KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test: (See Instructions on Reverse Side)												
Open Flow Deliverabilty			Test Date	Test Date: API No. 15 15-023-21179-00-00								
Company Noble Energy Inc					Lease Rogers					44-31	Well Number 44-31	
County Location Cheyenne NE-SW-SE-SE				Section 31				RNG (E/W) 39W			Acres Attributed	
Field				Reservoir Niobrara			Gas Gathering Connection Kinder Morgan					
Completion Date 5/16/2011			Plug Bac 1493'	Plug Back Total Depth 1493'			Packer \$	Set at				
Casing Size Weight 7", 4-1/2" 20#, 11.6#				Internal Diameter Set at 9-7/8", 6-1/4" S67',1538			Perforations 1332'		то 1358'			
Tubing Size Weight			Internal (Internal Diameter Set at			Perforations		То			
Type Cor Single ((Describe)			Type Fluid Production Saltwater			Pump Unit or Traveling Plunger? Yes /			/ No	
Producing	g Thru	(Annulus / Tubin	3)	% (% Carbon Dioxide			% Nitrogen		Gas Gr	Gas Gravity - G	
Vertical C					Pres	sure Taps				(Meter	Run) (Prover) Size	
										(
Pressure	Buildup	: Shut in	12	0 11 at 1	1:00	(PM)	Taken		20	at	(AM) (PM)	
Well on L	_ine:	Started 6/3	2	o <u>11</u> at <u>1</u>	2:50	(AM)(PM	Taken		20	at	(AM) (PM)	
					OBSERVE	D SURFACE	DATA			Duration of Shut-	in 314 Hours	
Static / Dynamic Property	Orific Size (inche	Ze Prover Pressure in		Flowing Temperature t	Temperature Temperature		Casing Wellhead Pressure (P,) or (P,) or (P,)		Tubing ad Pressure r (P ₁) or (P _c)	Duration (Hours)	Liquid Produced (Barrels)	
Shut-In		psig (Pm)	Inches H ₂ 0			psig 222	psia	psig	psia			
Flow												
		-			FLOW STR	EAM ATTRI	SUTES					
Plate Coefficcient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia Press Extension P _m x h		Gravity Factor F _g		Flowing Femperature Factor F _{II}	ure Factor		Metered Flov R (Mcfd)	v GOR (Cubic Fe Barrel)	Geneity	
									·			
(P _c) ² =		.: (P _w) ² =		(OPEN FL		ERABILITY) % (P	- 14.4) +			(P _a) (P _d)	² = 0.207	
(P _e) ² - (I	-	(P _c) ² - (P _w) ²	Choose formula 1 or 2 1. P _c ² -P _s ² 2. P _c ² -P _s ² divided by: P _c ² -P _s	LOG of formula 1, or 2.	P _e ² . P _* ²	Backpres Slope Assi	sure Curve		LOG [Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)	
Open Flow Mcfd @ 14.69		SE paia	5 psia Deliverability			Nation (2) 11 CC -		Matel C 11 CC]			
		and guthosity a	Mcfd @ 14.	<u> </u>				! 11		Mcfd @ 14.65 ps		
		erein, and that sa		, ,		. 20			ovember	rt and that he ha	, 20 <u>11</u>	
		*** · · · · · · · · · · · · · · · · · ·		,,	<u>-</u>		CK	ey	1 for	- 42-0 + -	RECEIVED	
		Witness (i	f any)						For C	Company	DEC 13 2011	
		For Comm	ission		<u>_</u>				Chec	ked by		

er penalty of perjury under the laws of the state of Kansas that I am authorized to request der Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc
going pressure information and statements contained on this application form are true and tof my knowledge and belief based upon available production summaries and lease records allation and/or upon type of completion or upon use being made of the gas well herein named. est a one-year exemption from open flow testing for the Rogers 44-31
ounds that said well:
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 e to supply to the best of my ability any and all supporting documents deemed by Commission y to corroborate this claim for exemption from testing.
Signature: Key Jo Koron Title: Regulatory Analyst II

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 RECEIVED signed and dated on the front side as though it was a verified report of annual test results.

DEC 13 2011

KCC WICHITA



NATURAL GAS ANALYSIS

PROJECT NO.:

201106109

ANALYSIS NO.:

COMPANY NAME: NOBLE ENERGY

ANALYSIS DATE:

JUNE 26, 2011

ACCOUNT NO.:

YUMA

SAMPLE DATE:

JUNE 16, 2011

PRODUCER: LEASE NO.:

TO:

EFFECTIVE DATE: JULY 1, 2011

NAME/DESCRIP.:

E1502321179 **ROGERS 44-31**

FIELD DATA SAMPLED BY:

M. MCCALL 80

CYLINDER NO.: AMBIENT TEMP.: 755

SAMPLE PRES.: SAMPLE TEMP.:

95

GRAVITY: VAPOR PRES.:

SPOT SAMPLE TYPE: FIELD COMMENTS: NO PROBE

LAB COMMENTS:

	NORM.	GPM @	GPM @		
COMPONENTS	MOLE%	14.65	14.73		
HELIUM	0.12	-	-		
HYDROGEN	0.00	•	-		
OXYGEN/ARGON	0.04	-	-		
NITROGEN	4.91	-	-		
CO2	0.97	-	-		
METHANE	91.84	-	-		
ETHANE	1.50	0.399		0.401	
PROPANE	0.43	0.118		0.118	
ISOBUTANE	0.07	0.023		0.023	
N-BUTANE	0.08	0.025		0.025	
ISOPENTANE	0.02	0.007		0.007	
N-PENTANE	0.01	0.004		0.004	
HEXANES+	0.01	0.004		0.004	
TOTAL	100.00	0.580		0.582	
BTU @ 60 DEG F		14.65		14.73	
NET DRY REAL =		874.2	•	879.0	
NET WET REAL =		858.9		863.7	
GROSS DRY REAL =		970.4		975.7	
GROSS WET REAL =		953.4		958.7	
RELATIVE DENSITY REAL	. (AIR=1 @ 14.696 PSIA 60F)	0.5986			

NOTE: REFERENCE GPA 2261(ASTM D1945), 2145, & 2172 CURRENT PUBLICATIONS

THIS DATA HAS BEEN ACQUIRED THROUGH APPLICATION OF CURRENT STATE-OF-THE-ART ANALYTICAL TECHNIQUES. THE USE OF THIS INFORMATION IS THE RESPONSIBLITY OF THE USER. EMPACT ANALYTICAL SYSTEMS, ASSUMES NO RESPONSIBLITY FOR ACCURACY OF THE REPORTED INFORMATION NOR ANY CONSEQUENCES OF IT'S APPLICATION.

RECEIVED DEC 13 2011

EMPACT Analytical Systems, Inc. 365 S. Main St. Brighton, CO 80601 303-637-0150

KCC WICHITA