

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 11-2-1999	
COMPANY Horsehoe Operating Inc		LEASE Suerte	
		WELL NO. 1	
COUNTY Hamilton	LOCATION SW NE	SECTION 20	TWP 23s 41
FIELD Bradshaw		PIPELINE CONNECTION KN	
COMPLETION DATE 6-16-1998		PACKER SET AT	
CASING SIZE 4.500		TOTAL DEPTH 2788	
WT. 10.500		ID 4.052	
SET AT 2510		PERF. 2478	
TUBING SIZE 2.375		TO 2788	
WT. 4.700		ID 1.995	
SET AT 2401		PERF.	
TYPE COMPLETION (Describe) single gas		TYPE FLUID PRODUCTION water	
PRODUCING THRU (Annulus/Tubing) casing		RESERVOIR TEMPERATURE F 95	
BAR PRESS - Pa 14.4 psia			
GAS GRAVITY - Gg .821		% CARBON DIOXIDE .148	
% NITROGEN 39.689		API GRAVITY OF LIQUID	
VERTICAL DEPTH (H) 2483		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						113	126				
1.	.750	35.00	9.00	54		109	122			.50	
2.	.750	36.50	18.00	57		103	116			.50	.1
3.	.750	37.00	40.00	56		99	112			.50	.5
4.	.750	38.00	92.00	56		90	103			.50	.5

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW Q Mcfd	GOR	G _m
1.	2.780	48.4	20.87	1.1036	1.0058	1.0036	64		.821
2.	2.780	49.9	29.97	1.1036	1.0029	1.0036	92	19280.9	1.018
3.	2.780	50.4	44.90	1.1036	1.0039	1.0037	138	5783.2	1.403
4.	2.780	51.4	68.77	1.1036	1.0039	1.0037	212	8857.9	1.224

PRESSURE CALCULATION

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² Thousands	(P _w) 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.	122.4	126.9	122.4	16.1	15.0	1.1	64.6	96.1
2.	116.4	126.9	116.5	16.1	13.6	2.5	92.5	90.9
3.	112.4	126.9	112.7	16.1	12.7	3.4	138.8	87.5
4.	103.4	126.9	104.1	16.1	10.8	5.3	212.6	79.9

INDICATED WELLHEAD OPEN FLOW

471

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 8 day of Nov, 19 99

Witness (if any)

For Commission

Original: Wichita
Copy: Dodge City
Copy: Horseshoe Operating

For Company

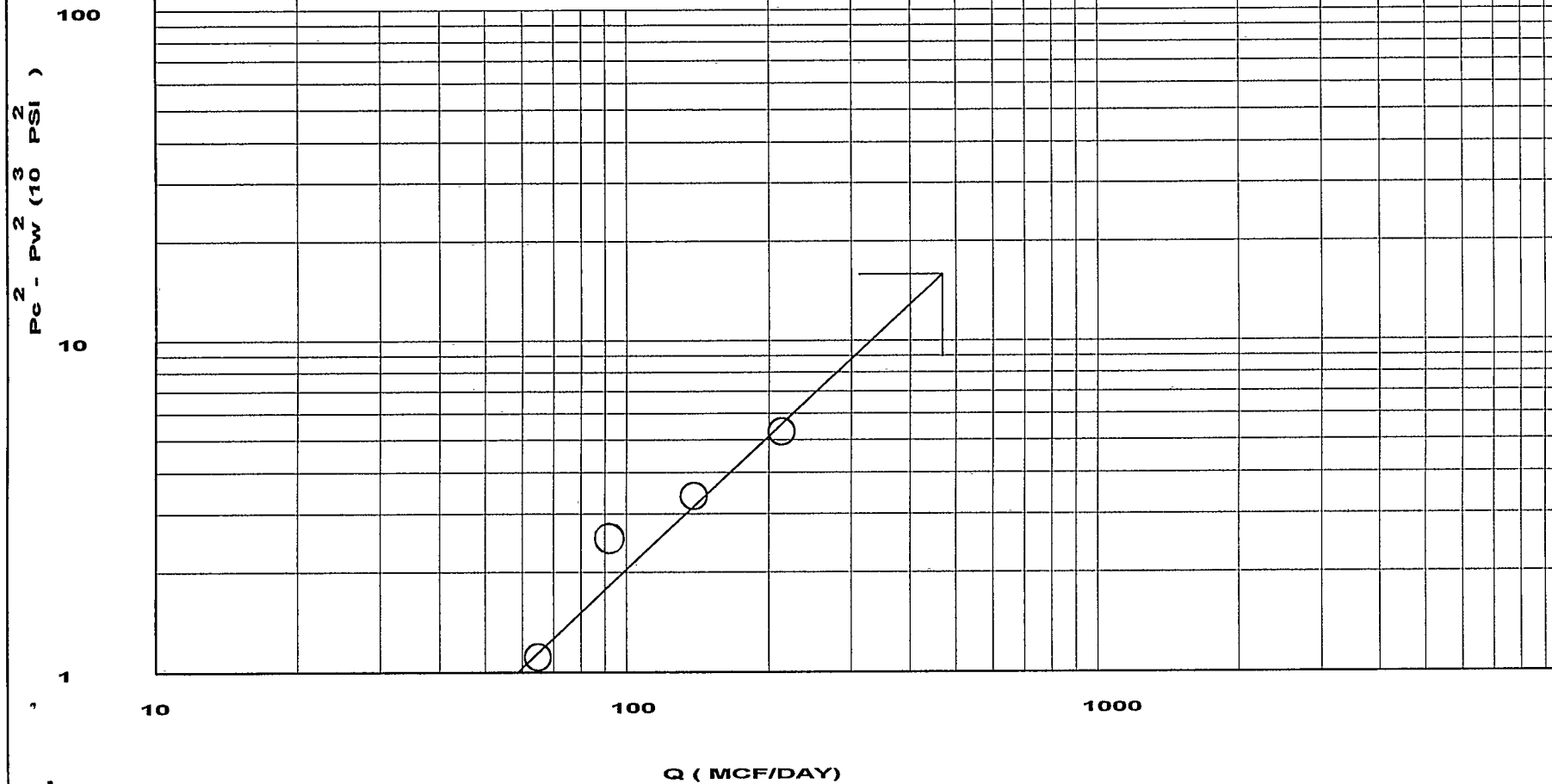
Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER:

TEST DATE: 11-2-1999

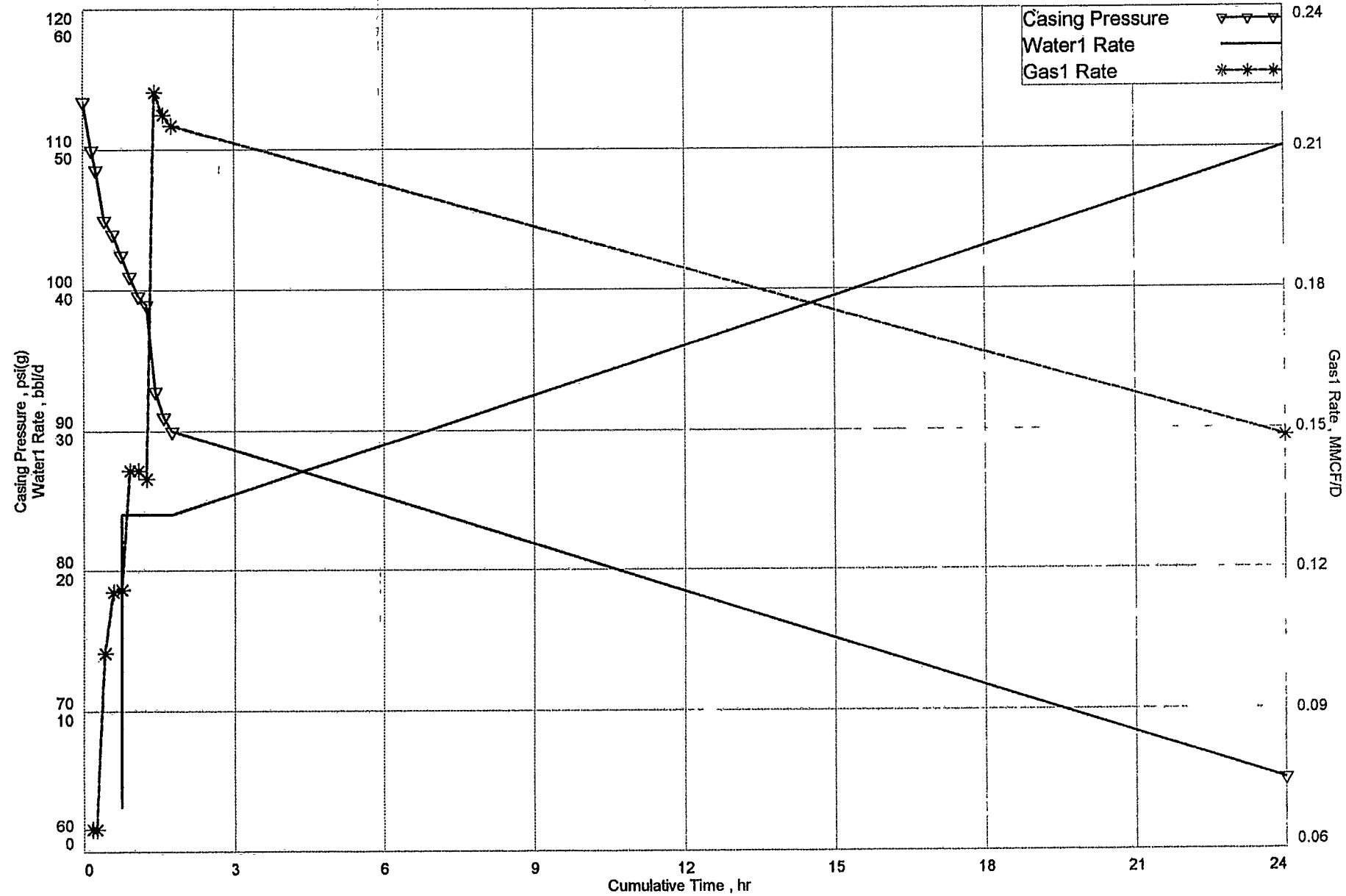
Horsehoe Operating Inc
 Suerte 1
 20 23s 41
 Hamilton ,KS.
 Exponent n: 0.7511
 AOF: 467.



Horseshoe Operating, Inc
SW NE 20 23s 41w Hamilton county Kansas

Suerte 1

Plot



FieldNotes

Field Measurements

	Date	Clock Time	Comments	Casing Pres	Static1 Pres	Diff1 Pres	Meter1 Temp	Gas1 Rate	Measured Wat1 Vol	Water1 Rate	Calc Inc Wat1 Gain
	yyyy/mm/dd	hh:mm:ss		psi(g)	psi(g)	in of H2O	°F	MMCF/D	bbl	bbl/d	bbl
1	1999/11/02	13:45:00	shutin	113.50					950.200		0.000
2		13:55:00		110.00	35.00	9.00	54.00	0.065			
3		14:00:00	1st pt	108.60	35.00	9.00	54.00	0.065			
4		14:10:00		105.00	36.00	22.00	55.00	0.102			
5		14:20:00		104.00	36.00	28.00	56.00	0.116			
6		14:30:00	2nd pt	102.50	36.50	28.00	57.00	0.116	950.300	3.200	0.100
7		14:40:00		101.00	37.00	41.00	56.00	0.141			
8		14:50:00		99.60	37.00	41.00	56.00	0.141			
9		15:00:00	3rd pt	99.00	37.00	40.00	56.00	0.140	950.800	24.000	0.500
10		15:10:00		92.80	37.50	99.00	56.00	0.222			
11		15:20:00		91.00	38.00	94.00	56.00	0.218			
12		15:30:00	4th pt	90.00	38.00	92.00	56.00	0.215	951.300	24.000	0.500
13	1999/11/03	13:45:00	1pt	65.00	38.00	45.00	65.00	0.148	997.700	50.049	46.400
14											