

KANSAS CORPORATION COMMISSION  
MULTIPOINT BACK PRESSURE TEST

FORM G-1  
8-7-58

TYPE TEST: <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		TEST DATE: 7/17/2001			
COMPANY Bear Petroleum, Inc		LEASE G. Britton		WELL NO. 1	
COUNTY Edwards	LOCATION 130' S n/2 ne	SECTION 8 26s 18w	TWP 2428	RNG 2496	ACRES 320
FIELD Bordewick	RESERVOIR Winfield & Herr	PIPELINE CONNECTION OneOK			
COMPLETION DATE 5-22-01	PLUG BACK DEPTH TOTAL DEPTH	2782 4840		PACKER SET AT	
CASING SIZE 4.500	WT. 10.500	ID 4.090	SET AT 4801	PERF. 2428	TO 2438
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 2488	PERF. 2496	TO 2506
TYPE COMPLETION (Describe) Perf & Acid		TYPE FLUID PRODUCTION Mist SW			
PRODUCING THRU (Annulus/Tubing) tubing		RESERVOIR TEMPERATURE F 97		BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg .659	% CARBON DIOXIDE 2.490	% NITROGEN 14.060		API GRAVITY OF LIQUID	
VERTICAL DEPTH (H) 2467	TYPE METER CONN. flange		METER RUN SIZE 2.067		
REMARKS					

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h <sub>w</sub> ) (h <sub>t</sub> )	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia	psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia		
SHUT-IN						598	612	595	609		
1.	1.000	141.50	1.10	86		560	574	550	564	.50	
2.	1.000	141.80	2.10	82		539	553	520	534	.50	
3.	1.000	148.80	12.20	72		510	524	410	424	.50	
4.	1.000	144.50	25.70	74		476	490	285	299	.50	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F <sub>b</sub> ) 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 <sub>m</sub>
1.	5.073	155.9	13.10	1.2318	.9759	1.0095	80		.659
2.	5.073	156.2	18.11	1.2318	.9795	1.0098	111		.659
3.	5.073	163.2	44.62	1.2318	.9887	1.0109	278		.659
4.	5.073	158.9	63.90	1.2318	.9868	1.0105	398		.659

PRESSURE CALCULATION

RATE NO.	Pt psia	Pc psia	Pw psia	(Pc) <sup>2</sup> Thousands	(Pw) <sup>2</sup> Thousands	PLOTTING POINTS		% SHUT-IN 100 $\left[ \frac{P_w - P_a}{P_c - P_a} \right]$
						(Pc) <sup>2</sup> - (Pw) <sup>2</sup> Thousands	Q Mcfd	
1.	564.4	612.4	574.4	375.0	329.9	45.1	80.6	93.6
2.	534.4	612.4	553.4	375.0	306.3	68.8	111.9	90.1
3.	424.4	612.4	524.4	375.0	275.0	100.0	278.7	85.3
4.	299.4	612.4	490.4	375.0	240.5	134.5	398.2	79.6

INDICATED WELLHEAD OPEN FLOW

Mcf @ 14.65 psia "n" = 1.485

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 20 day of July, 20 01

Witness (if any)

For Company

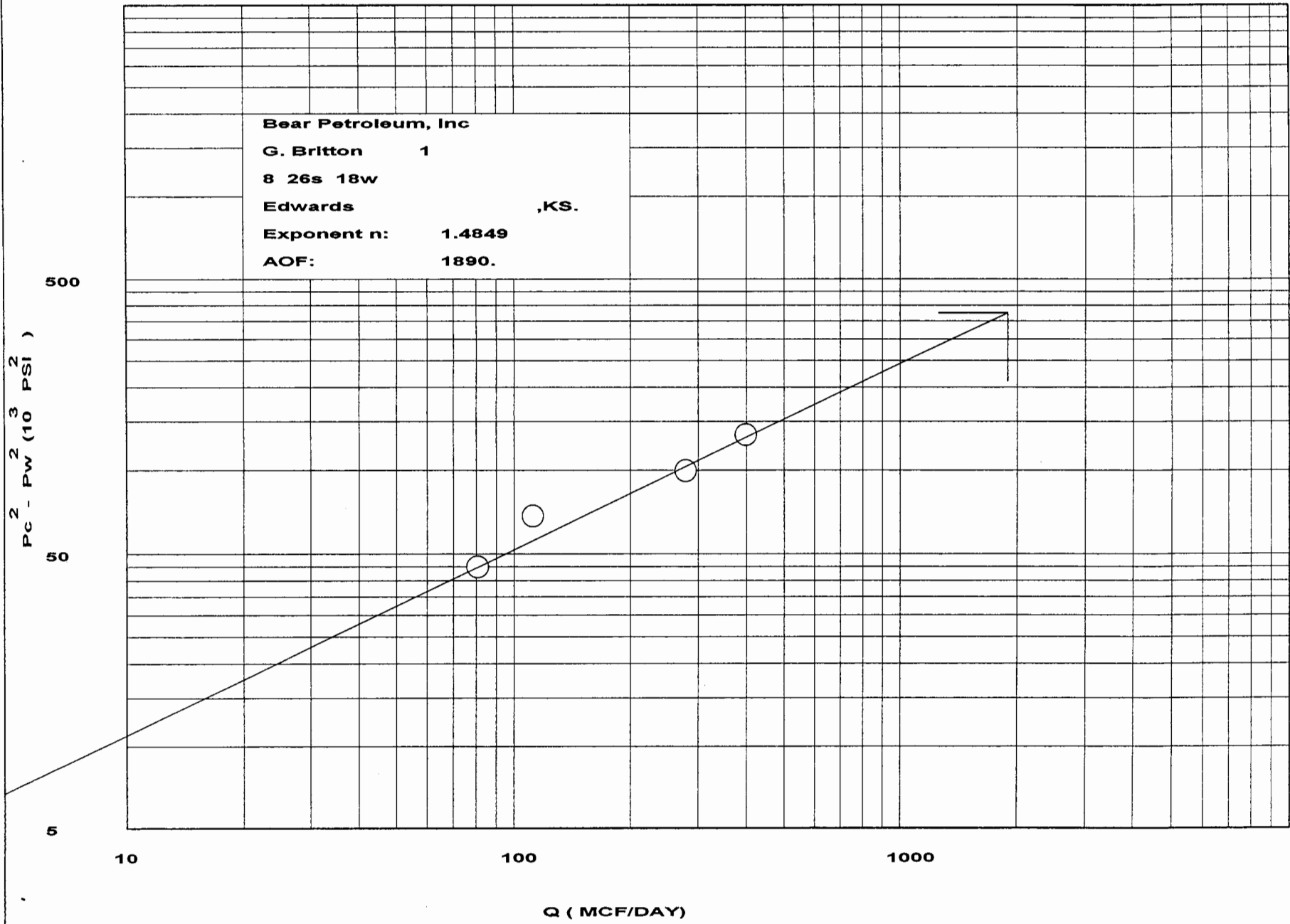
For Commission

Checked by

**GAS WELL BACK PRESSURE CURVE**

**WELL TESTER: Trilobite Testing**

**TEST DATE: 7/17/2001**



Bear Petroleum  
 130' N of N/2 NE SE 8 26s 18w Edwards KS  
 Start Test Date: 2001/07/17  
 Final Test Date: 2001/07/19

G Britton #1

# FieldNotes

## Field Measurements

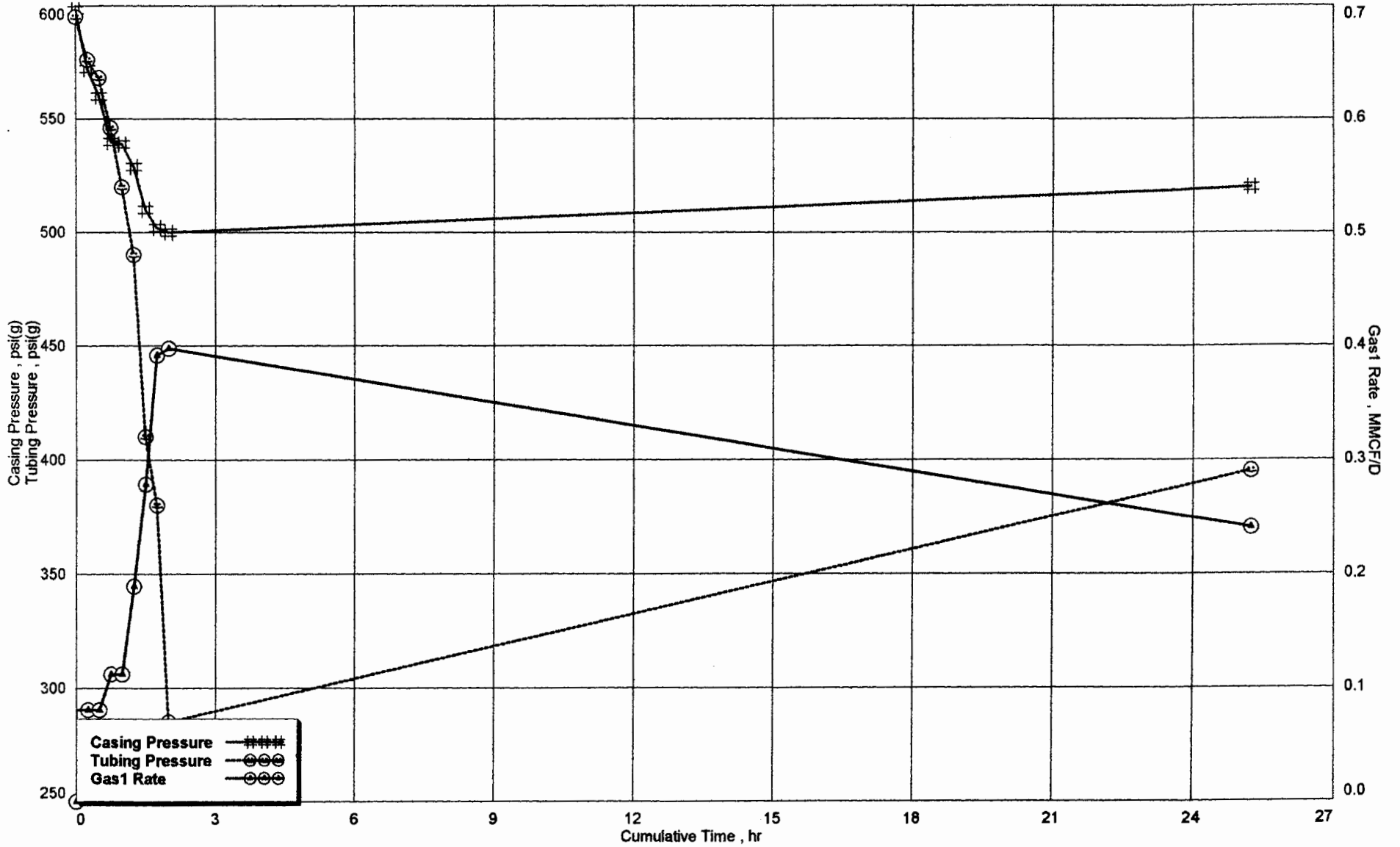
	Clock	Casing	Tubing	Static1	Diff1	Meter1	Gas1		
	Date	Time	Comment	Pres	Pres	Pres	Temp	Orifice1	Rate
	yyyy/mm/d	hh:mm:ss		psi(g)	psi(g)	psi(g)	in of H2O	in	MMCF/D
1	2001/07/17	18:45:00	shutin						
2		18:45:00		598.00	595.00	0.00	0.00	0.000	0.000
3		19:00:00		572.00	576.00	141.50	1.10	1.000	0.081
4		19:15:00	1st pt						
5		19:15:00		560.00	568.00	141.50	1.10	85.70	0.081
6		19:30:00		540.00	546.00	141.80	2.10	82.30	0.112
7		19:45:00	2nd pt						
8		19:45:00		539.00	520.00	141.80	2.10	80.00	0.112
9		20:00:00		529.00	490.00	142.20	5.90	73.10	0.189
10		20:15:00	3rd pt						
11		20:15:00		510.00	410.00	148.80	12.20	72.00	0.278
12		20:30:00		502.00	380.00	143.30	25.10	73.30	0.392
13		20:45:00	4th pt						
14		20:45:00		500.00	285.00	144.50	25.70	74.00	0.398
15	2001/07/18	20:00:00	1pt						
16		20:00:00		520.00	395.00	152.90	9.10	84.40	0.240

2001/07/17 18:45:00 To 2001/07/18 20:00:00  
 Gas 0.015 Cum. 0.015 MMCF

Bear Petroleum  
 130' N of N/2 NE SE 8 26s 18w Edwards KS  
 Start Test Date: 2001/07/17  
 Final Test Date: 2001/07/19

G Britton #1

# Plot





## Kansas Corporation Commission

Bill Graves, Governor John Wine, Chair Cynthia L. Claus, Commissioner Brian J. Moline, Commissioner

Dick Schremmer  
Bear Petroleum, Inc.  
P.O. Box 438  
Haysville, KS. 67060-0438

July 5, 2001

RE: **Preliminary Four-Point Backpressure  
Test From G. Britton #1 Gas Well;  
Sec. 8-26S-18W; Edwards County, KS.**

Dear Mr. Schremmer:

I must inform Bear Petroleum that the four-point backpressure test done through a flow-prover back on May 25<sup>th</sup> doesn't meet the KCC's acceptability criteria because of the Britton well only being "pulled" to a maximum percentage drawdown of 13.3 % on the highest flow rate and barely 1% during the lowest rate.

So, I must insist that Bear Petroleum retest the G. Britton #1 as soon as possible.

In the alternative, you could furnish a written explanation of your company's reasons for declining to retest the well and for the May test results being accepted by this office of the Conservation Division as valid despite not meeting the minimum pressure drawdown percentages.

The May test rates don't appear to staff to be excessively large, thereby posing a threat to the structural integrity of a gathering line. Besides, the test was run through a prover to the open atmosphere. It appears that there should be no risk of a pipeline rupture or of crowding other producing gas wells off of the system during the retesting at higher flow rates of the Britton well.

Try to have the results of the second test in my hands by no later than **August 6<sup>th</sup>**.

When preparing the Commission's G-2 form, feel free to utilize the previously recorded shut-in pressure of 679 psig in all calculations.

Make sure to switch to the standard orifice plate coefficients applicable to flow through an orifice sales meter rather than reusing those coefficients intended for use with a flow-prover.

I will await the submission of the second set of test results or the written explanation of which I spoke earlier. I can be reached at (316)-337-6224 should you have any questions.

Best of luck in future with respect to retesting of this gas well.

Sincerely,

A handwritten signature in cursive script that reads "Jim Hemmen".

Jim Hemmen  
Research Analyst

cc: Paul Simpson ✓  
c/o Trilobite Testing, L.L.C.  
P.O. Box 362  
Hays, KS. 67601-0362

KANSAS CORPORATION COMMISSION  
MULTIPOINT BACK PRESSURE TEST

FORM G-1  
8-7-58

TYPE TEST: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		TEST DATE: 5/25/01			
COMPANY Bear Petroleum, Inc		LEASE G. Britton		WELL NO. 1	
COUNTY Edwards	LOCATION 130' S n/2 ne	SECTION 8 26s 18w	TWP RNG	ACRES 320	
FIELD Bordewick	RESERVOIR Winfield & Herr	PIPELINE CONNECTION OneOK			
COMPLETION DATE 5-22-01	PLUG BACK DEPTH TOTAL DEPTH	2782 4840		PACKER SET AT	
CASING SIZE 4.500	WT. 10.500	ID 4.090	SET AT 4801	PERF. 2428	TO 2438
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 2488	PERF. 2496	TO 2506
TYPE COMPLETION (Describe) Perf & Acid			TYPE FLUID PRODUCTION Mist SW		
PRODUCING THRU (Annulus/Tubing) Tubing		RESERVOIR TEMPERATURE F 97		BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg .659		% CARBON DIOXIDE 2.490		% NITROGEN 14.060	
API GRAVITY OF LIQUID		VERTICAL DEPTH (H) 2467			
REMARKS		TYPE METER CONN. 2"		PROVER SIZE	

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(PROVER) PRESSURE psig	DIFF. (h <sub>w</sub> ) (h <sub>t</sub> )	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia	psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia		
SHUT-IN						679	693	683	697		
1.	.250	34.00		76		674	688	676	690	.50	
2.	.250	98.00		68		639	653	620	634	.50	
3.	.375	65.00		64		622	636	546	560	.50	
4.	.375	101.00		64		589	603	437	451	.50	.1

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F <sub>p</sub> ) 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 <sub>m</sub>
1.	1.120	48.4	48.40	1.2318	.9850	1.0028	65		.659
2.	1.119	112.4	112.40	1.2318	.9924	1.0077	154		.659
3.	2.439	79.4	79.40	1.2318	.9962	1.0055	238		.659
4.	2.440	115.4	115.40	1.2318	.9962	1.0081	348	72566.1	.716

PRESSURE CALCULATION

RATE NO.	P <sub>t</sub> psia	P <sub>c</sub> psia	P <sub>w</sub> psia	(P <sub>c</sub> ) <sup>2</sup> Thousands	(P <sub>w</sub> ) <sup>2</sup> Thousands	PLOTTING POINTS		% SHUT-IN 100 $\left[ \frac{P_w - P_a}{P_c - P_a} \right]$
						(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> Thousands	Q Mcfd	
1.	690.4	693.4	688.4	480.8	473.9	6.9	66.0	99.3
2.	634.4	693.4	653.4	480.8	426.9	53.9	154.9	94.1
3.	560.4	693.4	636.4	480.8	405.0	75.8	239.0	91.6
4.	451.4	693.4	603.4	480.8	364.1	116.7	348.3	86.7

INDICATED WELLHEAD OPEN FLOW

1587

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 1 day of June, 192001

Witness (if any)

For Commission

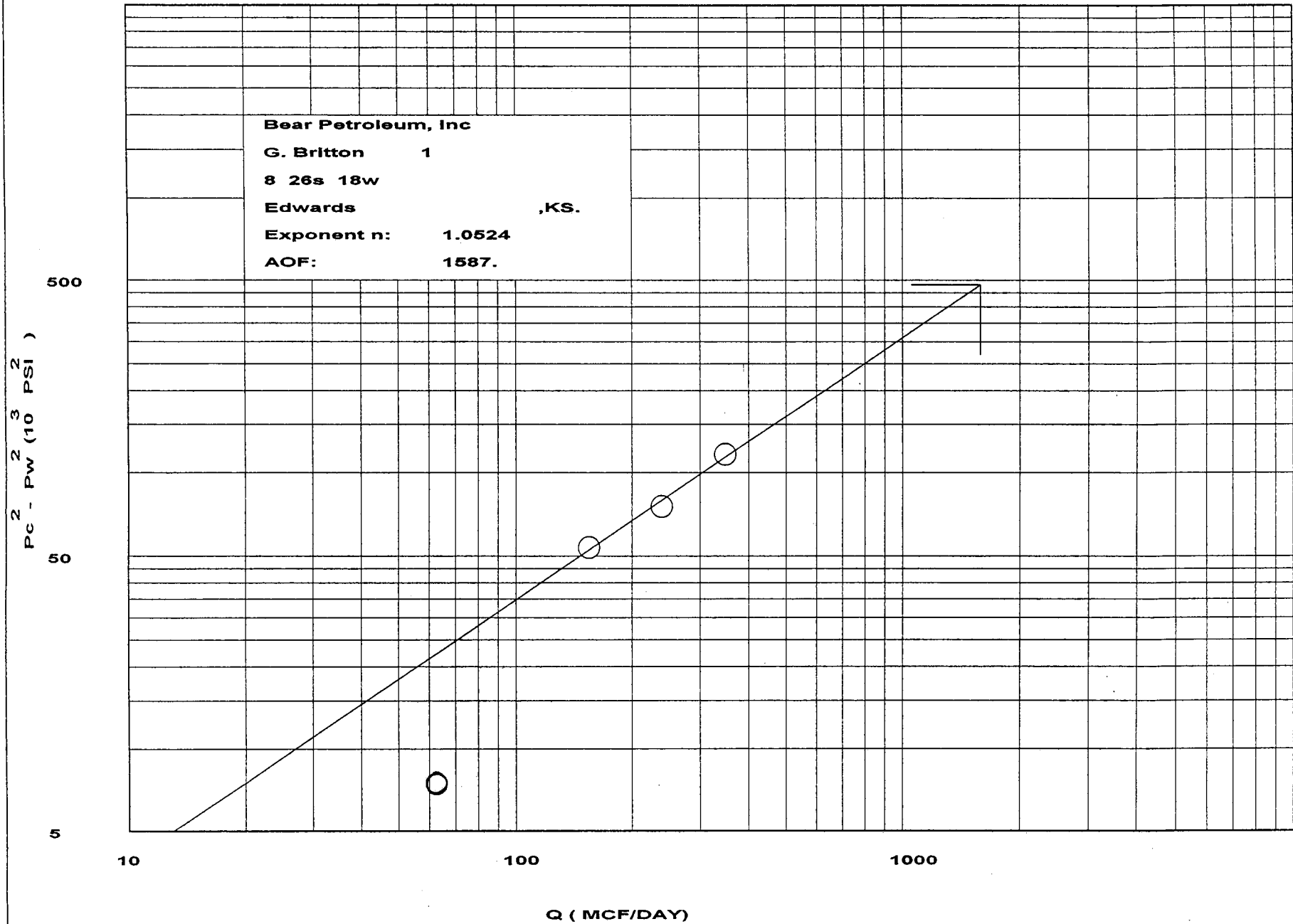
For Company

Checked by

**GAS WELL BACK PRESSURE CURVE**

**WELL TESTER: 5/25/01 @ 1210**

**TEST DATE: 5/25/01**



Bear Petroleum  
 130' S of N/2 NE SE Edwards KS  
 Start Test Date: 2001/05/25  
 Final Test Date: 2001/05/25

G. Britton

# FieldNotes

## Field Measurements

	Date	Clock Time	Comments	Casing Pres	Tubing Pres	Static1 Pres	Meter1 Temp	Gas1 Rate	Cum. Gas1
	yyyy/mm/dd	hh:mm:ss		psi(g)	psi(g)	psi(g)	°F	MMCF/D	MMCF
1	2001/05/25	12:10:00	shutin						
2		12:25:00	started test						
3		12:30:00		685.00	688.00	30.00	80.00	0.059	0.001
4		12:40:00		679.00	683.00	29.00	78.00	0.057	0.001
5		12:50:00		675.00	679.00	26.00	76.00	0.053	0.002
6		13:00:00	1st pt						
7		13:00:00		674.00	676.00	34.00	76.00	0.064	0.002
8		13:10:00		646.00	650.00	99.00	74.00	0.154	0.003
9		13:20:00		638.00	641.00	98.00	68.00	0.154	0.004
10		13:30:00	2nd pt						
11		13:30:00		639.00	620.00	98.00	66.00	0.154	0.005
12		13:40:00		634.00	594.00	63.00	66.00	0.230	0.006
13		13:50:00		628.00	570.00	61.00	64.00	0.224	0.008
14		14:00:00	3rd pt						
15		14:00:00		622.00	546.00	65.00	64.00	0.236	0.009
16		14:10:00		596.00	461.00	93.00	64.00	0.322	0.011
17		14:20:00		592.00	441.00	92.00	64.00	0.319	0.014
18		14:30:00	4th pt						
19		14:30:00		589.00	437.00	101.00	64.00	0.347	0.016

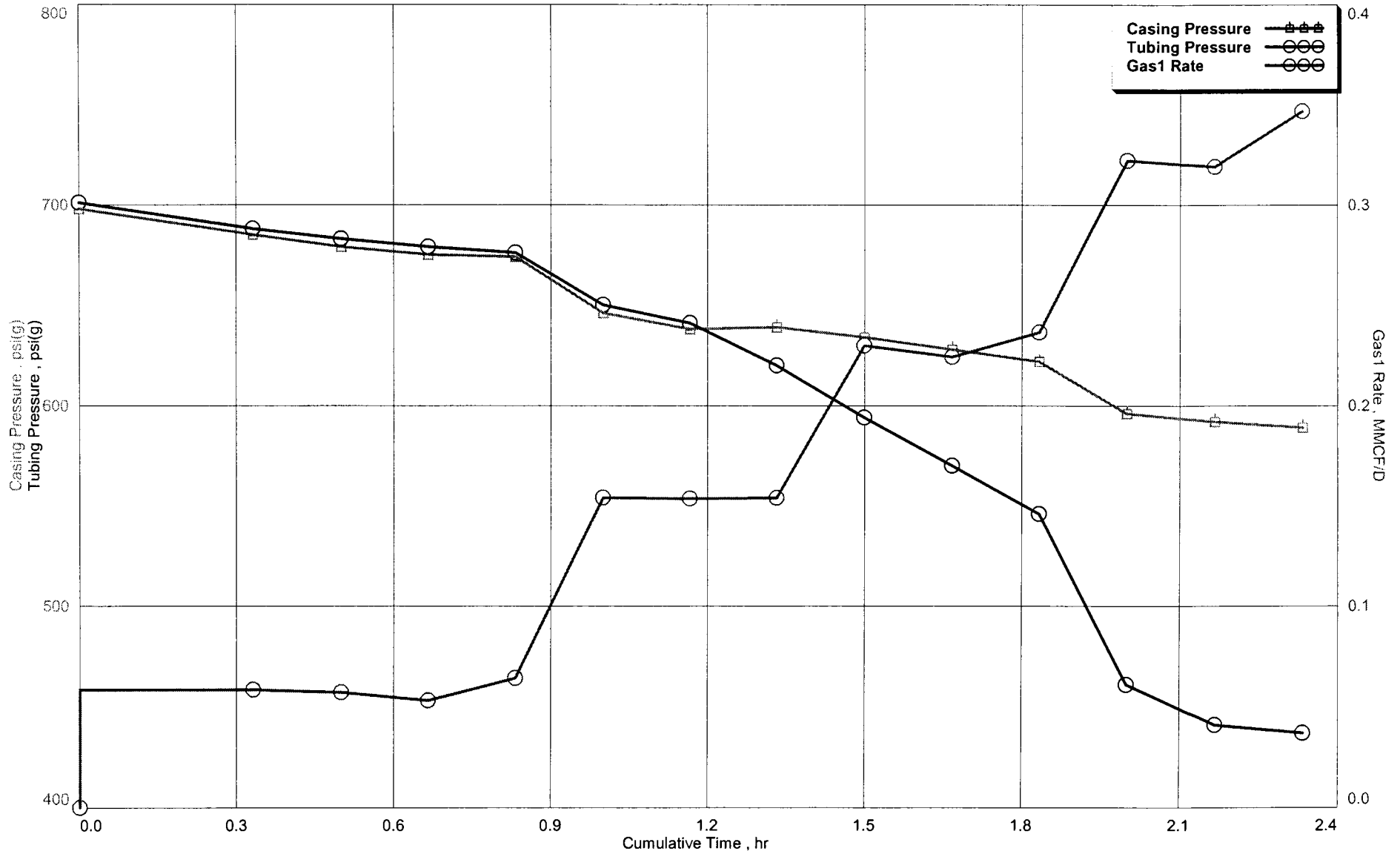
2001/05/25 12:10:00 To 2001/05/25 14:30:00  
 Gas 0.016 Cum. 0.016 MMCF



Bear Petroleum  
130' S of N/2 NE SE Edwards KS  
Start Test Date: 2001/05/25  
Final Test Date: 2001/05/25

G. Britton

# Plot



Company: Bear Petroleum

Address:

Wellname: G Britton

Legal: 130's N 1/2 NE SE Sec: 8 Twp: 26s Rge: 18w

Formation: Winfield Horseshoe Field/Pool: Burdewick County: Edwara St: ks

Casing size: Feet of: Wt: Meter run size: SI: 698

Tubing Size: Feet of: Wt: Orif (in): 95% 653

TD: Plugged back depth: Packer depth: 90% 628

Type Test: Tap Type: Gravity: 85% 593

Type Completion: Producing through: 80% 558

Date	Clk Tim	Tbg Pres	Csg Pres	Diff	Temp	Static/Prover	Wat Vol1	Oil Vol	Comment
mm/dd	clock	psi	psi	in of H2O	F	PSI	inch	inch	
5/25	1210	701	698	1					SI
	12:25			1					started
	12:30	688	685	/	80	30			
	1240	683	679		78	29			
	1250	679	675	4	76	26			
	1300	676	674		76	34			1st pt
	1310	650	646		74	99			
	1320	641	638		68	98			
	1330	620	639		68	98			2nd
	1340	594	634	3	66	63			
	1350	570	628	1/8	64	61			
	1400	546	622		64	65			3rd
	1410	461	596		64	93			
	1420	441	592		64	92			
	1430	437	589		64	100			4th pt
									.659
									2.49 Co2
									14.06 N2

Date	Miles	Name	Date	Miles	Name	Date	Miles	Name

524 1225

## GENERAL INFORMATION

### Client Information:

Company: Bear Petroleum

Contact: Dick Schremmer

Phone: Fax: e-mail:

### Site Information:

Contact:

Phone: Fax: e-mail:

### Well Information:

Name: G. Britton

Operator:

Location-Downhole:

Location-Surface:

### Test Information:

Company: Trilobite Testing

Representative:

Supervisor: Paul Simpson

Test Type: initial 4pt Job Number:

Test Unit:

Start Date: 2001/05/25 Start Time: 12:10:00

End Date: 2001/05/25 End Time:

Report Date: Prepared By:

Remarks: Qualified By:

108 miles rush center to well to rush center to well

4pt 295.00  
~~100~~ .85 miles  
219