

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow
 Deliverability

Test Date:
5-28-15

API No. 15
15-119-21385-00-00

Company
O'BRIEN ENERGY RESOURCES CORP.

Lease
KEYSTONE

Well Number
1-5

County
MEAD

Location
SW NE SE SE

Section
5

TWP
33S

RNG (E/W)
29W

Acres Attributed

Field

Reservoir
MORROW

Gas Gathering Connection
DCP MIDSTREAM

Completion Date
3-10-15

Plug Back Total Depth

Packer Set at
5700

Casing Size
4.5

Weight
10.5

Internal Diameter
4.090

Set at
6385

Perforations
5717

To
5725

Tubing Size
2.375

Weight
4.7

Internal Diameter
1.995

Set at

Perforations

To

Type Completion (Describe)
SINGLE GAS

Type Fluid Production
OIL

Pump Unit or Traveling Plunger? Yes / No
NO

Producing Thru (Annulus / Tubing)
TUBING

% Carbon Dioxide
0.100

% Nitrogen
7.515

Gas Gravity - G_g
.690

Vertical Depth(H)
5721

Pressure Taps
FLANGE

(Meter Run) (Prover) Size
3.068"

Pressure Buildup: Shut in 5-24-15 20 at 0815 (AM) (PM) Taken 5-27-15 20 at 0815 (AM) (PM)
Well on Line: Started 5-27-15 20 at 0815 (AM) (PM) Taken 5-28-15 20 at 0815 (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in 72.0 Hours

Static / Dynamic Property	Orifice Size (inches)	Casing and Meter 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 _f) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _f) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in								960.6	975.0	72.0	
Flow	1.250	74.3	45.6	51	75			251.2	265.6	24.0	1.67

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _v) (F _a) Mcfd	Casing and Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{dv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
7.7708	88.70	63.60	1.2039	1.0088	1.0087	605.4	NONE	0.690

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 950.6$; $(P_w)^2 = 78.7$; $P_0 = 28.8$ % $(P_c - 14.4) + 14.4 = 975.0$; $(P_a)^2 = 0.207$
 $(P_d)^2 =$

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_w)^2$	$(P_c)^2 - (P_w)^2$	Choose formula 1 or 2: 1. $P_c^2 - P_a^2$ 2. $P_c^2 - P_w^2$ 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)
950.42	78.7	1.090	0.0374	0.500	0.0187	1.0440	632.08

Open Flow 632

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 28 day of MAY, 2015

Witness (if any)

For Commission

Mark J. Brock
For Company
Precision Wireline & Testing
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 _____ 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

Received
KANSAS CORPORATION COMMISSION
JUL 31 2015
CONSERVATION DIVISION
WICHITA, KS

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.