

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

Failed

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 1-25-2001	
COMPANY American Warrior		LEASE Wells	
WELL NO. 1-13			
COUNTY Ness	LOCATION C SW	SECTION 13 18S 21W	ACRES 160
FIELD Chase		PIPELINE CONNECTION	
COMPLETION DATE 9/27/99	PLUG BACK DEPTH TOTAL DEPTH	PACKER SET AT 2414	
CASING SIZE 4.500	WT. 9.500	ID 4.090	SET AT 2450
PERF. 2217		TO 2253	
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 2350
PERF.		TO	
TYPE COMPLETION (Describe) Perforated		TYPE FLUID PRODUCTION water	
PRODUCING THRU (Annulus/Tubing) annulus		RESERVOIR TEMPERATURE F BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg .787	% CARBON DIOXIDE .807	% NITROGEN 52.049	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2235		TYPE METER CONN. PROVER SIZE 2"	
REMARKS			

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(PROVER) 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						598	612				
1.	.250	17.00		40		566	580			.50	
2.	.250	21.00		38		534	548			.50	
3.											
4.											

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _p) Mcfd	(PROVER) 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.	1.120	31.4	31.40	1.1272	1.0198	1.0013	40		.787
2.	1.120	35.4	35.40	1.1272	1.0218	1.0016	45		.787
3.									
4.									

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.	580.4	612.4	580.4	375.0	336.9	38.2	40.5	94.6
2.	548.4	612.4	548.4	375.0	300.7	74.3	45.7	89.3
3.	532.4	612.4	532.4	375.0	283.5	91.6	110.3	86.6
4.		612.4		375.0		375.0		

INDICATED WELLHEAD OPEN FLOW

61

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 _____ day of _____, 19 _____

Witness (if any)

For Company

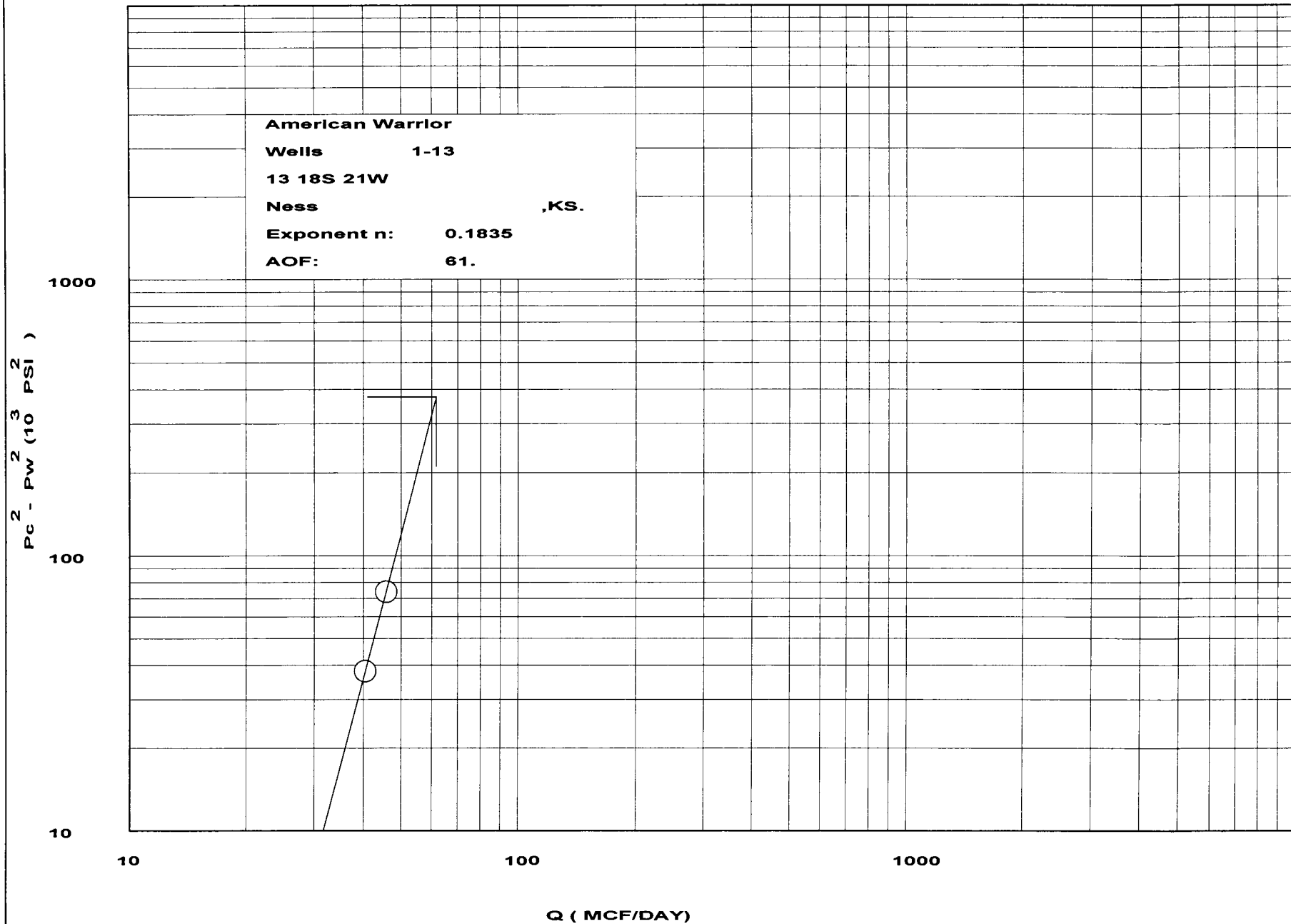
For Commission

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: 1-25-01 @ 11:30

TEST DATE: 1-25-2001



[illegible]

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM CG-1 Rev.

TEST TYPE	State	Class	Depth	TEST DATE
COMPANY	Lease	Wells	Well No.	
American Warrior, Inc.	13	18 S	21 W	1-13
COUNTY	LOCATION	SECTION	TWP	RANGE (SW)
Ness	C SW	13	18 S	21 W
API WELL NUMBER	RESERVE	Chase	PIPELINE CONNECTION	
13-135-24070				
COMPLETION DATE	SLUG BACK	TOTAL DEPTH	FACE SET AT	
September 27, 1999		2414		
CASING SIZE	WT	ID	SET AT	FEET
4 1/2	9.5	4.090	2456	2217-2221, 2247-2253
TUBING SIZE	WT	ID	SET AT	FEET
2 3/8	4.7	1.995	2350	TO
TYPE COMPLETION (Describe)	TYPE FLUID PRODUCTION			
Perforated				
PRODUCING THRU	RESERVOIR TEMPERATURE °F			BAR PRESS - P, 14.5 Pda
GAS GRAVITY - G _g	% CARBON DIOXIDE	% NITROGEN		API GRAVITY OF LIQUID
VERTICAL DEPTH (ft)	TYPE LINE CONNECTION			(API GRAVITY OF LIQUID)

REMARKS

OBSERVED DATA							DURATION OF TEST		
RATE NO.	CASING SIZE In	CASING (PROVED) PRESSURE Pda	DEV. (D ₁) (D ₂)	FLOWING TEMP t	WELL-HEAD TEMP t	CSG WELL-HEAD PRESSURE Pda (P ₁) (P ₂) (P ₃)	TBG WELL-HEAD PRESSURE Pda (P ₁) (P ₂) (P ₃)	FLOW DURATION (HOURS)	LIQUID PROD. Bbls
1									
2									
3									
4									
5									

RATE OF FLOW CALCULATIONS									
RATE NO.	COEFFICIENT (F ₁) (F ₂) Min	(GASING) (PROVED) PRESSURE Pda	PRESSURE EXTENSION $\sqrt{P_1 - P_2}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _d	RATE OF FLOW Q Mcf/D	GOR (GPM/D)	Q _L
1									
2									
3									
4									
5									

PRESSURE CALCULATIONS								
RATE NO.	P ₁ Pda	P ₂ Pda	P ₃ Pda	(P ₁) ² THOUSANDS	(P ₂) ² THOUSANDS	(P ₃) ² - (P ₂) ² THOUSANDS	Q Mcf/D	% SHUT-IN (P ₁ - P ₂) / (P ₁ - P ₃)
1								
2								
3								
4								
5								

INDICATED WELL-HEAD OPEN FLOW

Mc/D @ 14.5 Pda

W =

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 _____ day of _____, 19____.

Witness (if any)

For Company

For Commission

Checked By (Rev. 10/99)