

STATE OF KANSAS - CORPORATION COMMISSION

FORM O-2  
8-7-58

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

15-103-21045-0000

TYPE TEST:  Deliverability  Open Flow TEST DATE: April 11, 1990

COMPANY: Fairway Petroleum, Inc. LEASE: Stuckey WELL NO.: 2-2

COUNTY: Leavenworth LOCATION: NW NW SW SECTION: 29 TWP: 9S RNO: 23E ACRES: 40

FIELD: McLouth RESERVOIR: McLouth PIPELINE CONNECTION: NONE

COMPLETION DATE: 3/4/89 PLUG BACK TOTAL DEPTH: 1141 PACKER SET AT: [blank]

CASING SIZE: WT. [blank] I.D. 4 1/2" SET AT 1141 PERF. 1052 TO 1054

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

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

PRODUCING THRU: 4 1/2" Casing RESERVOIR TEMPERATURE F: 72° BAR. PRESS - P<sub>a</sub>: 14.4 Psia

GAS GRAVITY - G<sub>g</sub>: 0.593 % CARBON DIOXIDE: 0 % NITROGEN: 1.85 API GRAVITY OF LIQUID: [blank]

VERTICAL DEPTH (H): 1141 TYPE METER CONN.: None (METER RUN) (PROVER) SIZE: 2"

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

FLOW TEST: STARTED April 2, 1990 19 AT (AM)(PM) TAKEN 19 AT (AM)(PM)

OBSERVED DATA Over a Year DURATION OF SHUT-IN: [blank] HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASED WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>i</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>i</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						390	404.4			Year	
FLOW	.50	315	---	72	72	315	329.4			1	

RATE OF FLOW CALCULATIONS

COEFFICIENT (F <sub>p</sub> )(F <sub>d</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
4.388	329.4	---	1.299	0.9887	1.027	1,906.5		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 163.5 ; (P<sub>w</sub>)<sup>2</sup> = 108.5 ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ (P<sub>w</sub>)<sup>2</sup> = 0.207 (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
	55.0			0.85			5,554.2

OPEN FLOW 5554.2 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) \_\_\_\_\_

CONSERVATION DIVISION  
Wichita, Kansas

Checked by \_\_\_\_\_