Form G-2
(Rev. 7/03)

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test: *(See Instructions on Reverse Side)*

☑ Open Flow
☐ Deliverabilty

Test Date: 9-28-10

API No. 15: 15-175-22181-00-00

Company	Lease	Well Number
NOBLE ENERGY	BLACK	3-15

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
SEWARD	953 FSL & 1637 FEL	15	34S	31W	

Field	Reservoir	Gas Gathering Connection
ARKALON	U. MORROW	DCP MIDSTREAM

Completion Date	Plug Back Total Depth	Packer Set at
8-2-10	5616	5553

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
5.5	17.0	4.892		5665-5572	5575-5580

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2.375	4.7	1.995	5533		

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger? Yes / No
SINGLE GAS	WATER	NO

Producing Thru (Annulus / Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
TUBING	0.143	3.304	0.659

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
5573	FLANGE	3.068"

Pressure Buildup: Shut in 9-24-10 20 ___ at 0930 (AM) (PM) Taken 9-27-10 20 ___ at 0930 (AM) (PM)

Well on Line: Started 9-27-10 20 ___ at 0930 (AM) (PM) Taken 9-28-10 20 ___ at 0930 (AM) (PM)

OBSERVED SURFACE DATA Duration of Shut-in 72.0 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 Wellhead Pressure (P_w) or (P_t) or (P_c) psia	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In								1390.7	1405.1	72.0	
Flow	1.500	27.4	11.9	75	75			502.2	516.6	24.0	0

FLOW STREAM ATTRIBUTES

Plate Coeffiecient (F_b) (F_p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m x h}$	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
11.4128	41.80	22.30	1.2318	0.9859	1.0035	310.2	NONE	0.659

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2$ = 1974.3 : $(P_w)^2$ = 268.6 : P_d = 36.9 % (P_c - 14.4) + 14.4 = 1405.1 : $(P_a)^2$ = 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: $\left[\frac{P_c^2 - P_w^2}{}\right]$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
1974.10	1705.50	1.157	0.0635	0.648	0.0412	1.0994	341.05

Open Flow 341 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 SEPTEMBER, 20 10.

COPY TO KCC WICHITA
Witness (if any)

COPY TO KCC DODGE CITY
For Commission

RECEIVED
OCT 12 2010
KCC WICHITA

PRECISION WIRELINE AND TESTING
For Company

MARK BROCK
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

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.

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Sample No: 20103252

PRECISION WIRELINE AND TESTING
NATURAL GAS ANALYSIS REPORT
620-624-4505

Operator:	NOBLE ENERGY	Analysis Date:	09/27/10
Well Name:	BLACK 3-15	Sample Date:	09/27/10
Location:	15-34S-31W	Sample Pressure:	35.7
County:	SEWARD	Sample Temperature:	103
State:	KANSAS	Sample Time:	1330

Sample Source: METER RUN
Formation: U MORROW
Bottle No: P-22
Requested By: NOBLE ENERGY
Sampled By: MARK

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NATURAL GAS ANALYSIS

	Mole %	GPM
Helium	0.123	
Hydrogen	0.000	
Oxygen	0.000	
Nitrogen	3.304	
Carbon Dioxide	0.143	
Methane	86.057	
Ethane	5.211	1.954
Propane	3.080	1.155
Iso Butane	0.433	0.133
Normal Butane	0.945	0.301
Iso Pentane	0.227	0.062
Normal Pentane	0.223	0.062
Hexanes Plus	0.254	0.058
TOTALS	100.000	3.724

Z Factor:	0.9998
Specific Gravity:	0.6594
BTU/cu.ft. (sat, 60 F. 14.73 psia):	1108.1
BTU/cu.ft. (dry, 60 F. 14.73 psia):	1127.7
Octane Rating	121.9

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Comments: