

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

RECEIVED

NOV 14 2003

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:
09/09/2003

API No. 15
023-20501-00-00

KCC WICHITA

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

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

Field: **CHERR CREEK** Reservoir: **NIORARA** Gas Gathering Connection: **BITTER CREEK PIPELINE**

RECEIVED

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

SEP 29 2003

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

KCC WICHITA

Tubing Size: _____ Weight: _____ Internal Diameter: _____ Set at: _____ Perforations: _____ To: _____

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

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

Vertical Depth(H): **1604** Pressure Taps: _____ (Meter Run) (Prover) Size: **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 (P _m)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						257		NA			
Flow	3/8	115		60		280		NA		24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _s) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207

(P_d)² = _____

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

(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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	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)

Peterson J. Jansche
For Company

For Commission

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 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.

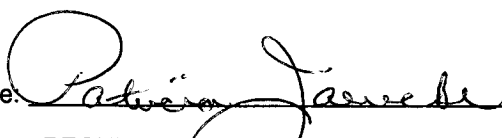
I hereby request a one-year exemption from open flow testing for the ZWEYGARDT 24-32 gas well on the grounds that said well:

(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: 
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 : Zwegardt	Well No. : 24 32
County : Cheyenne	Location : GEBW/A, Sec. 32-T36-R41W	Acres ;
Field : Cherry Creek	Reservoir : Niobrara	Pipeline Conn. : None
Completion Date :	PBTD : 1324'	Packer Set ;
Casing Size ; 4 1/2"	Set @ : 1585'	Perfs. ; N/A
Tubing Size : None	Set @ :	Perfs.
Type of Completion : Single Gas	Type Fluid Prod ; None	Bar. Press. ; 13 PSI
Producing Thru : Casing	Reservoir Temp. F ; -	Liquid API Grav : N/A
Gas Gravity .6 (nat)	% CO2 ; - % N2 ; -	Prover Size ; 2"
Vertical Depth ; 1435'	Type Meter Conn. ; None	

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

OBSERVED DATA

Rate No.	Orifice Size in.	Prover Press. psig	Flowing Temp. deg. F	Casing Wellhead Pressure psig		Shut-in Hrs.:	
				psig	psig	Duration hrs.	Liquid Prod. bbls.
Shut-in	Blank	267	-	267	270		
1	3/16	248	88	248	270	0	0
2	17/64	239	87	239	281	1	0
3	11/32	228	87	228	252	1	0
4	7/16	219	87	219	241	1	0
5	13/32	148	88	148	228	1	0
					181	24	0

RATE OF FLOW CALCULATIONS

Rate No.	Coefficient matd	Prover Press. psig	Gravity Factor Fg	Temp. Factor Ft	Deviation Factor Fgv	Rate of Flow Q matd
1	0.6237	281	1.291	0.9924	1.0188	212
2	1.2840	292	1.291	0.9933	1.0181	418
3	2.0250	241	1.291	0.9938	1.0173	640
4	3.4950	228	1.291	0.9933	1.0162	1029
5	2.9066	181	1.291	0.9924	1.0115	608

PRESSURE CALCULATIONS

Rate No.	Po psia	Pw psia	Po^2 /1000	Pw^2 /1000	Po^2-Pw^2 /1000	Q matd	Shut-in %
1	270	281	72.9	88.1	4.8	212	86.50
2	270	292	72.9	85.5	8.4	418	89.00
3	270	241	72.9	58.1	14.8	640	88.72
4	270	228	72.9	51.1	21.8	1029	82.88
5	270	181	72.9	25.6	47.0	608	57.89

INDICATED WELLHEAD OPEN FLOW =

850.42

Matd

"n" = 1.03

The undersigned authority, on behalf of the Company, states that he is duly authorized to make this above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 3 day of September 2003

Wayne Mahon

For Excell Drilling Co.

Signature: Wayne Mahon

Title: Field Technician



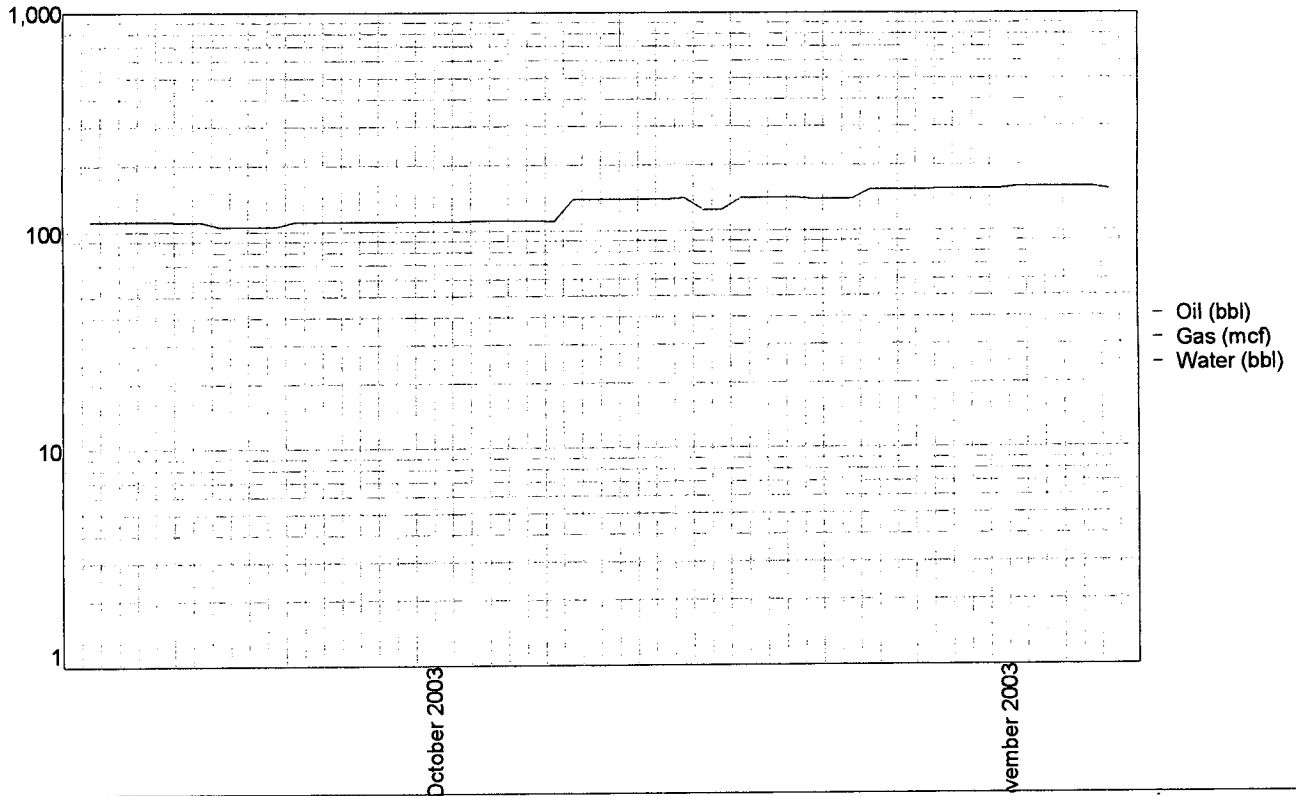
Daily Production Report

ZWEYGARDT 24 32 - ZWEYGARDT 24 32

Date: 11/10/2003
Time: 1:30 PM

Selected Time Frame: All History

ZWEYGARDT 24 32 - ZWEYGARDT 24 32



Daily Production

Date	Oil	Gas	Water
11/06/2003	0.00	154	0.00
11/05/2003	0.00	158	0.00
11/04/2003	0.00	158	0.00
11/03/2003	0.00	158	0.00
11/02/2003	0.00	158	0.00
11/01/2003	0.00	158	0.00
10/31/2003	0.00	155	0.00
10/30/2003	0.00	155	0.00
10/29/2003	0.00	155	0.00
10/28/2003	0.00	155	0.00
10/27/2003	0.00	154	0.00
10/26/2003	0.00	154	0.00
10/25/2003	0.00	154	0.00
10/24/2003	0.00	154	0.00
10/23/2003	0.00	140	0.00
10/22/2003	0.00	140	0.00
10/21/2003	0.00	140	0.00
10/20/2003	0.00	142	0.00
10/19/2003	0.00	142	0.00
10/18/2003	0.00	142	0.00
10/17/2003	0.00	142	0.00



Daily Production Report

ZWEYGARDT 24 32 - ZWEYGARDT 24 32

Date: 11/10/2003
Time: 1:30 PM

Selected Time Frame: All History

Daily Production

Date	Oil	Gas	Water
10/16/2003	0.00	125	0.00
10/15/2003	0.00	125	0.00
10/14/2003	0.00	142	0.00
10/13/2003	0.00	140	0.00
10/12/2003	0.00	140	0.00
10/11/2003	0.00	140	0.00
10/10/2003	0.00	140	0.00
10/09/2003	0.00	140	0.00
10/08/2003	0.00	140	0.00
10/07/2003	0.00	111	0.00
10/06/2003	0.00	112	0.00
10/05/2003	0.00	112	0.00
10/04/2003	0.00	112	0.00
10/03/2003	0.00	112	0.00
10/02/2003	0.00	111	0.00
10/01/2003	0.00	111	0.00
09/30/2003	0.00	111	0.00
09/29/2003	0.00	111	0.00
09/28/2003	0.00	111	0.00
09/27/2003	0.00	111	0.00
09/26/2003	0.00	111	0.00
09/25/2003	0.00	111	0.00
09/24/2003	0.00	111	0.00
09/23/2003	0.00	111	0.00
09/22/2003	0.00	106	0.00
09/21/2003	0.00	106	0.00
09/20/2003	0.00	106	0.00
09/19/2003	0.00	106	0.00
09/18/2003	0.00	111	0.00
09/17/2003	0.00	111	0.00
09/16/2003	0.00	112	0.00
09/15/2003	0.00	112	0.00
09/14/2003	0.00	112	0.00
09/13/2003	0.00	112	0.00
09/12/2003	0.00	112	0.00
Total:	0.00	7,275	0.00
Average:	0.00	130	0.00

ZWEYGARDT 24 32 - 1010700024:00 Pressures Ledger Report

All History

Page 1

Date	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>Choke Size</u>	<u>Notes</u>
11/10/2003 5:42:00 PM	0	220	64/64	
11/9/2003 5:42:00 PM	0	220	64/64	
11/8/2003 5:42:00 PM	0	220	64/64	
11/7/2003 5:42:00 PM	0	220	64/64	
11/6/2003 12:57:00 PM	0	220	64/64	
11/5/2003 12:57:00 PM	0	225	64/64	
11/4/2003 1:25:00 PM	0	225	64/64	
11/3/2003 1:25:00 PM	0	228	64/64	
11/2/2003 1:25:00 PM	0	228	64/64	
11/1/2003 1:40:00 PM	0	228	64/64	
10/31/2003 1:40:00 PM	0	230	64/64	
10/30/2003 1:40:00 PM	0	230	64/64	
10/29/2003 1:40:00 PM	0	230	64/64	
10/28/2003 1:34:00 PM	0	230	64/64	
10/27/2003 1:34:00 PM	0	235	64/64	
10/26/2003 1:34:00 PM	0	235	64/64	
10/25/2003 2:34:00 PM	0	235	64/64	
10/24/2003 12:08:00 PM	0	235	64/64	
10/23/2003 12:08:00 PM	0	238	64/64	
10/22/2003 12:08:00 PM	0	238	64/64	
10/21/2003 2:28:00 PM	0	238	64/64	
10/20/2003 2:28:00 PM	0	240	64/64	
10/19/2003 2:28:00 PM	0	240	64/64	
10/18/2003 2:28:00 PM	0	240	64/64	
10/17/2003 12:49:00 PM	0	240	64/64	
10/16/2003 12:49:00 PM	0	241	64/64	
10/15/2003 3:49:00 PM	0	241	64/64	
10/14/2003 4:14:00 PM	0	242	64/64	
10/13/2003 4:14:00 PM	0	248	64/64	
10/12/2003 4:14:00 PM	0	248	64/64	
10/11/2003 4:14:00 PM	0	248	64/64	
10/10/2003 12:41:00 PM	0	248	64/64	
10/9/2003 12:41:00 PM	0	251	64/64	
10/8/2003 12:41:00 PM	0	251	64/64	
10/7/2003 2:06:00 PM	0	251	64/64	
10/6/2003 2:06:00 PM	0	255	64/64	
10/5/2003 2:06:00 PM	0	255	64/64	
10/4/2003 2:06:00 PM	0	255	64/64	
10/3/2003 12:40:00 PM	0	255	64/64	
10/2/2003 12:40:00 PM	0	255	64/64	
10/1/2003 3:20:00 AM	0	255	64/64	
9/30/2003 3:20:00 AM	0	255	64/64	

ZWEYGARDT 24 32 - 1010700024:00 Pressures Ledger Report

All History

Page 3

<u>Date</u>	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>Choke Size</u>	<u>Notes</u>
9/29/2003 3:20:00 AM	0	255	64/64	
9/28/2003 3:20:00 AM	0	255	64/64	
9/27/2003 3:20:00 AM	0	255	64/64	
9/26/2003 12:44:00 PM	0	255	64/64	
9/25/2003 12:44:00 PM	0	255	64/64	
9/24/2003 12:44:00 PM	0	255	64/64	
9/23/2003 1:37:00 PM	0	255	64/64	
9/22/2003 1:37:00 PM	0	260	64/64	
9/21/2003 1:37:00 PM	0	260	64/64	
9/20/2003 1:37:00 PM	0	260	64/64	
9/19/2003 12:37:00 PM	0	260	64/64	
9/18/2003 12:37:00 PM	0	258	64/64	
9/17/2003 3:18:00 PM	0	258	64/64	
9/16/2003 3:18:00 PM	0	260	64/64	
9/15/2003 3:18:00 PM	0	260	64/64	
9/14/2003 3:18:00 PM	0	260	64/64	
9/13/2003 3:18:00 PM	0	260	64/64	
9/12/2003 12:20:00 PM	0	260	64/64	

12600 Northborough
Suite 250
Houston, TX 77067-3299

Tel: 281.876.6150
Fax: 281.876.6106
www.nobleenergyinc.com

Onshore Division



RECEIVED

NOV 14 2003

KCC WICHITA

November 11, 2003

Kansas Corporation Commission
Jim Hemmen, Research Analyst
Conservation Division
Finney State Office Building
130 S. Market, Room 2078
Wichita, KS 67202-3802

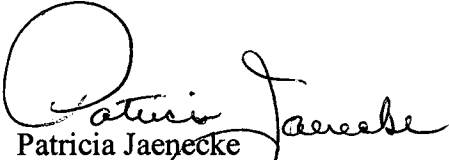
Re: Submission of Open Flow Testing
Exemption For Zweygardt #24-32
Sec. 32-03S-41W, Cheyenne County

Dear Mr. Hemmen

As per your letter of October 3, I am attaching Form G-2 along with a graph of production from September 12 through November 6 and a report showing well pressure during that period on the above referenced well. As you can see, the production rate is well below the 250 MCF/Day threshold rate.

If further information is needed, please advise.

Sincerely,


Patricia Jaenecke
Regulatory Specialist III

Attached

Zwey