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

Type Tes	t:		0.112		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(See Ins	truct	ions on Re	everse Side	e)						
<b>√</b> Op			Test Date:					,	API No. 15							
De	liveral	oilty			6/24/20						5-067-239	1-00	0-00			
Company Linn Op	<b>).</b>		Lease Weeks								4 AT	Well Number 4 ATU-100				
County Location Grant NW NW NW NW					Section 29			TWP 30S	•					Acres 640	Attributed	
Field Hugoton-Panoma					Reservoir Chase				Gas Gathering Cor Jayhawk Gas Pla				ction			
Completion Date 5/16/2013					Plug Back Total Depth 2690			h	Packer Set at N/A							
Casing Size 5.5			Weight 15.5		Internal Diameter 4.95			Set at 3110			Perforations 2430		то 2608			
Tubing Size N/A			Weight N/A		Internal Diameter N/A			Set at N/A			Perforations N/A		To N/A		. F.	
Type Cor Single	npletio	escribe)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Type Fluid Production Dry Gas					Pump	Unit or Trave	ling l	Plunger? Yes	/ No			
	_	nulus / Tubir	1g)	% Carbon Dioxide					% Nitrogen 16.853			Gas Gravity - G <sub>s</sub> .7340				
Vertical Depth(H) 3112					Pressure Taps Flange				· · · · · · · · · · · · · · · · · · ·				(Meter Run) (Prover) Size 3.068			
Pressure Buildup: Shut in 6/24					0 13 at 11:00 AM (AM) (F			(AM) (PM)	) Taken 6/27			20 _	13 <sub>at</sub> 11:00	11:00 AM (AM) (PM)		
Well on L			Started 6/2		13 at 1								13 <sub>at</sub> 11:00		(AM) (PM)	
						OBSE	RVE	D SURFAC	E DATA				Duration of Shu	t-in	Hours	
Static / Dynamic Property	ynamic Size		Circle one: Meter Prover Press psig (Pm)	1 3	Flowing Well He Temperature t		ture (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P		Pressure	Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> ) psig psia			Duration (Hours)		Liquid Produced (Barrels)	
Shut-In	Shut-In .75		22.9	0	76 76			psig psia 22.9 37.3		NΑ			72	0	0	
Flow	Flow .75		19.1	10.0	76 76		19.1	33.5	NA NA			24 0				
				T		FLOW S	STR	EAM ATTR	IBUTES			<del></del>			T	
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd			Circle one: Meter or ver Pressure psia	Press Extension P <sub>m</sub> xh	Grav Fac F <sub>s</sub>	tor Te		Flowing emperature Factor F <sub>r1</sub>	Deviati Facto F <sub>pv</sub>		or R		GOF (Cubic F Barre	eet/	Flowing Fluid Gravity G <sub>m</sub>	
2.74		33.	.5	18.303	1.169		.98	35	1	-	57.746		0		0	
					(OPEN FL	OW) (DE	LIVE	ERABILITY	) CALCUL	ATION	s		(P	) <sup>2</sup> = 0.5	207	
$(P_c)^2 = 1$	.3913	3 :	(P <sub>w</sub> ) <sup>2</sup> =	1.1223	P <sub>d</sub> =		%	6 (I	P <sub>c</sub> - 14.4) +	14.4 =	:		(P	)2 =		
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		$(P_c)^2 - (P_w)^2$ 1. $P_c^2 - P_a$ 2. $P_c^2 - P_a$		Choose formula 1 or 2: 1. $P_c^2 \cdot P_a^2$ 2. $P_c^2 \cdot P_d^2$ divided by: $P_c^2 \cdot P_a^2$	LOG of formula 1. or 2. and divide by:		Backpressure Curve Slope = "n"			n x LOG		Antilog	De	Open Flow Deliverability Equals R x Antilog (Mcfd)		
1.1843		.26	90	4.402	.644		.85				.5471		3.5245	203	203.5255	
Open Flow Mcfd @ 14.65 psia							Deliverability				Mcfd @ 14.65 psia					
		_		n behalf of the				4.	7		luly				12	
the facts s	tated t	hereir	n, and that s	aid report is true	and correct	t. Execu	ted 1	this the <u> </u>	7 VED	day of			,	mai	20	
			Witness	if any)		KAN	SAS	CORPORAT	ION COMMIS	SSION	Shawn 1	Hil For Cor	dreth	fu	dress	
			For Comr	nission			_	AUG 0.	5 2013			Checke				

CONSERVATION DIVISION WICHITA, KS