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

Type Test	t:				(	See Instruct	tions on Rev	erse Side	)				
Open Flow Deliverabilty				Test Date: API No. 15 15-023-21292-00-00						00-00			
Company Noble Energy Inc					Lease Nipps					24-33	Well Number 24-33		
County Location Cheyenne SE-NE-SE-S					Section 33		TWP 5S			W)	Acres Attributed		
Field Prairie Star					Reservoir Niobrara			Gas Gathering Connection Kinder Morgan					
Completion Date 5/9/11			Plug Bac 1495'	Plug Back Total Depth 1495'			Packer S	et at					
Casing Size Weight 7", 4-1/2" 17#, 11.6				Internal [ 9-7/8",		Set at <b>388',1565</b> '		Perforations 1332'		То <b>1358</b> '			
Tubing Size Weight 2-3/8" 4.7#				nt	Internal [ 1.995	Diameter	Set a	Set at		rations	То		
Type Cor Single (		n (De	escribe)			Type Fluid Production Saltwater			Pump Unit or Traveling Plunger? Yes / No Yes			/ No	
Producing Tubing	-	(Anr	nulus / Tubin	g)	% C	% Carbon Dioxide			% Nitrogen		Gas Gr	Gas Gravity - G	
Vertical C		<del>1</del> )				Pres	sure Taps				(Meter l	Run) (Prover) Sizi	
Pressure	Buildu	ıp:	Shut in 5/1	4 2	11 at 1	2:00	(AM) (M)	Taken		20	at	(AM) (PM)	
Well on L	_ine:	;		2								(AM) (PM)	
	,					OBSERVE	D SURFACE	DATA			Duration of Shut-	in_408Hou	
Static / Dynamic Property	ynamic Size		Circle one: Meter Prover Presso psig (Pm)	Pressure Differential in Inches H <sub>2</sub> 0	Il Flowing Well Head Temperature Temperature		Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>c</sub> ) psig psia		Tubing  Wellhead Pressure  (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )  psig psia		Duration (Hours)	Liquid Produced (Barrels)	
Shut-In							180	po.u	, , , , , , , , , , , , , , , , , , ,	, ,			
Flow													
				1	1	FLOW STR	REAM ATTRI	BUTES			<del></del>	<del></del>	
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd		Circle one:  Meter or  Prover Pressure  psia		Press Extension √ P <sub>m</sub> x h	Extension Fact		tor Temperature		eviation Metered Flow factor R F <sub>pv</sub> (Mcfd)		v GOR (Cubic Fe Barrel)	I Gravity	
				<u> </u>	(0.0.5)				4710110				
(P <sub>c</sub> ) <sup>2</sup> =		:	(P <sub>w</sub> ) <sup>2</sup> =	· ;	(OPEN FL		<b>'ERABILITY</b> ) % (P	- 14.4) +		::	(P <sub>a</sub> )	<sup>2</sup> = 0.207 <sup>2</sup> =	
$(P_o)^2 - (P_a)^2$ or $(P_o)^2 - (P_d)^2$		(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>		Choose formula 1 or 2  1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. 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>	LOG of formula 1. or 2. and divide	P.2-P.2	Backpressure Cu Slope = "n" or Assigned Standard Slop		n x LOG		Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)	
Open Flo	)W			Mcfd @ 14.	.65 psia		Deliverabi	ility		· .	Mcfd @ 14.65 ps	l ia	
The	unders	igned	d authority, o	n behalf of the	Company, s	states that h	ne is duly au	thorized t	o make th	e above repo	rt and that he ha	s knowledge of	
the facts s	stated I	herei	n, and that s	aid report is tru	e and correc	t. Executed	this the 28	3	day of N	ovember		, 20	
			Witness (	if any)			-	Ch	ey	For	Company	n	
<del></del>			For Comm	nission			_		U	Che	ked by	ECEIVED-	
											DE	C 1 3 2011	

exempt status u	oder penalty of perjury under the laws of the state of Kansas that I am authorized to request onder Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc
	est of my knowledge and belief based upon available production summaries and lease records
of equipment in	stallation and/or upon type of completion or upon use being made of the gas well herein named.  uest a one-year exemption from open flow testing for the Nipps 24-33
	grounds that said well:
I further agr	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 ee to supply to the best of my ability any and all supporting documents deemed by Commission ary to corroborate this claim for exemption from testing.
	Signature: <u>Regulatory Analyst II</u>

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.

DEC 13 2011

KCC WICHITA



## **NATURAL GAS ANALYSIS**

PROJECT NO.:

201106109

ANALYSIS NO.:

COMPANY NAME: NOBLE ENERGY

ANALYSIS DATE: SAMPLE DATE:

JUNE 26, 2011 JUNE 16, 2011

ACCOUNT NO.: PRODUCER:

YUMA

TO:

231

LEASE NO.:

E1502321292

EFFECTIVE DATE: JULY 1, 2011

NAME/DESCRIP.: NIPPS 24-33

\*\*\*FIELD DATA\*\*\*

J. AMOS

CYLINDER NO.:

SAMPLED BY: SAMPLE PRES.:

31

AMBIENT TEMP.:

SAMPLE TEMP.:

87

**GRAVITY:** 

**SPOT** SAMPLE TYPE:

VAPOR PRES.:

FIELD COMMENTS: NO PROBE LAB COMMENTS:

	NORM.	GPM @	GPM @		
COMPONENTS	MOLE%	14.65	14.73		
HELIUM	0.11	-	-		
HYDROGEN	0.06	•	-		
OXYGEN/ARGON	0.04	•	-		
NITROGEN	4.17	-	-		
CO2	0.47	-	•		
METHANE	93.23	-	•		
ETHANE	1.34	0.356		0.358	
PROPANE	0.40	0.110		0.110	
ISOBUTANE	0.07	0.023		0.023	
N-BUTANE	0.07	0.022		0.022	
ISOPENTANE	0.02	0.007		0.007	
N-PENTANE	0.02	0.007		0.007	
HEXANES+	0.00	0.000		0.000	
TOTAL	100.00	0.525		0.527	
BTU @ 60 DEG F		14.65		14.73	
NET DRY REAL =		883.3		888.2	
NET WET REAL =		867.9		872.8	
GROSS DRY REAL =		980.6		986.0	
GROSS WET REAL =		963.5		968.9	

RELATIVE DENSITY REAL (AIR=1 @ 14.696 PSIA 60F):

0.5892

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.

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