:

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Open Flow Deliverability Tigst Daje Deliverability	Type Test	t:					•	'See Instruc	tions on Re	verse Side	9)					
Company Comp	Op	en Flo	w				Toet Date	٠.			ΔĐI	No. 15				
Company Horseshoo Operating, Inc. Well Number Horseshoo Operating, Inc. Section TWP INS (EW) Acres Attributed ADW Acres Attributed Completion Date Play Back Total Depth 3022 Packer Set at 3023 Packer Set at 3022 Packer Set at 3023 Packer Set at 3024 Packer Set at 3024 Packer Set at 3024 Packer Set at 3024 Packer Set at 3025 Packer Set at 3026 Packer S	De	liverab	ilty			/	1-/3-/	7					0 - 0000			
Greeley C NE 15 17S 40W Paservoir Play Back Total Depith 3022 Centificition-Date 928-0000 3022 Casing Size Weight 10.5 4.052 3020 Perforations To 2980-88 Tubing Size Veight 10.5 4.052 3020 2000-44.61-70 2980-88 Tubing Size Veight 10.5 4.052 3020 Perforations To 2980-88 Tubing Size Veight 10.5 4.052 3020 Perforations To 2980-88 Tubing Size Veight 10.5 4.052 3020 Perforations To 3001 Type Completion (Describe) Type Fluid Production Walter Yes / No Yes Carbon Dicade No Nitrogen Gas Gravity · Q. Type Completion (Describe) Type Fluid Production Walter Yes / No			Оре	erating, In	nc.					*** *			. 2	Well Nu	mber	
Bradshaw Winfield DCP Mildstream		 y										/W)		Acres A	\ttributed	
Completion Date Packer Set at Packer Set at		aw											ection			
Casing Size Weight 4.05 4.05 and 4.05 and 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 3020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Production Programment Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Tubing Size Weight Internal Diameter Set at 30020 2929-44:61-70 2980-88 Type Completion (Cescribe) Type Fluid Production Weight Set at 4.7			е				_	k Total Dep	th		Packer :	Set at				
Tubbing Size 4.7	Casing S						Internal I	Diameter						 88		
Type Fluid Production Water Prosents of Single Gas Water Production Traveling Plunger? Yes / No Yes Yes Producting Trave (Annulus / Tubling) % Carbon Dioxide % Nitrogen Gas Gravity - Q Casing Pressure Buildup: Sturtion Flange Pressure Buildup: Sturtion Circle one Meter Run) (Prover) Size Flange Pressure Taps Flange Outline Taveling (Meter Run) (Prover) Size And (PM) Flange Outline Taveling (Meter Run) (Prover) Size And (PM) Pressure Taps Flange Outline Taveling (Meter Run) (Prover) Size (Meter Run) (Prover) Size And (PM) Pressure Taps (Meter Run) (Prover) Size (AM) (PM) Taken Pressure Taps (AM) (PM) Pr	Tubing Size Weight					Internal t		Set	Set at							
Producing Thru (Annulus / Tubing) % Carbon Dioxide % Nitrogen Gas Gravity - G, Casing Pressure Buildup: Shut in	Type Con		n (D				Type Flui	Type Fluid Production								
Vertical Depth(H)	Producing		(An	nulus / Tubli	ng)			arbon Diox	ide			jen	Gas G	avity - (3,	
Pressure Buildup: Shut in	<u>_</u>	Pepth(F	()			··-		•				·.·· .	(Meter	Run) (Pi	rover) Size	
Well on Line: Started						7	11 /				1-1	7	11 7117			
Case	Pressure	Bulldu	p:	Shut in	1-1	<u>A</u> 20	D	1,45	(PM)	Takén	/-/	<u> </u>	// at 9.5	<u>15 (</u>	AM)(PM)	
Static / Dynamic Size Pressure Meter Pressure Meter Pressure Property Pressure Property Pressure Property Property Pressure Pres	Well on L	ine:		Started		20) at		(AM) (PM)	Taken		20	al	(AM) (PM)	
Wellhead Pressure Wellhead Pressure Proper Pressure Pres				_				OBSERVE	D SURFAC	E DATA			Duration of Shut-	-in	Hours	
Property (Inches) Property (I					1		Flowing	Well Head					Duration	Llaut	Inuid Produced	
FLOW STREAM ATTRIBUTES Plate Coefficient (F _s)(F _s) (F _s) (F _s)(F _s) (F _s				Prover Press	sure	in		'	(P _w) or (F	P _t) or (P _t)	(P,) a	r (P ₁) or (P _c)				
Plate Coefficient (F ₂) (F ₂) Metal or or Prover Pressure pala (OPEN FLOW) (DELIVERABILITY) CALCULATIONS (P ₂) ² = (P ₂) ² = (P ₃) ³ = (P	Shut-In	1.00	2							71			24			
Plate Coefficient (F ₁) (F ₂) (F ₃	Flow										<u></u>					
Coefficient (F _s) (F _s					·			FLOW STE	REAM ATTE	RIBUTES		•				
(P _e) ² = : (P _w) ² = : P _d = % (P _e -14.4) + 14.4 = : (P _d) ² = (P _e) ² =	Coeffical (F _k) (F	lent ,)	Pro	Meter or ver Pressure	1	Extension	Fac	tor	Temperature Factor	F	actor	R	(Cubic Fe		Fluid Gravity	
(P _e) ² = : (P _w) ² = : P _d = % (P _e -14.4) + 14.4 = : (P _d) ² = (P _e) ² =						-										
(P _e) ² =							(OPEN FL	OW) (DELIV	ERABILITY) CALCUI	LATIONS		(P.)	 i² = 0.2	07	
(P ₂) ² - (P ₃) ² (P ₂) ² (P ₃)	(P _e)2 =		<u>_:</u>	(P _w) ²		 :	P _d =		% ((P _e - 14.4) -	14.4 = _	:				
The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the	(P _a)2 - (F or (P _a)2 - (F	2°)3	(F	' _c)² - (P _w)²	1. 2.	P ₂ -P ₂	formula 1. or 2. and divide	P.2. P.2	Sio	pe = "n" - or ssigned		rog [Antilog	Dell Equals	iverability R x Antilog	
The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the														<u> </u>		
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the facts stated therein, and that said report is true and correct. Executed this the	Open Flor	<u>~</u>			N	Actd @ 14.6	55 psia		Deliveral	bility			Mcfd @ 14.65 ps	<u>la</u>	 	
Janice Ripley										uthorized i	to make ti	ne above repo	rt and that he ha	is knowl	ledge of	
Witness (if any) For Commission Checked by AAV 1 2: 2011		1		, with their c	1Q	, por 10 11 11 10 10 10 10 10 10 10 10 10 10	and const		. sna trio		Dani	re R	inter		-v <u></u> .	
For Commission Checked by RECEIVE				Witness	(li any)				-			For	Sympany DE	CEIV	ED	
			_	For Com	mission				-			Chec	cked by	v 4 2	2011	

KCC WICHITA

I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to reque exempt status under Rule K.A.R. 82-3-304 on behalf of the operator Horseshoe Operating, Inc.	est
and that the foregoing pressure information and statements contained on this application form are true ar	nd
correct to the best of my knowledge and belief based upon available production summaries and lease record	ds
of equipment installation and/or upon type of completion or upon use being made of the gas well herein name. I hereby request a one-year exemption from open flow testing for the	∌d.
gas well on the grounds that said well:	_
· (Check ane)	
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 not capable of producing at a daily rate in excess of 250 mcf/D	
I further agree to supply to the best of my ability any and all supporting documents deemed by Commis	.ssion
staff as necessary to corroborate this claim for exemption from testing.	
al 1	
Date: <u>5/9///</u>	
Signature: Janice Ripley	
Title: Production Assistant	_
THE	_

Instructions:

If a gas well meets one of 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 claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been 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 for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption IS denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31 of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.