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

FORM G-2 (Rev.8/98)

TYPE TEST:

⊠oı															
⊠ o	eliver	abilit	У		TRS	TEST DATE: 8/14/11				2	API No.	15-03	3-21,20	5-00 <b>-</b> 0	00
Company								Lease	1				Well	Number	
Thoro	ughb	red A	Associa	ates	S			HERD	)				3		
County						tion		Secti	.on	TWP R	NG (R/W)		Acre	s Attribut	ed
COMANCHE						120'E C SW SE SEC				T32S-19	9 <b>W</b>			160	
Field					Resc	Reservoir				G	Sas Gathe	ring Con	nection		
MISSISSIPI/ALTA															
Completion Date Plug Back Total Depth Packer Set at 5250															-
Casing Size Weight					Inte	ernal Diam	eter	Set at			Perforati	ons	To		
5.500 15.500						4.950			5280			968	5194		
Tubing Size Weight					Inte	ernal Diam	Set at			Perforati	ons	To			
2.375 4.700					1	.995	5200								
Type Comp		n (Des	cribe)		Тур	Fluid Pro		P			Pump Unit or Traveling Plunger?				
Producing Thru(Annulus/Tubing)						% Carbon Dioxide			*			% Nitrogen		Gas Gravity- Gg	
TUBING						.121						.063		.598	
Vertical	Depth	(H)			Pres	sure Taps			····			Mete	r Run Size	1	
4968	3					FLA	ANGE							3	
Pressure	Build	up: Sh	ut in	8	/11/11		•		•	TAKEN	11:	00 AM			
Well on Line: Started 8/1					/14/11			TAKEN	9:1	5 AM					
OBSERVED SURFACE DATA															
							SERVEI	JOUNTA	CEI	DATA					
Static/ Orif Dynamic Siz Property in		fice Meter			Pressure	Flowing	WellHead	Casing WellHead			Tubing WellHead Pr		ad Press.		Liquid
			Pressu	re	Diff.	Temp.	Temp.	(P <sub>4</sub> ) (P <sub>5</sub>		(P <sub>C</sub> )	(P <sub>W</sub> ) (P <sub>t</sub>		(F <sub>G</sub> )	Duration	Prod.
		. psi		In. H 20		t.	t.	psig	psia		psig	g psia		(Hours)	Barrels
					)										
Shut-in	1							210		224				70.3	ა.ვ
							60								
Flow .750			45.0		1.00	1.00 60		50	64					24.0	
						FL	ow st	REAM A	TRI	BUTES					
	- 1				<del></del>	Τ							<u> </u>	<del></del>	
CORFFICIENT		(METER)		B	etension	GRAVIT	Y FL	OWING TEMP D		VIATION	RATE OF FLOW				
_			SSURE V		P <sub>m</sub> × H <sub>w</sub>	FACTOR		_		PACTOR		R		IOR .	G m
MCIU	MCIG		914			Fg		Pt		Fpv	Mcfd				
2.740		59	59.4		7.71	1.293	,   ,	.0000 1.0047		1 0047	27			600	
						1.255		.0000		1.0047	<u> </u>		l		.598
					(0)	PEN FLO	DW)(DE	LIVERAB	ILIT	Y) CALC	CULAT	IONS		2	
(Pc) <sup>2</sup> =	50.	4	t	Pw) <sup>2</sup>	<b>- 4</b> .	1	Pd =	22.3	ŧ	/De - 14	45 . 14		(Pa		
						27	Г 7	ГЭТ				1.4) + 14.4 -		(Pd) <sup>2</sup> ≈ 2.50	
$(P_c)^2 - (P_a)^2$					(P <sub>G</sub> ) - (P	`a <sup>,[*</sup>		Backpressure Curve Slope		ĺ				Open Flow	
or (P <sub>C</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>		$(P_c)^2 - (P_w)^2$		<sup>2</sup>	(P <sub>C</sub> ) <sup>2</sup> - (P	d <sup>2</sup> Log		or		n x LOG	l II			Deliverability = R x Antilog	
(E) - (E)					$(P)^2 - (P)^2$	,2		Assigne Standard		* 2 200		Anti:	log	Mofd	
	•			1	c <u> </u>	w	<u> </u>		<del></del>	<del> </del>			<del></del>		
50.15		46.21			1.085	. o	355	.599		.021	3	1.050		28	
47.86		46.21			1.036		152	.599		.0091		1.021		28	
										·	<del></del>		<u>I</u> .,		
OPEN PLOW			28		M	cfd @ 14.6	5 psia		DRLIVE	CRABILITY		28		Mcfd 0 14	.65 psia
The unc	lorsign	ed autl	writy, on	boh	af of the Con	npany, sta	tes that he is	duly onthori	sed to	make the el	boye repo	rt and the	t by ban kh	owledge of	the facts
					serioo baa e			5"	day	of	Asc.	/		20	12
									ε	<i>ע</i> פרבייים		$-\mathcal{L}$			
	Witi	noss (if	впу)					RECEIVED AND FOR COMPANY							
									A	PR ns	2012	_	-01 -0	y-	
For Commission APR 0 5 2012 Check											Check	ed by			

KCC WICHITA