## KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Open Flow Test Date: API No. 15 15-023-21179-00-00  Company Lease Well Number	Test Date: API No. 15	
Deliverabilty 15-023-21179-00-00  Company Lease Well Number	1631 Date.	
outspany mener	15-023 <b>-</b> 21179-00-00	
Noble Energy Inc. Rogers 44-31		Well Number 4-31
County Location Section TWP RNG (E/W) Acres Attributed		Acres Attributed
Cheyenne NE-SW-SE-SE 31 5S 39W RECENT		RECEIVED
Field Reservoir Gas Gathering Connection Prairie Star Niobrara Kinder Morgan	Niobrara Kinder Morgan	DEC 2 0 2012
Completion Date Plug Back Total Depth Packer Set at 5/16/2011 1493'		DEC 2 0 ZUT
Casing Size Weight Internal Diameter Set at Perforations To KCC WICH 7", 4-1/2" 17#, 11.6# 9-7/8", 6-1/4" 367', 1538' 1332' 1358'		
Tubing Size Weight Internal Diameter Set at Perforations To 2-3/8" 4.7# 1.995 1372'	Internal Diameter Set at Perforations To	o
Type Completion (Describe)  Type Fluid Production  Pump Unit or Traveling Plunger? Yes / No	w	Yes / No
Single (gas) saltwater no		
Producing Thru (Annulus / Tubing) % Carbon Dioxide % Nitrogen Gas Gravity - G <sub>g</sub> tubing	% Carbon Dioxide % Nitrogen Ga	as Gravity - G <sub>g</sub>
Vertical Depth(H) Pressure Taps (Meter Run) (Prover) Size	Pressure Taps (N	Meter Run) (Prover) Size
Pressure Buildup: Shut in 10/23 20 12 at 12:30 (AM) (PM) Taken 20 at (AM) (PM)	20 12 at 12:30 (AM) (PM) Taken 20 at	(AM) (PM)
Well on Line: Started 10/24 20 12 at 12:30 (AM) (PM) Taken 20 at (AM) (PM)	20 12 at 12:30 (AM) (PM) Taken 20 at	(AM) (PM)
OBSERVED SURFACE DATA Duration of Shut-in 24 Hours	OBSERVED SURFACE DATA Duration of	f Shut-in 24 Hours
Static / Orifice	I Flowing 1 Well Head I	nn Liquid Produced
Dynamic Size Prover Pressure in Temperature (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> ) (P <sub>w</sub> ) or (P <sub>c</sub> ) (Hours) (Barrels)	Temperature $P_{\text{top}} = P_{\text{top}} = P_{\text$	I *
Shut-In   psig (Pm) Inches H <sub>2</sub> 0   psig psia psig psia   psig psia	Pog Pou Fra	
Flow 12	12	
FLOW STREAM ATTRIBUTES	FLOW STREAM ATTRIBUTES	
Flowing Flowing	Elawing	Flowing
Coefficient Meter or Extension Factor Temperature Factor R (Cubic Feet/ Condition Recognition Recognit	Factor Temperature Factor R (Cu	ubic Feet/ Fluid
(F <sub>b</sub> )(F <sub>p</sub> ) Prover Pressure psia		Barren i ' i
(OPEN FLOW) (DELIVERABILITY) CALCULATIONS $(P_a)^2 = 0.207$	(OPEN FLOW) (DELIVERABILITY) CALCULATIONS	(P ½ = 0.207
$(P_c)^2 = $ : $(P_w)^2 = $ : $P_d = $ % $(P_c - 14.4) + 14.4 = $ : $(P_d)^2 = $	$P_d = $ % $(P_c - 14.4) + 14.4 = ;$	
$(P_c)^2 - (P_a)^2 \qquad (P_c)^2 - (P_w)^2 \qquad (P_c$	LOC - Backpressure Curve	l '
or 2. P <sup>2</sup> -P <sup>2</sup> 1. or 2 or If X LOG Antilog Equals R x Antilog	1. or 2. Antilog	a I 'I
(P <sub>c</sub> ) <sup>2</sup> · (P <sub>d</sub> ) <sup>2</sup> divided by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> and divide by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> Assigned Standard Slope (Mcfd)		(Mcfd)
Open Flow Mcfd @ 14.65 psia Deliverability Mcfd @ 14.65 psia	4.65 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	e 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 17 day of December , 20 12	rue and correct. Executed this the 17 day of December	, 20 12
Witness (If any) For Company	For Company	
For Commission Checked by	Checked by	

	penalty of perjury under the laws of the state of Kansas that I am authorized to request Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc.
and that the foregoi correct to the best o of equipment installa	ng pressure information and statements contained on this application form are true and f my knowledge and belief based upon available production summaries and lease records ation and/or upon type of completion or upon use being made of the gas well herein named. It a one-year exemption from open flow testing for the Rogers 44-31
(Check of Check of Ch	
Date: 12/17/2012	Signature:
	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.