

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow
 Deliverability

Test Date:
6-26-12

API No. 15
15-007-22848-00-00

Company CHESAPEAKE OPERATING, INC.		Lease MESA TOP		Well Number 2-9	
County BARBER	Location 1420' FSL & 400' FWL	Section 9	TWP 35S	RNG (E/W) 15W	Acres Attributed
Field SOUTH AETNA		Reservoir DETRITAL/MISSISSIPPI		Gas Gathering Connection ATLAS	
Completion Date 11-2-04		Plug Back Total Depth 5322		Packer Set at NONE	
Casing Size 4.5	Weight 10.5	Internal Diameter 4.090	Set at 5383	Perforations 5144	To 5168
Tubing Size 2.375	Weight 4.7	Internal Diameter 1.995	Set at 5308	Perforations	To
Type Completion (Describe) COMINGLED GAS		Type Fluid Production WAER/OIL		Pump Unit or Traveling Plunger? Yes / No YES-PUMP	
Producing Thru (Annulus / Tubing) ANNULUS		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 5156		Pressure Taps FLANGE		Gas Gravity - G _g .623	
Pressure Buildup: Shut in 6-22-12 20 at 0830 (AM) (PM) Taken 6-25-12 20 at 0830 (AM) (PM)		Well on Line: Started 6-25-12 20 at 0830 (AM) (PM) Taken 6-26-12 20 at 0830 (AM) (PM)			

OBSERVED SURFACE DATA

Duration of Shut-in **72.0** Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or Prover Pressure psig (P _m)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						252.7	267.1			72.0	
Flow	.375	35.4	33.3	91	75	55.8	70.2			24.0	7.5

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _s) (F _p) Mcd	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 (Mcd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
.686	49.80	40.72	1.2669	0.9715	1.0037	34.5	NONE	0.623

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 71.3 ; (P_w)² = 4.9 ; P_d = 26.3 % ; (P_c - 14.4) + 14.4 = 267.1 ; (P_d)² = 0.207 ; (P_d)² = _____

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) 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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcd)
71.14	66.41	1.071	0.0298	0.850	0.0254	1.0602	36.58

Open Flow **37** Mcd @ 14.65 psia Deliverability Mcd @ 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 26 day of JUNE, 20 12.

Copy to KCC Wichita
Witness (if any)

Copy to KCC Dodge City
For Commission

Precision Wireline & Testing **RECEIVED**
For Company

Mark J. Burt **JUL 09 2012**
Checked by

KCC WICHITA

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 _____ 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 _____ 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: _____

Signature: _____

Title: _____

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.