

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow
 Deliverability

Test Date:
12/19/2012

API No. 15
15-175-21813 - 0000

Company MERIT ENERGY COMPANY		Lease BUSH		Well Number B-4	
County SEWARD	Location 990' FNL & 990' FEL	Section 35	TWP 33	RNG (E/W) 33	Acres Attributed 640
Field EVALYN		Reservoir Upper Lansing		Gas Gathering Connection APC	
Completion Date 02/02/2001		Plug Back Total Depth 4870'		Packer Set at 4372'	
Casing Size 5.5	Weight 15.5#	Internal Diameter 4.95	Set at 5312'	Perforations 4450'	To 4460'
Tubing Size 2.375	Weight 4.7#	Internal Diameter 1.995	Set at 4366'	Perforations NA	To NA
Type Completion (Describe) SINGLE GAS		Type Fluid Production WATER		Pump Unit or Traveling Plunger? Yes / No PUMPING UNIT YES	
Producing Thru (Annulus / Tubing) CASING		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 4870'		Pressure Taps FLANGE		(Meter Run) (Prover) Size 2	
Pressure Buildup: Shut in <u>12/19/12</u> 20 <u>11</u> at <u>09:00 AM</u> (AM) (PM) Taken <u>12/20/12</u> 20 <u>11</u> at <u>9:00 AM</u> (AM) (PM)					
Well on Line: Started _____ 20 ____ at _____ (AM) (PM) Taken _____ 20 ____ at _____ (AM) (PM)					

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KCC WICHITA

OBSERVED SURFACE DATA

Duration of Shut-in _____ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P ₁) or (P _e)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _e)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in	.38						435		16	24	
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = _____ : (P_w)² = _____ : P_o = _____ % (P_c - 14.4) + 14.4 = _____ : (P_a)² = 0.207
(P_d)² = _____

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_o)^2$	$(P_c)^2 - (P_w)^2$	Choose formula 1 or 2: 1. $P_c^2 - P_a^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w^2$	LOG of formula 1. or 2. and divide by: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow Mcf @ 14.65 psia Deliverability Mcf @ 14.65 psia

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 therein, and that said report is true and correct. Executed this the 26TH day of DECEMBER, 20 12.

Witness (if any)

For Commission

MCP

For Company

Checked by

8019.

I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator MERIT ENERGY COMPANY and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.

I hereby request a one-year exemption from open flow testing for the BUSH B-4 gas well on the grounds that said well:

(Check one)

- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. _____
- is not capable of producing at a daily rate in excess of 250 mcf/D

I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing.

Date: 12/26/2012

Signature: *McKee Patrick*
Title: REGULATORY ANALYST

Instructions: If a gas well meets one of the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been measured after a *minimum of 24 hours shut-in/buildup* time and shall be reported on the front side of this form under **OBSERVED SURFACE DATA**. Shut-in pressure shall thereafter be reported yearly in the same manner for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption **IS** denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31 of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.

MID 18985 CompletionName Bush B-4 (Marmaton B) F(Type Producing Method
 API 151752181300 - Seward Oil Prod Var Oil Plan Oil Oil Prod Var Oil Plan Oil Oil Prod Var Oil Plan Oil BOE BOE
 State Kansas County Aries Case State Plus Regulatory Field Producing Gas Route
 Cost Center 1001032190 Producing Status State Plus Regulatory Field Producing Gas Route Accounting ID
 1001032190 Aries Case

Weekly Average Production Information for Bush B-4 (Marmaton B) F002

	Gas												
	Gas Prod	Plan Gas	Sales	Var Gas	Plan Oil	Oil Prod	Var Oil	Plan NGL	NGLS	Var NGL	Plan BOE	BOE	Var BOE
12/20/2012	25.3	0.0	25.3	25.3	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	4.2
12/13/2012	28.6	0.0	28.6	28.6	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	4.8
12/6/2012	33.7	0.0	33.7	33.7	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	5.6
11/29/2012	37.0	0.0	37.0	37.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	6.2
11/22/2012	43.0	0.0	43.0	43.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	7.2
11/15/2012	49.7	0.0	49.7	49.7	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	8.3
11/8/2012	57.1	0.0	57.1	57.1	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	9.5
11/1/2012	65.6	0.0	65.6	65.6	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	10.9
10/25/2012	77.4	0.0	77.4	77.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	12.9
10/18/2012	96.4	0.0	96.4	96.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	16.1
10/11/2012	120.7	0.0	120.7	120.7	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	20.1
10/4/2012	160.0	0.0	160.0	160.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	26.7
9/27/2012	158.0	0.0	158.0	158.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	26.3
9/20/2012	216.4	0.0	216.4	216.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	36.1
9/13/2012	277.4	0.0	277.4	277.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	46.2
9/6/2012	350.4	0.0	350.4	350.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	58.4
8/30/2012	389.4	0.0	389.4	389.4	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	64.9
8/23/2012	408.0	0.0	408.0	408.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	68.0
8/16/2012	461.7	0.0	461.7	461.7	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	77.0
8/9/2012	336.7	0.0	336.7	336.7	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	56.1
8/2/2012	.0	0.0	0.0	0.0	0.0	0.0	.0	0.0	0.0	0.0	0.0	0.0	0.0
7/26/2012													
7/19/2012													
7/12/2012													
7/5/2012													
6/28/2012													

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