KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

☐ Open Flow

☑ Deliverabilty

Test Date: 12/1/2009

API No. 15
15-199-20355 '0000

Company	Lease	Well Number
Raven Resources, LLC	Agnew	#2-23

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
Wallace County	NE/4 NW/4	23	11S	42W	

Field	Reservoir	Gas Gathering Connection
	Niobrara	Closed gathering system (West Kansas Pipeline)

Completion Date	Plug Back Total Depth	Packer Set at
8/2008	1233.66'	

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4 1/2"	10.5		1275.64'	1070' - 1090'	

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2 3/8	4.7		1060.56'		

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger? Yes / No
CO2 Frac		No

Producing Thru (Annulus / Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
Tubing			

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
1292'		.500"

Pressure Buildup: Shut in __12-1__ 20 __09__ at __9:30 am__ (AM) (PM) Taken __12-2__ 20 __09__ at __9:30 am__ (AM) (PM)

Well on Line: Started __12-2__ 20 __09__ at __9:30 am__ (AM) (PM) Taken __12-3__ 20 __09__ at __9:30 am__ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in __24__ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H_2O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Casing psia	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Tubing psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In	.500"	14	0			4		4		24	0
Flow	.500"	15	2			2		2		24	0

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_{tt}	Deviation Factor F_{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G_m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 =$ _____ : $(P_w)^2 =$ _____ : $P_d =$ _____ % $(P_c - 14.4) + 14.4 =$ _____ :

$(P_a)^2 = 0.207$

$(P_d)^2 =$ _____

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" -------- or -------- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow	Mcfd @ 14.65 psia	Deliverability	Mcfd @ 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 _____ day of _____ , 20 _____ .

_____
Witness (if any)

_____
For Company

_____
For Commission

_____
Checked by

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST
(See Instructions on Reverse Side)

Type Test:
- [ ] Open Flow
- [ ] Deliverability

Test Date: _____   API No. 15 _____

Company	Lease _Agnew_	Well Number _2-23_

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
Wallace		_23_	_11S_	_42W_	

Field	Reservoir _Niobrara_	Gas Gathering Connection

Completion Date _8-4-08_	Plug Back Total Depth _1233.66'_	Packer Set at

Casing Size _4½"_	Weight _10.5_	Internal Diameter	Set at _1275.64'_	Perforations _1070' — 1090'_	To

Tubing Size _2⅜"_	Weight _4.7_	Internal Diameter	Set at _1060.56"_	Perforations	To

Type Completion (Describe) _CO₂ Frac_	Type Fluid Production	Pump Unit or Traveling Plunger? Yes / (No)

Producing Thru (Annulus / Tubing) _Tubing_	% Carbon Dioxide	% Nitrogen	Gas Gravity - G

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size _.500"_

Pressure Buildup: Shut in _12-1_ 20_09_ at _9:30_ (AM) (PM) Taken _12-2_ 20_09_ at _9:30_ (AM)(PM)

Well on Line: Started _12-2_ 20_09_ at _9:30_ (AM) (PM) Taken _12-3_ 20_09_ at _9:30_ (AM) (PM)

OBSERVED SURFACE DATA   Duration of Shut-in _24_ Hours

Static / Dynamic Property	Orifice Size (inches)	(Meter) Prover Pressure psig (Pm)	Pressure Differential in Inches H₂O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P_w) or (P_1) or (P_o) psig	psia	Tubing Wellhead Pressure (P_w) or (P_1) or (P_c) psig	psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In	.500	14	0			4		4		24	0
Flow	.500	15	2			2		2		24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F_b) (F_o) Mcfd	Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F_g	Flowing Temperature Factor F_{tf}	Deviation Factor F_{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G_b

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_s)^2$ = 0.207

$(P_u)^2$ = _____ $(P_w)^2$ = _____ P_d = _____ % $(P_c - 14.4) + 14.4$ = _____ $(P_d)^2$ = _____

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

Open Flow	Mcfd @ 14.65 psia	Deliverability	Mcfd @ 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 _14_ day of _May_, 20 _10_.

Witness (if any) _____   For Company _____

For Commission _____

Checked by _____

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 __Raven Resources, LLC__ 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 __Agnew 2-23__ 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: __5/18/10__

RECEIVED
KANSAS CORPORATION COMMISSION

MAY 20 2010

CONSERVATION DIVISION
WICHITA, KS

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.