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

Type Test	t				-	(	See Ins	tructi	ons on Re	verse Si	de)							
Open Flow						Test Date						API No. 15						
Deliverabilty						10/09 to 10/10/14					053-20,404 - 00 - 0							
Company Rupe C	any		<sub>Lease</sub> <b>Kihn</b>								Well Number  1							
County Location Ellsworth E/2 NE						Section 30						RNG (E/	W)	Acres Attributed			ttributed	
Field Grubb						Reservoi KC			Gas Gathering Co Rupe Oil			-	ection			•		
Completion Date 2/27/78						Plug Bac 2615	k Total [	n	Packer Set at none			et at						
Casing S 4.5	Casing Size Weight 4.5					Internal Diameter			Set at 2679			Perfo 255	rations 7	то 2565				
Tubing Size Weight 2.375						Internal [	Set a	at	t Perforations			То						
Type Completion (Describe) single						Type Fluid Production SW					Pump Unit or Traveling				g Plunger? Yes / No			
Producing Thru (Annulus / Tubing) Tubing						% Carbon Dioxide				% Nitrogen 25.460				Gas Gravity - G <sub>9</sub> .7740				
Vertical Depth(H)						Pressure Taps flange								(Meter Run) (Prover) Size 2"				
Pressure Buildup Shut in 10/06					2	0 14 at 1	(AM) (PM)	PM) Taken 10/09			20	14 at	10:45 a	am (	AM) (PM)			
Well on Line Started 10/0				/09										14 <sub>at</sub> 10 45 am (A			, , ,	
							OBSEI	RVE	SURFAC	E DATA	-			Duration	n of Shut-ı	<sub>n</sub> _72	Hours	
Static / Dynamic Property	c Size		Circle one Meter Prover Press paig (Pm)	Diff sure	essure erential in nes H <sub>2</sub> 0	Flowing Temperature t	Well He Tempera		Wellhead (P <sub>w</sub> ) or (F	Casing /ellhead Pressure  or (P <sub>1</sub> ) or (P <sub>2</sub> )  osig psia		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Duration (Hours)		Liquid Produced (Barrels)		
Shut-In	t-In		Paig (i iii)	,					290.6 305			psig psia		72				
Flow	.50	00 65		18	3	60			221.2	235.6				24				
				<del>,                                    </del>			FLOW	STRI	EAM ATTR	IBUTES		J	<del></del>	- 1				
(F <sub>b</sub> ) (F	Coeffiecient		Circle one Meter or rover Pressure psia		ress ension P <sub>m</sub> x h	Fac	Gravity Factor F <sub>g</sub>		Flowing Temperature Factor F <sub>tt</sub>		Deviation Factor F <sub>pv</sub>		Metered Flow R (Mcfd)	v GOR (Cubic Fee Barrel)		et/	Flowing Fluid Gravity G <sub>m</sub>	
1.219		79	0.4	37 8	0	1.13	7	10	00				52					
_						(OPEN FL	OW) (DE	LIVE	RABILITY	) CALCI	JLAT	IONS			(P <sub>2</sub> ) <sup>2</sup>	= 02	07	
$(P_c)^2 = 9$	3 025	<u> </u>	(P <sub>w</sub> ) <sup>2</sup>	55.5	mula 1 or 2	P <sub>d</sub> =% (				P <sub>c</sub> - 14 4) + 14 4 =				(P <sub>d</sub> ) <sup>2</sup> =				
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_g)^2$		(F	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>		2-P2 2-P2 2-P2 2-P2	LOG of formula 1 or 2 and divide	formula 1 or 2 and divide p 2 p 2		Backpressure Curve Slope = "n" or Assigned Standard Slope			n x LOG		Antilog		Open Flow Deliverability Equals R x Antilog (Mcfd)		
92.818		37	7 518	2.473	3	.3932			.850			.3342		2.15		112		
									assig	ned								
Open Flow 112 Mcfd @ 14 65 psia									Deliverability				Mcfd @ 14 65 psia					
		-	d authority, o			• •			•	Oth			e above repo	ert and th	nat he has		ledge of 20 14	
			Witness	(if any)			KAN	_	CORPORATIO	N COMMI	NOISS	1	GLM.	Company		—(—		
	_		For Com	mission				- 0	CT 15	2014				ked by				