

KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Form G-2
(Rev 8/95)

Type Test

Open Flow
 Deliverability

Test Date: 06/11/13

API No. 15- 189-22693 - 0001

Company ANADARKO PETROLEUM CORPORATION		Lease KRAMER		Well Number #1-1	
County STEVENS	Location 1100' FSL & 1950' FWL	Section 1	TWP 34S	RNGE (E/W) 38W	Acres Attributed 640
Field HUGOTON	Reservoir CHASE	Gas Gathering Connection AGC			
Completion Date 11/13/12	Plug Back Total Depth 2995	Packer Set at N/A			
Casing Size 5.5	Weight 15.5	Internal Diameter 4.95	Set at 6683	Perforations 2662	To 2843
Tubing Size 2.375	Weight 4.7	Internal Diameter 1.995	Set at 2861	Perforations N/A	To N/A
Type Completion (Describe) GAS	Type Fluid Production WATER	Pump Unit or Traveling Plunger? ROD PUMP		Yes / No YES	
Producing Thru (Annulus / Casing) CASING	% Carbon Dioxide 0.124	% Nitrogen 12.189	Gas Gravity - G _g 0.709		
Vertical Depth (H) 2752	Pressure Taps FLANGE	(Meter Run) X	(PROVER)	Size 2	
Pressure Buildup: Well on Line:	Shut in Started	<u>06/07/13</u> <u>06/10/13</u>	at 9:15 a.m. at 9:15 a.m.	Taken Taken	<u>06/10/13</u> <u>06/11/13</u> at 9:15 a.m. at 9:15 a.m.

OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size inches	Circle One: Meter or Prover Pressure psig	Pressure Differential in (h) Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						7	21.4	PUMP		72	
Flow	1.000	5.2	2.3	76	60	5.5	19.9	PUMP		24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle One: Meter or Prover Pressure psia	Pressure Extension Sqrt ((P _m)(H _w))	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
5.073	19.6	6.714	1.188	0.985	1.000	40	0	0.000

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P _c) ² =	0.458	(P _w) ² =	0.396	P _c =	%	(P _c -14.4)+14.4=		(P _w) ² =0.207
(P _c) ² -(P _w) ²		(P _c) ² -(P _w) ²		LOG of formula	1. or 2. (P _c ² -P _w ²)	Backpressure Curve Slope = "n"		
or (P _c) ² -(P _d) ²		divided by P _c ² -P _w ²		and divide by:		Assigned Standard Slope	n x LOG ()	Antilog
0.251	0.062	4.048	0.607	0.850			0.516	3.281
								131

Open Flow 131 Mcfd @ 14.65 psia **Deliverability** Mcfd @ 14.65 psia

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 11th day of June, 2013.

Witness (if any)

For Commission

ANADARKO PETROLEUM
For Company

BRIAN NORTON
Checked by

KCC WICHITA
JUN 18 2013
RECEIVED