - 14.4) + 14.4 = [] ; (P_d)² = 0.207 ; (P_d)² = []

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
	18.6			0.85			449.2

OPEN FLOW 449.2 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

CONSERVATION DIVISION

[Signature]
Checked by