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
- [x] Deliverability

Test Date: 09/09/2003

API No. 15: 023-20501-00-00

Company	Lease	Well Number
NOBLE ENERGY, INC	ZWEYGARDT	24-32

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
CHEYENNE	SESW	32	3S	41	

Field	Reservoir	Gas Gathering Connection
CHERR CREEK	NIOBRARA	BITTER CREEK PIPELINE

Completion Date	Plug Back Total Depth	Packer Set at
09/09/2003	1524	

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4 1/2"	10.5#	4.052	1566'	1400	1436

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To

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Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger? Yes / No
SINGLE (GAS)	NONE	NO

Producing Thru (Annulus / Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
CASING			0.6

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
1604		2"

Pressure Buildup: Shut in 8/30 20 03 at _____ (AM) (PM) Taken 9/03 20 03 at _____ (AM) (PM)

Well on Line: Started 9/09 20 03 at 3:10 (AM) (PM) Taken _____ 20 ___ at _____ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in _____ 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 psia	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	Tubing psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In						257		NA			
Flow	3/8	115		60		280		NA		24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (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

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2$ = _____ : $(P_w)^2$ = _____ : P_d = _____ % $(P_c - 14.4) + 14.4$ = _____ : $(P_a)^2$ = 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)

Open Flow _____ Mcfd @ 14.65 psia Deliverability 113 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 26th day of September, 20 03.

Witness (if any)

For Company

For Commission

Checked by

Form G-2
(Rev. 7/03)

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 NOBLE ENERGY, INC. 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 ZWEYGARDT 24-32 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: 09/26/03

Signature: Patricia Tarrell

Title: REGULATORY SPECIALIST III

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.

MULTIPOINT BACK PRESSURE TEST

Test Type ;	INITIAL	**State:**	Kansas	**Test Date:**	09/03/03
Company ;	Nobel Energy	**Lease ;**	Zweygardt	**Well No. ;**	24 32
County ;	Cheyenne	**Location ;**	SESW/4,Sec.32-T3S-R41W	**Acres ;**	
Field;	Cherry Creek	**Reservior ;**	Niobrara	**Pipeline Conn.**	None
Completion Date ;		**PBTD ;**	1524'	**Packer Set ;**	
Casing Size ;	4 1/2" Wt. ; 10.5#	**Set @ ;**	1566'	**Perfs. ;**	N/A
Tubing Size ;	None Wt. ;	**Set @ ;**		**Perfs ;**	
Type of Completion ;	Single Gas	**Type Fluid Prod ; None**			
Producing Thru ; Casing		**Reservoir Temp. F ; --**		**Bar. Press. ;**	13 PSI
Gas Gravity ; .6 (est)		**% CO2 ; -- % N2 ; --**		**Liquid API Grav.**	N/A
Vertical Depth ;	1436'	**Type Meter Conn. ; None**		**Prover Size ;**	2"

Remarks: Used 2" critical flow prover & dead weight tester.

OBSERVED DATA — Shut-in Hrs.:

Rate No.	Orifice Size in.	Prover Press. psig	Flowing Temp. deg. F	Casing Wellhead Pressure psig	psia	Duration hrs.	Liquid Prod. bbls.
Shut-in	blank	257	--	257	270	0	0
1	3/16	248	68	248	261	1	0
2	17/64	239	67	239	252	1	0
3	11/32	228	67	228	241	1	0
4	7/16	213	67	213	226	1	0
5	13/32	148	68	148	161	24	0

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RATE OF FLOW CALCULATIONS

Rate No.	Coeffi-cient mcfd	Prover Press. psia	Gravity Factor Fg	Temp. Factor Ft	Deviation Factor Fpv	Rate of Flow Q mcfd
1	0.6237	261	1.291	0.9924	1.0188	212
2	1.2640	252	1.291	0.9933	1.0181	416
3	2.0350	241	1.291	0.9933	1.0173	640
4	3.4950	226	1.291	0.9933	1.0162	1029
5	2.9066	161	1.291	0.9924	1.0115	606

PRESSURE CALCULATIONS

Rate No.	Pc psia	Pw psia	Pc^2 /1000	Pw^2 /1000	Pc^2-Pw^2 /1000	Q mcfd	Shut-in %
1	270	261	72.9	68.1	4.8	212	96.50
2	270	252	72.9	63.5	9.4	416	93.00
3	270	241	72.9	58.1	14.8	640	88.72
4	270	226	72.9	51.1	21.8	1029	82.88
5	270	161	72.9	25.9	47.0	606	57.59

INDICATED WELLHEAD OPEN FLOW = 950.42 Mcfd "n" = 1.03

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 _____ day of _____, 20____.

Wayne Mahon For Excell Drilling Co.

Signed:_____ Title: Field Technician

Lease Name: ZWEYGARDT
County, State: CHEYENNE, KS
Operator: NOBLE ENERGY INCORPORATED
Field: CHERRY CREEK NIOBRARA GAS
Reservoir: NIOBRARA
Location: 32 3S 41W C SE SW

ZWEYGARDT - NOBLE ENERGY INCORPORATED NIOBRARA as of 04/2004 CHERRY CREEK NIOBRARA GAS