KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test			-	(See Inst	ructions of Rev	erse Side)				(Rev: 6		
	Open Flov											
	Deliverabi	ility		Test Date:	3/6/13		API No. 15-	129 00099	-000/			
Company					Lease					Well Number		
	ADARKO PETROLEUM CORPORATION Location				INTERSTATE Section				RNGE (E/W)	11-21	cres Attributed	
County MORTON	1980FNL&330FWL			21			TWP 34		43	^	Cres Alinbuleo O	
Field		Reservoir				Gas Gathering (
INTERSTATE				Ε				HUGS V	V			
Completion Date			Plug Back Tol					Packer Set a	-			
08/23/81 Casing Size	Weight			1227 Interenal Diameter			Set at		NA Perforations	To		
4.5			9.5		4.09		1227		1184	10	1216	
Tubing Size	Weigl				Interenal Diameter		Set at	Set at I		To		
2.375				4.7 1.99					NA NA			
Type Completion (Describe)				Type Fluid Production			Pump Unit or Traveling Plunger?			Yes / No		
SINGLE GAS Producing Thru (Annulus / Casing)				WATER % Carbon Dioxide			% Nitrogen Gas Grav		Gas Gravity -	N/A		
CASING				1.27				39.624 0.815		J ₀		
Vertical Depth (H)				Pressure Taps			(Meter Run) (PROVER)		Size			
1200	y/				FLANGE			X		4		
Pressure Buildup:			3/5/13	•	11:20 am	(AM)(PM)		3/6/13	_	11:20 am	(AM)(PM)	
Well on Line:		Started		_ 2000 at		(AM)(PM)	Taken		_ 2000 at		(AM)(PM)	
				OBSE	RVED SURI	FACE DATA		Duration of Sh	ut-in	24	Hours	
	-	Circle One: Pressure				C			bing		Liquid	
Static /	Orifice	Meter or	Differential	Flowing	Well Head	•	ad Pressure			Duration	Produced	
Dynamic	Size inches	Prover Pressure	in (h) Inches H ₂ O	Temperature t	Temperature t		(P _t) or (P _c)	1	P _t) or (P _c)	(Hours)	(Barrels)	
Property Shut-In	inches	psig	inches n ₂ O	Lt		psig 29	psia 43.4	psig N/A	psia	24	 	
Flow	1.000	N/A	N/A	N/A	60	N/A	0	N/A		N/A	0	
						·	. <u></u>	<u> </u>	<u> </u>			
		 		FLOV		ATTRIBUTE	<u> </u>	,				
Plate Coefficient	Circle One: Meter or		Pressure Extension	Gravity	Flowing Temperature	~ I I I		OR	Flowing Fluid			
(F _b) (F _p)	Prover Pressure		Sqrt	Factor	Factor Factor		R	(Cubic Feet/		Gravity		
Mcfd	psia		((Pm)(Hw))	F _o	F _g F _{ft}		(Mcfd)	Barrel)		G _m		
4.874	1	14.4		1.108	1.063	1.000	0	0		0.000		
			(OP	EN FLOW) (DELIVERAE	BILITY) CALC	CULATIONS					
			,							(P _w) ² =0.207		
(P _c) ² =	$(P_o)^2 = 1.884 (P_w)^2 = $		0	. P _d =	%		(P _c -14.4)+14.4=		(P _d) ² =			
(D)2 (D)2		Choose formula 1 or 2:	LOG of			Backpressure Curve				Open Flow Deliverability		
(P _c) ² -(P _a) ²	(P _c) ² -(P _w) ²	1. P _c ² -P _s ² 2. P _c ² -P _c ²	formula	(P _c ² -P _w ²)	Slope = "n"		- ×100()		A	Į.	-	
or (P _o) ² -(P _d) ²	(Pc) -(Pw)	divided by	1. or 2. and divide	(Fc -Fw)	or Assigned		n x LOG()		Antilog		t x Antilog cfd	
(107-10)		P _c ² -P _w ² by:				ard Slope					1	
1.677	1.884	0.89		051			0.000		1	0		
O Els		0	N-44 @ 44	CE:_	Dalling bill	4		M-64 @ 44	CC:-			
Open Flow			Mcfd @ 14.	oo psia	Deliverabili	ty		Mcfd @ 14	oo psia	-		
The undersign	ned authority	y, on behalf of t	he Compan	y, states that	he is duly a	uthorized to m	nake the above	report and t	hat he has k	nowledge		
of the facts state	ed therein, a	and that said re	port is true a	nd correct.	Executed th	is the 6th day	of March 201 3	3				
								Thomas L	. Walsh			
Witness (if any)				•				For Company				
	•					Checked by						
		RECEIVED										
							KANSAS (CORPORATIO	N COMMISSIO	N		

APR 1 8 2013

CONSERVATION DIVISION WICHITA, KS

I declare under penalty or perjury under the laws of the state of Kansas that I am auti exempt status under Rule K.A.R. 82-3-304 on behalf of the operator								
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 installa-								
tion and/or of type completion or upon use of the gas well herin named. I hereby request a permanent exemption form open flow testing for the <u>Literate 11-2</u> 1								
gas well on the grounds that said well:								
(Check One)								
in a sealth and mostly and a mostly and								
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 vacuume at the present time; KCC approval Docket No								
is incapable of producing at a daily rate in excess of 150 mcf/D								
Date: 16-Apr - 2013								
Signature: <u>Must. Dlbb</u> Title: <u>Production Engineer</u>								
Title: Production Engineer.								

Instructions All active gas wells must have at least on 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 calender 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 therafter be reported yearley 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.

RECEIVED KANSAS CORPORATION COMMISSION

APR 1 8 2013

CONSERVATION DIVISION WICHITA, KS