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

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Type Test:  Open Flow  ✓ Deliverabilty					(See Instructions on Reverse Side)  Test Date: API No. 15 5/4/14 119-20254 - 6								RECEIVED				
Company	,		••			5/4/14			Lease		119	1-20254	_ 00	00		<b>O</b> Weli Nu	mber
Quantum Resources Management, LLC  County Location					Adams Ranch Section TWP				RNG (E/W)				F-8 Acres Attributed				
Meade 660' FSL & 660' FEL Field						3 35S Reservoir				29W Gas Gathering Connection					<del></del>		
Cimmaron Bend Completion Date					Morrow / Chester / St. Gen Plug Back Total Depth				DCP Packer Set at								
3/1/77	JII Dali					6120'	- IOIAI DE	<u>-</u>			r auner c	7 <del>0</del> 1					
Casing Size Weight 5 1/2" 15.5#				Internal Diameter			Set at 6258'		Perforations 5800'			то 6094'					
Tubing Size Weight 2 3/8"				Internal Diameter			Set at 6118'		Perforations			То					
Type Completion (Describe) Gas Well						Type Fluid Production Gas, Oil, Water				Pump Unit or Traveling Plunger? Yes / No Pumping Unit							
Producing Thru (Annulus / Tubing) Tubing				% C	% Carbon Dioxide					% Nitrogen Gas Gravity - G <sub>g</sub>					· · · · · · · · · · · · · · · · · · ·		
Vertical D	epth(H	)					Pre	essu	re Taps		-				(Meter	Run) (P	over) Size
Pressure	Buildu	p: :	Shut in _5/3	3	2	0_14_at_9	:30		AM) (PM)	Taken_5/	14		. 20	14 at 1	9:30		AM)(PM)
Well on Line: Started20				0 at	at (AM) (PM) Taken				20 a				at (AM) (PM)				
				_			OBSERV	/ED	SURFACE	DATA			-	Duration	of Shut-	<sub>in</sub> 24	Hours
Static / Orifice   Dynamic Size   Property (inches)		Meter 1 Prover Pressure		Pressure Differential in Inches H <sub>2</sub> 0	Flowing Temperature t	Well Head Temperatur t		Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Press (P <sub>w</sub> ) or (P <sub>1</sub> ) or (I		)		Duration (Hours)		Liquid Produced (Barrels)	
Shut-In			paig (i in)		Inches H <sub>2</sub> O	<u> </u>		۱,	psig 50	psia	psig 22	psia					
Flow								+									
						•	FLOW ST	rre/	AM ATTRI	BUTES						1	
Plate Coefficient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd			Meter or Exte		Press Extension ✓ P <sub>m</sub> x h	Grav Fac F	tor	Flowing Temperature Factor F <sub>II</sub>		Deviation Factor F <sub>pv</sub>		Metered Flow R (Mcfd)		GOR (Cubic Feet/ Barrel)			Flowing Fluid Gravity G <sub>m</sub>
								-			l						
(P <sub>c</sub> ) <sup>2</sup> =		_;	(P <sub>w</sub> )² :		:	(OPEN FLO	OW) (DEL	IVEF _%	_	CALCUL + (14.4 - <sub>2</sub>			:		(P <sub>s</sub> )	<sup>2</sup> = 0.2 <sup>2</sup> =	07
$(P_o)^2 - (P_e)^2$ or $(P_o)^2 - (P_d)^2$		(P <sub>o</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>		Choose termula 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:		Backpressure Curve Slope = "n" or Assigned Standard Slope			n x 1	LOG	] .	Antilog		Open Flow Deliverability Equals R x Antilog (Mcfd)	
			_			<u> </u>		_									
Open Flor					Mcfd @ 14.	65 psia	<u> </u>	<u> </u>	Deliverabil	lity	<u> </u>			1cfd @ 1	4.65 psi	<u> </u> a	
_		gned	authority, o			· ·	states that			thorized t				-	· ·	_	edge of
the facts st	tated th	nerei	n, and that s	aid r	eport is true	and correc	t. Execute	ed th	is the <u>14</u>	th	day of	ay				, , 2	20 14 .
			Witness	(if any	)				_	Quantu	ım Resot	irces Ma		ement, l	LLC K	(CC	WICHI
<del></del>			For Com			<u>-</u>							Check				
														,		MAI	2 9 2014

exempt status und	der penalty of perjury under the laws of the state of Kansas that I at der Rule K.A.R. 82-3-304 on behalf of the operator Quantum Resource going pressure information and statements contained on this applic	ces Management, LLC
correct to the best	st of my knowledge and belief based upon available production summalallation and/or upon type of completion or upon use being made of the	naries and lease records e gas well herein named.
	lest a one-year exemption from open flow testing for the Adams Rar rounds that said well:	nch F-8
_	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 undergo 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 se to supply to the best of my ability any and all supporting documentry to corroborate this claim for exemption from testing.	
	Signature: Regulatory Analyst	higz

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. KCC WICHITA

MAY 29 2014

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