

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 10-29-1999	
COMPANY Horseshoe Operating Inc		LEASE Boltz	
		WELL NO. 2	
COUNTY Hamilton	LOCATION SE NE	SECTION 1	TWP 24s 41
		RNG	ACRES 640
FIELD Bradshaw	RESERVOIR Winfield	PIPELINE CONNECTION KN	
COMPLETION DATE 10-15-1996		PLUG BACK DEPTH 2405	PACKER SET AT
		TOTAL DEPTH	
CASING SIZE 4.500	WT. 11.600	ID 4.000	SET AT 2428
		PERF. 2384	TO 2391
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 2400
		PERF.	TO
TYPE COMPLETION (Describe) Single Gas		TYPE FLUID PRODUCTION water	
PRODUCING THRU (Annulus/Tubing) casing		RESERVOIR TEMPERATURE F 100	BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .798	% CARBON DIOXIDE	% NITROGEN 37.397	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2387		TYPE METER CONN. flange	METER RUN SIZE 2.067
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						128	141				
1.	.750	55.00	4.00	55		123	136			.80	
2.	.750	55.00	9.00	55		112	125				
3.	.750	58.00	16.00	54		103	117			.80	
4.	.750	59.00	28.00	54		91	104			.80	

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.	2.780	68.3	16.53	1.1194	1.0048	1.0052	51		.798
2.	2.780	68.3	24.79	1.1194	1.0048	1.0052	77		.798
3.	2.780	71.3	33.78	1.1194	1.0058	1.0054	106		.798
4.	2.280	72.3	44.99	1.1194	1.0058	1.0055	116		.798

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.	136.3	141.3	136.3	20.0	18.6	1.4	52.0	96.1
2.	125.7	141.3	125.8	20.0	15.8	4.1	77.9	87.9
3.	117.1	141.3	117.2	20.0	13.7	6.2	106.3	81.2
4.	104.3	141.3	104.5	20.0	10.9	9.1	116.1	71.2

INDICATED WELLHEAD OPEN FLOW

189

Mcfd @ 14.65 psia

"n" =

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 4 day of Nov, 19 99

Witness (if any)

For Commission

Original: Wichita
Copy : Dodge City
Copy: Horseshoe Operating

For Company

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER:

TEST DATE: 10-29-1999

Horsehoe Operating Inc

Boltz 2

1 24s 41

Hamilton ,KS.

Exponent n: 0.5598

AOF: 189.

$P_c^2 - P_w^3$ (10 PSI)²

100

10

1

1

10

100

Q (MCF/DAY)

