

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

Type Test:

(See Instructions on Reverse Side)

- Open Flow  
 Deliverability

Test Date:  
05/22/13

API No. 15 - 119-20, 125-0000

Company Chaparral Energy		Lease Barragree			Well Number 1-30
County Meade	Location E/2	Section 30	TWP 34S	RNG (E/W) 27W	Acres Attributed
Field Johan		Reservoir Chester	Gas Gathering Connection DCP Midstream		
Completion Date 11/05/1973		Plug Back Total Depth 6310	Packer Set at 6072		
Casing Size 4.500	Weight 9.3	Internal Diameter 3.500	Set at 6312	Perforations 6044	To 6157
Tubing Size 2.375	Weight 4.7	Internal Diameter 1.995	Set at 6048	Perforations	To
Type Completion (Describe) Single		Type Fluid Production Salt Water	Pump Unit or Traveling Plunger? Yes / No Plunger		
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide .351	% Nitrogen 1.179	Gas Gravity - G <sub>g</sub> .6580	
Vertical Depth(H) 6101		Pressure Taps Flange		(Meter Run) (Prover) Size Meter Run	
Pressure Buildup:	Shut in 05/20	20 13	at 10:30 AM	(AM) (PM) Taken 05/21	20 13
					at 10:30 AM (AM) (PM)
Well on Line:	Started 05/21	20 13	at 10:45 AM	(AM) (PM) Taken 05/22	20 13
					at 10:45 AM (AM) (PM)

### OBSERVED SURFACE DATA

Duration of Shut-in \_\_\_\_\_ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or Prover Pressure psig (Pm)	Pressure Differential in Inches H <sub>2</sub> O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In								166	180.4	24	
Flow	.500	76.6	25	73	60			4	18.4	24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>v</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F <sub>g</sub>	Flowing Temperature Factor F <sub>t</sub>	Deviation Factor F <sub>pv</sub>	Motored Flow R (Mcfd)	GOR (Cubic Feet/Barrel)	Flowing Fluid Gravity G <sub>m</sub>
1.214	91	47.6445	1.2328	.9877	1.0080	71	0	

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 32.54 : (P<sub>w</sub>)<sup>2</sup> = .46 : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>a</sub>)<sup>2</sup> = 0.207 : (P<sub>d</sub>)<sup>2</sup> = .207

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>a</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(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> <sup>2</sup>	LOG of formula 1. or 2. and divide by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
32.33	32.08	1.00779	.00337	.850	.00286	1.0066	71

Open Flow 71

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.

**KCC WICHITA**

\_\_\_\_\_ day of May, 20 13

*Darryl Jewin*  
For Company

**JUN 05 2013**

Witness (if any)

For Commission

**RECEIVED**

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 CHAPARRAL ENERGY, L.L.C. 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.

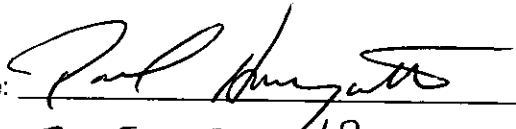
I hereby request a one-year exemption from open flow testing for the BARRAGREE 1-30 gas well on the grounds that said well:

(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: 6/03/2013

Signature:   
 Title: SR. ENG. TECH / REG.

**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.

Gas Testing and Measurement  
PETROLEUM LABORATORY  
EFM INSTALLATION  
GAS SURVEYS

GAS PRODUCTION SURVEYS  
BACK PRESSURE TESTS  
ELECTRONIC VOLUMES  
CHART INTEGRATION

# THURMOND-McGLOTHLIN, INC.

## NATURAL GAS MEASUREMENT

P.O. Box 806  
Woodward, OK 73802  
580.256.9849 Fax 580.256.5909

### FRACTIONAL ANALYSIS \* COMPONENTS MOL %

	MOL %	GPM
Carbon Dioxide	0.351	
Nitrogen	1.179	
Methane	88.848	14.977
Ethane	4.829	1.283
Propane	2.257	0.618
iso-Butane	0.363	0.118
n-Butane	0.733	0.230
iso-Pentane	0.253	0.092
n-Pentane	0.261	0.094
Hexane +	0.926	0.402

Date Run: 5/22/2013

Company: Chaparrall

Lease: Barragree 1-30

Sta. No.: Sec. 30-34s-27w

Pressure: 91

Temperature: 72

Cylinder No.: W-550

Analysis By: TM Woodward

Secured By: GIF

Date Sampled: 5/22/2013

H2S PPM

### GASOLINE CONTENT @ 14.65 PSIA & 60 F

	GPM
PROPANE & HEAVIER	1.554
BUTANE & HEAVIER	0.936
PENTANE & HEAVIER	0.588

REMARKS:  
Spot Sample  
One Point

### Gross Heating Value BTU @ 14.65 PSIA & 60 F

Dry	1139.8
Wet	1120.0

RESULTS TO:  
Chaparrall

### SPECIFIC GRAVITY

0.6580

\*Based on GPA 2145 & 2172

*Natural gas is one of our Most Valuable and Profitable Properties. Careful  
Conservation and Expert Handling will pay Abundant Dividends.*

**KCC WICHITA**

**JUN 05 2013**

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