KCC WICHITA

Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Type Test	t:					(See Instruc	tions on Reve	erse Side)						
Open Flow Test Date:								API	No. 15					
✓ Deliverability 02/04/2013 - 02														
Company				•			Lease					Well Nur	nber	
F.G. Holl Company, L.L.C.				EMBRY "A"			′_"A"			3	-23			
County Location				Section		TWP		RNG (E/W)			Acres Attributed			
Edwards NE NE N			E NW	23		24\$		16W						
Field Embry					Reservoir Mississippi				Gas Gathering Connecti Rolling Thunder		tion			
Embry Completion Date					Plug Back Total Depth			Packer Set at						
01/14/1997					4280'		•	None						
Casing Size			Weigh	t	Internal Diameter		Set at		Perfo	rations	То			
4-1/2"			10.5#				4375'		4232'- 4242' &		4250'	4250'-4252'		
Tubing Size			Weight		Internal Diameter		Set at		Perforations		То	То		
2-3/8"			4.7#				4210'							
Type Completion (Des			escribe)		Type Fluid Production				Pump Unit or Traveling Plu		Plunger? Yes	unger? Yes / No		
Single					Water				0/ 11/					
Producing Thru (Annulus / Tubing)			l	% Carbor	Dioxide		% Nitrogen			Gas Gravity - G				
Tubing Vertical Depth(H)						Drana	ure Taps				(Motor S	um) (Den	ver) Size	
vertical D	epui(r	(יד				F1633	ure raps				(Meter 1	turi) (Fio	ver) Size	
			02//	04/2013		·nn			2/04/20	113	8.00			
Pressure Buildup:			Shut in						02/04/2013		at <u>8:00</u>			
Well on Line: Started 02/05/2013 19				at _9:	:00	(AM) (PM)	1) (PM) Taken 02/05/2013 19		at <u>9:00</u>	9:00 (AM) (PI				
						OBSERVE	D SURFACE	DATA			Duration of Shut-	_{-in 24}	Hou	
Static / Orific		ice	Circle one:	Pressure	Flowing	Well Head	Casing		•	ubing	_			
Dynamic	Siz	20	Meter or Prover Pressu	Differential re in (h)	Temperature	Temperature	perature Wellhead F			ad Pressure (P _L) or (P _C)	Duration (Hours)	1 '	Liquid Produced (Barrels)	
Property	inches		psig	Inches H ₂ 0	t	l t	psig	psia psig		psia	(*100.0)	, '-		
Shut-In						<u> </u>	83		45		24			
	-											+		
Flow	[<u> </u>					
					_	FLOW STR	REAM ATTRI	BUTES						
Plate			Circle one:	Press	Grav	vity	Flowing	Devi	ation	Metered Flow	GOR		Flowing	
Coefficient (F _b) (F _a) P		Pro	Meter or over Pressure	Extension	Extension Fact		or Temperature		ctor	R	(Cubic Fe		Fluid Gravity	
Mcfd			psia	š P _m x H _w	š P _m x H _w F		F _{rt}	F _{pv}		(Mcfd)	Barrel	١	G _m	
										••				
									[
					(OPEN FL	OW) (DELIV	ERABILITY)	CALCUL	ATIONS		(P _a)	p ² = 0.20	07	
(P _c) ² =		_:	(P _w) ² =	<u> </u>	P _d =		% (P _c	- 14.4) +	14.4 =	:	(P _a)			
				Choose formula 1 or 2:	100 4		Backpres	sure Curve		ГЛ		On	en Flow	
(P _c) ² - (P _a) ²		(1	P _e) ² - (P _w) ²	1. P _c ² -P _a ²	LOG of formula			e = "n" or	_ n x LOG		Antilog	Deliverability		
$(P_c)^2 - (P_d)^2$		}		2. P _c ² -P _d ²	1. or 2. and divide p 2 p 2 by:		Assigned				,	Equals R x Antilog Mcfd		
				divided by: P _c ² - P _w ²	by:	<u> </u>	Standa	rd Slope					- INICIO	
							1			· ·		1		
Open Flov	had .	Į		Mcfd @ 14.6	5 neia			····			//cfd @ 14.65 psi	•		
oben 1101				mora (g. 14.0	, paid		Denverabilit	,			пола ць 14.05 ра			
The t	unders	igned	authority, on	behalf of the Co	mpany, sta	tes that he is	•	zed to ma		A ' '	that he has know	vledge of	the facts	
tated the	rein, a	nd tha	at said report	is true and corre	ct. Execute	ed this the	4+~	day of		larch		, 4 1	2013	
	•		•					-			1			
			IACH and	(now)				<u> </u>	HO	11 CON	nusny	4		
			Witness (i	any)				1 1	د	11 Con	ompany j /	RE	CEIVE	
			For Comn	rission				Nev	CLEE	Cher	ked by	4 4 4 4	······ • • • • • • • • • • • • • • • •	
											v -	MAN	1052	

I declare under penalty or perjury under the laws of the state of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator F.G. Holl Company, L.L.C. and that the foregoing information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon gas production records and records of equipment installation and/or of type completion or upon use of the gas well herein named. I hereby request a permanent exemption from open flow testing for the EMBRY "A" 3-23 gas well on the grounds that said well:
(Check one) 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 undergoing ER is on vacuum at the present time; KCC approval Docket No. is incapable of producing at a daily rate in excess of 250 mcf/D
Date: 03/04/2013 Signature: Acheera Longo Title: Landman

Instructions:

All active gas wells must have at least an original G-2 form on file with the conservation division. If a gas well meets 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 obtain a testing exemption.

At some point during the succeeding calendar year, wellhead shut-in pressure shall be 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.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than thirty (30) days after the taking of the pressure reading. The form must be signed and dated on the front side as though it was a verified report of test results.

MAR 05 2013

KCC WICHITA