Jnv 4185

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special				TEST DATE: 3/6/2001	
COMPANY		LEASE			WELL NO.
American Warrior		Witthuhn			4-35
COUNTY	LOCATION	SECTION	TWP	RNG	ACRES
Ness	150'E SW SE s	35	18s	21w	160
FIELD	RESERVOIR	PIPELINE CONNECTION			
	Chase				
COMPLETION DATE	PLUG BACK DEPTH	2350			PACKER SET AT
9/20/1999	TOTAL DEPTH				
CASING SIZE	WT.	ID	SET AT	PERF.	TO
4.500	9.500	4.090	2355	2257	2317
TUBING SIZE	WT.	ID	SET AT	PERF.	TO
2.375	4.700	1.995	2330		
TYPE COMPLETION (Describe)		TYPE FLUID PRODUCTION			
perforated		water			
PRODUCING THRU (Annulus/Tubing)		RESERVOIR TEMPERATURE F			BAR PRESS - Pa
annulus		90			14.4 psia
GAS GRAVITY - Gg	% CARBON DIOXIDE	% NITROGEN			API GRAVITY OF LIQUID
.753	.259	47.847			
VERTICAL DEPTH (H)		TYPE METER CONN.			PROVER SIZE
2287					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. psig	CASING WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ psia	TUBING WELLHEAD PRESS. psig	TUBING WELLHEAD PRESS. $(P_w)(P_t)(P_c)$ psia	DURATION HOURS	LIQUID PROD. Bbls.
SHUT-IN						587	601				
1.	.250	56.00		50		568	582			.50	
2.	.250	124.00		56		548	562			.50	
3.	.375	108.00		54		511	525			.50	
4.	.500	78.00		52		464	478			.50	

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	70.4	70.40	1.1522	1.0098	1.0037	92		.753
2.	1.120	138.4	138.40	1.1522	1.0039	1.0070	180		.753
3.	2.440	122.4	122.40	1.1522	1.0058	1.0063	348		.753
4.	4.388	92.4	92.40	1.1522	1.0078	1.0048	473		.753

PRESSURE CALCULATION

RATE NO.	Pt psia	Pc psia	Pw psia	$(Pc)^2$ Thousands	$(Pw)^2$ Thousands	PLOTTING POINTS $(P_c)^2 - (P_w)^2$ Thousands	PLOTTING POINTS Q Mcfd	% SHUT-IN $100\left[\frac{Pw - Pa}{Pc - Pa}\right]$
1.	582.4	601.4	582.4	361.7	339.2	22.5	92.1	96.8
2.	562.4	601.4	562.5	361.7	316.4	45.3	180.5	93.4
3.	525.4	601.4	525.6	361.7	276.3	85.4	348.3	87.1
4.	478.4	601.4	478.8	361.7	229.2	132.4	473.1	79.1

INDICATED WELLHEAD OPEN FLOW 1453 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 19 day of March, 2001

Witness (if any)

For Company

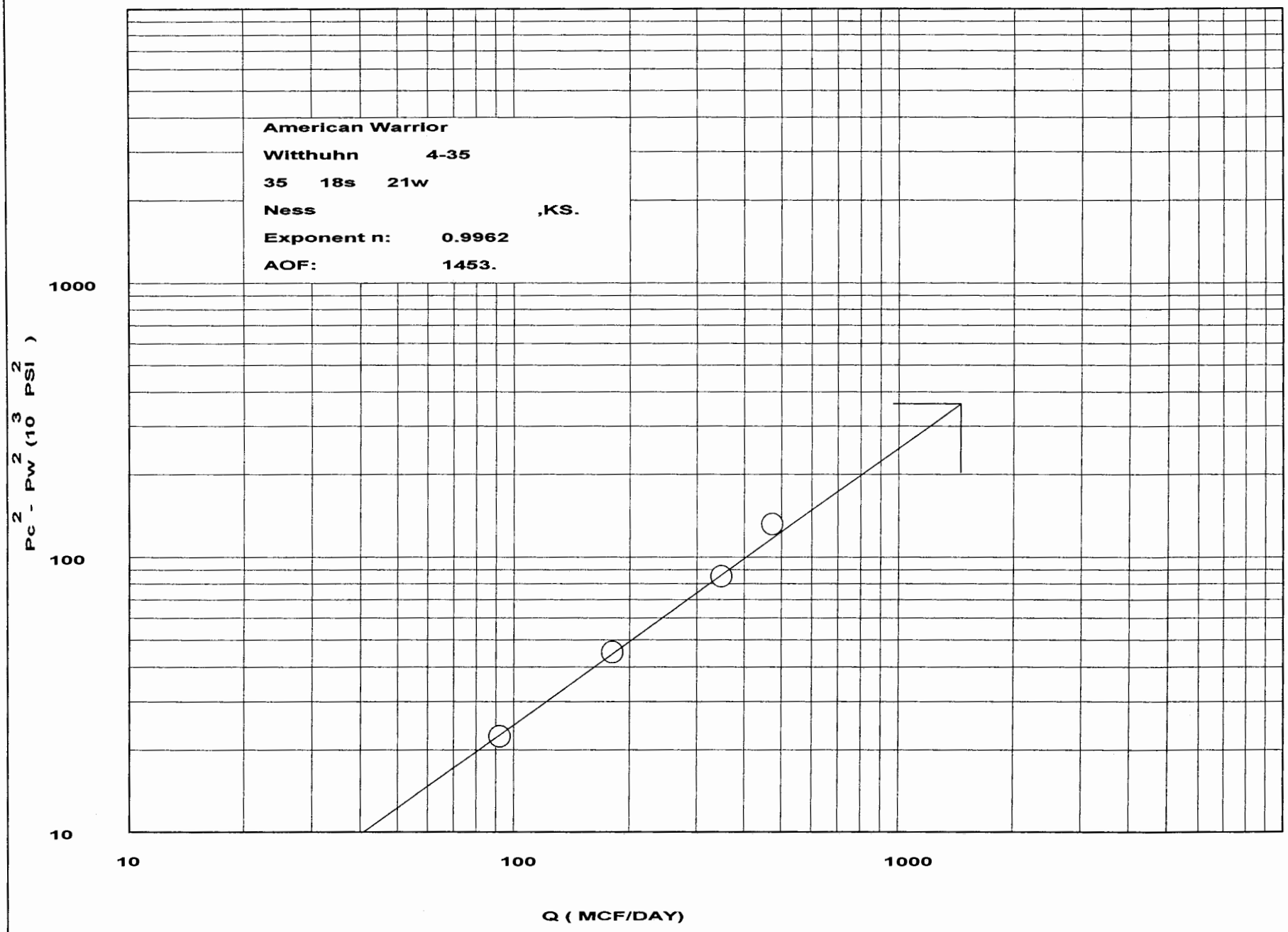
For Commission

Checked by

WELL TESTER:

GAS WELL BACK PRESSURE CURVE

TEST DATE: 3/6/2001



STATE OF KANSAS - CORPORATION COMMISSION FORM CG-1 Rev.

MULTI-POINT BACK PRESSURE TEST

TYPE TEST: ☒ Initial ☐ Annual ☐ Special TEST DATE:

COMPANY: American Warrior, Inc. LEASE: Witthuhn WELL NO: 4-35

COUNTY: Ness LOCATION: 150' E SW SE NW SECTION: 23 TWP: 18 S RNG (E/W): 21 W ACRES: 160

API WELL NUMBER: 15 - 135-24076 RESERVOIR: Chase PRESENT CONNECTION:

COMPLETION DATE: September 20, 1999 PLUG BACK TOTAL DEPTH: 2340 PACKER SET AT:

CASING SIZE: 4 1/2 WT: 9.5 ID: 4.090 SET AT: 2355 PERF.: 2257-67,2278-84,2311-17 TO:

TUBING SIZE: 2 3/8 WT: 4.7 ID: 1.995 SET AT: 2330 PERF.: TO:

TYPE COMPLETION (Describe): Perforated TYPE FLUID PRODUCTION:

PRODUCING THRU: RESERVOIR TEMPERATURE °F: BAR PRESS - P_a: 14.6 Psi

GAS GRAVITY - G_g: % CARBON DIOXIDE: % NITROGEN: API GRAVITY OF LIQUID

VERTICAL DEPTH (H): TYPE METER CONNECTION: METER RUN (PROVER) SIZE:

REMARKS:

OBSERVED DATA DURATION OF SHUT-IN: HR.

RATE NO.	ORIFICE SIZE d_n	METER (PROVER) PRESSURE Psig	DIFF. (h_w) (h_w)	FLOWING TEMP t	WELL-HEAD TEMP. t	CSG WELLHEAD PRESS. Psig	CSG WELLHEAD PRESS. $(P_c)(P_f)(P_a)$ Psia	TBG WELLHEAD PRESS. Psig	TBG WELLHEAD PRESS. $(P_t)(P_f)(P_a)$ Psia	FLOW DURATION (HOURS)	LIQUID PROD. Bbls.
SHUT-IN											
1											
2											
3											
4											
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT $(F_b)(F_p)$ Mcfd	(METER) (PROVER) PRESSURE Psia	PRESS 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 (Cf/Bbl)	G_m
1.									
2.									
3.									
4.									
5.									

PRESSURE CALCULATIONS

RATE NO.	P_t Psia	P_c Psia	P_a Psia	$(P_c)^2$ THOUSANDS	$(P_a)^2$ THOUSANDS	FLOWING POINTS $(P_c)^2 - (P_a)^2$ THOUSANDS	FLOWING POINTS Q Mcfd	% SHUT-IN $100 \frac{(P_c - P_t)}{(P_c - P_a)}$
1								
2								
3								
4								
5								

INDICATED WELLHEAD OPEN FLOW Mcfd @ 14.65 Psia °F=

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 (Rev.10/99)

STATE OF KANSAS - CORPORATION COMMISSION — FORM CG-1 Rev.

MULTIPOINT BACK PRESSURE TEST

TYPE TEST: ☒ Initial ☐ Annual ☐ Special — TEST DATE:

COMPANY: American Warrior, Inc.		LEASE: Withuhn			WELL NO.: 4-35
COUNTY: Ness	LOCATION: 150' E SW SE NW	SECTION: 23	TWP: 18 S	RNG (E/W): 21 W	ACRES: 160
API WELL NUMBER: 15-135-24076		RESERVOIR: Chase		PIPELINE CONNECTION:	
COMPLETION DATE: September 20, 1999		PLUG BACK TOTAL DEPTH: 2340		PACKER SET AT:	
CASING SIZE: 4 1/2	WT: 9.5	I.D.: 4.090	SET AT: 2355	PERF.: 2257-67,2278-84, 2311-17	TO:
TUBING SIZE: 2 3/8	WT: 4.7	I.D.: 1.995	SET AT: 2330	PERF.:	TO:
TYPE COMPLETION (Describe): Perforated		TYPE FLUID PRODUCTION:			
PRODUCING THRU:		RESERVOIR TEMPERATURE °F:			BAR PRESS - P_a 14.4 Psia
GAS GRAVITY - G_g:		% CARBON DIOXIDE:	% NITROGEN:		API GRAVITY OF LIQUID:
VERTICAL DEPTH (H):		TYPE METER CONNECTION:			METER RUN (PROVER) SIZE:

REMARKS:

OBSERVED DATA — DURATION OF SHUT-IN ____ HR.

RATE NO.	ORIFICE SIZE d_i	METER (PROVER) PRESSURE Psig	DIFF. (h_w) (h_o)	FLOWING TEMP t	WELL HEAD TEMP. t	CSG WELLHEAD PRESS. Psig	$(P_c)(P_t)(P_a)$ Psia	TBG WELLHEAD PRESS. Psig	$(P_w)(P_t)(P_a)$ Psia	FLOW DURATION (HOURS)	LIQUID PROD. Bbls.
SHUT-IN											
1											
2											
3											
4											
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT $(F_b)(F_p)$ Mcfd	(METER) (PROVER) PRESSURE Psia	PRESS EXTENSION $\sqrt{P_m^2 h_w}$	GRAVITY FACTOR F_g	FLOWING TEMP FACTOR F_t	DEVIATION FACTOR F_{pv}	RATE OF FLOW Q Mcfd	GOR (CF/Bbl)	G_m
1									
2									
3									
4									
5									

PRESSURE CALCULATIONS

RATE NO.	P_c Psia	P_w Psia	P_a Psia	$(P_c)^2$ THOUSANDS	$(P_w)^2$ THOUSANDS	PLOTTING POINTS $(P_c)^2 - (P_w)^2$ THOUSANDS	PLOTTING POINTS Q Mcfd	% SHUT-IN $100 \frac{(P_c - P_w)}{(P_c - P_a)}$
1								
2								
3								
4								
5								

INDICATED WELLHEAD OPEN FLOW: ____ 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 (Rev.10/98)

Company:	America Warrior Inc								
Address:									
Wellname:	Smith Ranch 4-35								
Legal:				Sec:		Twp:		Rge:	
Formation:		Field/Pool:				County:		St:	
Casing size:		Feet of:		Wt:		Meter run size:		SI:	587
Tubing Size:		Feet of:		Wt:		Orif (in):		95%	558
TD:		Pluged back depth:			Packer depth:			90%	528
Type Test:			Tap Type:			Gravity:		85%	499
Type Completion:				Producing through:				80%	470

Date	Clk Tim	Tbg Pres	Csg Pres	Diff	Temp	Static/Prover	Wat Vol1	Oil Vol	Comment
mm/dd	clock	psi	psi	in of H20	F	PSI	inch	inch	
05/06	10:30		587						Shut In
		1/							Motor Problems
	11:50		587						Shut
	1200	4"	577		50	58			
	1210		574		50	56			
	1220		568		50	56			1st pt
	1230		562		56	82			
	1240		554		56	121			
	1250		548		56	124			2nd pt
	1300	3/8	532		54	96			
	1310		526		54	110			
	1320		511		54	108			3rd pt
	1330	1/2	475		54	88			
	1340		455		54	87			
	1350		464		52	78			
									GI 295
									GA 60
								44	miles 74.80
									429.80

Date	Miles	Name	Date	Miles	Name	Date	Miles	Name