

STATE OF KANSAS - CORPORATION COMMISSION

FORM CG-1

MULTIPOINT BACK PRESSURE TEST

15-005-2040-0900

TYPE TEST: Initial Annual Special TEST DATE: August 14, 1988

COMPANY Fairway Petroleum, Inc. LEASE BRACKE WELL NO. 2

COUNTY Atchison LOCATION SW 1/4 SECTION 24 TWP 7S RNG 21E ACRES 160

FIELD RESEVOIR McLouth PIPELINE CONNECTION LAGGS, Inc.

COMPLETION DATE 3/30/84 (oil only) PLUG BACK TOTAL DEPTH PACKER SET AT

CASING SIZE WT. ID 4 1/2" SET AT 1485 PERF. 1374 TO 1384 1389 - 1392

TUBING SIZE WT. ID 2 3/8" SET AT 1410 PERF. TO

TYPE COMPLETION (Describe) Perforated TYPE FLUID PRODUCTION Oil

PRODUCING THRU 2 3/8 tubing RESERVOIR TEMPERATURE F 77 BAR PRESS - P_a 14.4 Psia

GAS GRAVITY - G_g 0.5813 % CARBON DIOXIDE .23% % NITROGEN 3.19% API GRAVITY OF LIQUID 19.8

VERTICAL DEPTH (H) 1485 TYPE METER CONN. None (PROVER) SIZE 2"

REMARKS

RECEIVED SEP 12 1988 CONSERVATION COMMISSION

OBSERVED DATA DURATION OF SHUT-IN 72 HR.

RATE No.	ORIFICE SIZE in.	(PROVER) PRESSURE psig	DIFF. (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 X P _i X P _c) psia			
SHUT IN						230.0	244.4			72		
1	0.75	48.0	-	77	77	48.0	62.4			1		
2		UNABLE TO OBTAIN ADDITIONAL FLOWS										
3												
4												
5												

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT (F _d)(F _p) Mofd	(PROVER) PRESSURE psia	EXTENSION √P _m zhw	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW Q Mofd	GOR	Q _m
1	9.694	62.4	-	1.3116	0.9834	1.0025	786		
2									
3									
4									
5									

PRESSURE CALCULATIONS

RATE NO.	P _i psia	P _c psia	P _w psia	(P _c) ² THOUSANDS	(P _w) ² THOUSANDS	PLOTING POINTS		100 [SHUT-IN P _w -P _a / P _c -P _a]
						(P _c) ² - (P _w) ² THOUSANDS	Q Mofd	
1		244.4	62.4	59.73	3.89	55.84	786	
2								
3								
4								
5								

INDICATED WELLHEAD OPEN FLOW 830 Mofd @ 14.45 psia Q_m = 0.850 (assumed)

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 28 day of August, 1988.

Shaffer M. Hentel
For Company

Witness (if any)