

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 9-22-10	
COMPANY Ritchie Exploration		LEASE Ford Cattle Unit	
COUNTY Ford		WELL NO. 1	
LOCATION W/2 SE/4	SECTION 32 27s 22w	TWP RNG	ACRES 640
FIELD Lamb North	RESERVOIR Mississippian	PIPELINE CONNECTION Superior Pipeline	
COMPLETION DATE 6-29-10	PLUG BACK DEPTH 5057	PACKER SET AT	
	TOTAL DEPTH 5152		
CASING SIZE 4.500	WT. 10.500	ID 4.052	SET AT 5149
			PERF. 4991
			TO 5012
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 5013
			PERF.
			TO
TYPE COMPLETION (Describe) New Well		TYPE FLUID PRODUCTION None	
PRODUCING THRU (Annulus/Tubing) Tubing		RESERVOIR TEMPERATURE F 120	
		BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg 0.657	% CARBON DIOXIDE 0.053	% NITROGEN 9.389	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 5001	TYPE METER CONN. Flange		METER RUN SIZE 3.067
REMARKS			

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING 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						1186	1200	1075	1089	73.00	
1.	1.500	14.80	1.00	87		1118	1132	997	1011	1.00	
2.	1.500	15.50	2.50	91		1064	1078	927	941	1.00	
3.	1.500	15.70	7.20	89		1021	1035	879	893	1.00	
4.	1.500	16.50	14.60	84		955	969	816	830	1.00	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW Q Mcfd	GOR	G _m
1.	11.410	29.2	5.40	1.2334	0.9750	1.0015	74		0.657
2.	11.410	29.9	8.65	1.2334	0.9715	1.0014	118		0.657
3.	11.410	30.1	14.72	1.2334	0.9732	1.0015	201		0.657
4.	11.410	30.9	21.24	1.2334	0.9777	1.0017	292		0.657

PRESSURE CALCULATION

RATE NO.	Pt psia	Pc psia	Pw psia	(Pc) ² Thousands	(Pw) ² Thousands	PLOTING POINTS		% SHUT-IN 100 $\left[\frac{P_w - P_a}{P_c - P_a} \right]$
						(P _c) ² - (P _w) ² Thousands	Q Mcfd	
1.	1011.4	1200.4	1132.4	1441.0	1282.3	158.6	74.3	94.3
2.	941.4	1200.4	1078.4	1441.0	1162.9	278.0	118.4	89.7
3.	893.4	1200.4	1035.4	1441.0	1072.1	368.9	201.9	86.1
4.	830.4	1200.4	969.4	1441.0	939.7	501.2	292.7	80.5

INDICATED WELLHEAD OPEN FLOW

1026

Mcfd @ 14.65 psia

"n" = 1.000

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 herein and that said report is true and correct. Executed this the _____ day of _____, 20 _____

Witness (if any)

For Commission

Jessie Simpson
For Company

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Trilobite Testing

TEST DATE: 9-22-10

**Ritchie Exploration
Ford Cattle Unit
32 27s 22w
Ford ,KS
Exponent n: 1.1909
AOF (MCF/Day): 1026.**

