Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Completion Date 3/12/12 Casing Size Weight			ht	Internal [k Total De		none Set at Perforations		Set at		To			
4.5 Tubing Size Weight			Internal Diameter		450	4500 Set at		4111 Perforations		4120 To				
2.375						410	4109			Di		-,		
Type Completion (Describe) single				Type Fluid Production Oil/SW			Pump Unit or Traveling Plung Yes-pump unit				r? Yes	/ No		
Producing Thru (Annulus / Tubing) Annulus				% Carbon Dioxide .146			% Nitrogen 11.023				Gas Gravity - G _g . 725			
Vertical Depth(H)				Pressure Taps flange							(Meter Run) (Prover) Size 2"			
Pressure Buil	dup:	Shut in 9/0)9	13 at 1	···		Taken 9/	12	20	13 _{at}	11:00	am	(AM) (PM)	
Vell on Line:		Started 9/1				_ (AM) (PM)			20				(AM) (PM)	
					OBSERV	ED SURFAC	E DATA			Duration	n of Shut-	in 72	Hours	
ynamic S	mic Size Prover Pressu		Pressure Differential in Inches H ₂ 0	Flowing Well Hea Temperature Temperatu		Wellhead Pressure (P_w) or (P_t) or (P_c)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)		Liquid Produced (Barrels)		
Shut-In		F-15 (1 m/)				404.4	psia 418.8	psig	psia	72		-		
Flow .7	50	71	.7	70		82.1	96.5			24				
					FLOW ST	REAM ATTR	IBUTES							
Coefficient Meter or		Circle one: Meter or over Pressure psia	Press Extension ✓ P _m x h	Extension Fact		Flowing Temperature Factor F _n	Fac	Factor		ed Flow GOR R (Cubic F ofd) Barrel			Flowing Fluid Gravity G _m	
2.779	85	.4	7.73	1.174	9.	9905			25				.725	
_c) ² = 175.3	93 :	(P _w) ² =	9.312	(OPEN FLO		VERABILITY) CALCUL P _c - 14.4) +		:_:		_	2 = 0.20 2 =	07	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_a)^2$ $(P_c)^2 - (P_w)^2$ or $(P_c)^2 - (P_d)^2$		Choose formula 1 or 2 1. $P_c^2 - P_a^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_d^2$	LOG of formula 1. or 2. and divide p 2 p 2		Backpressure Curve Slope = "n" Assigned Standard Slope		nxt	n x LOG		Antilog		Open Flow Deliverability Equals R x Antilog (Mcfd)	
175.186 1		6.081	1.055	.0232		.850	.850		.0197			26		
·						assign	ed							
pen Flow 2	5		Mcfd @ 14.	65 psia		Deliverab	ility			Mcfd @	14.65 psi	а		

RECEIVED