

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

FORM G-2  
(Rev. 8/98)

TYPE TEST:  
 Open Flow  
 Deliverability

TEST DATE: 3/16/2004 *INW 6288* API No. 15-033-21367

Company Castelli Exploration		Lease Gregg		Well Number 1-17	
County Comanche	Location SW NE SE	Section 17	TWP 33s	RNG(E/W) 16w	Acres Attributed 400
Field Shimer	Reservoir Mississippi	Gas Gathering Connection ONEOK			
Completion Date 11/05/03	Plug Back Total Depth 5012	Packer Set at none			
Casing Size 4.500	Weight 10.500	Internal Diameter 4.052	Set at 5025	Perforations 4967	To 4978
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) perf acid frac	Type Fluid Production oil	Pump Unit or Traveling Plunger? no			
Producing Thru (Annulus/Tubing) casing	% Carbon Dioxide .115	% Nitrogen 1.179	Gas Gravity- Gg .614		
Vertical Depth (H) 4972	Pressure Taps flange	Meter Run Size 2.067			
Pressure Buildup: Shut in	2004/3/12@1015	TAKEN	2004/3/15@1445		
Well on Line: Started	2004/3/15@1445	TAKEN	2004/3/16@1835		

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						1028	1042			76.5	
Flow	1.375	206.1	12.30	104		688	702			28.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
10.460	220.5	52.08	1.2762	.9602	1.0140	676		.614

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 1086.6      (P<sub>w</sub>)<sup>2</sup> = 493.6      P<sub>d</sub> = 21.2      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 48.62

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" ---- or ---- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
1086.39	592.98	1.832	.2629	.603	.1586	1.441	975
1037.98	592.98	1.750	.2431	.603	.1466	1.402	948

OPEN FLOW      975      Mcfd @ 14.65 psia      DELIVERABILITY      948      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 herein and that said report is true and correct. Executed this the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

\_\_\_\_\_  
Witness (if any)  
\_\_\_\_\_  
For Commission

\_\_\_\_\_  
For Company  
\_\_\_\_\_  
Checked by

I declare under penalty or 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 Castelli Exploration

and that the foregoing information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon gas production records and records of equipment installation and/or of type completion or upon use of the gas well herein named.

I hereby request a permanent exemption from open flow testing for the Gregg 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 incapable of producing at a daily rate in excess of 150 mcf/D

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

**Instructions:**

All active gas wells must have at least an original G-2 form on file with the conservation division. If a gas well meets 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 obtain a testing exemption.

At some point during the succeeding calendar year, wellhead shut-in pressure shall be 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.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than thirty (30) days after the taking of the pressure reading. The form must be signed and dated on the front side as though it was a verified report of test results.