

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow
- Deliverability

Test Date:
10/04 to 10/05/10

API No. 15
145-21573-00-00

Company F.G. Holl		Lease Ward A			Well Number 1-19	
County Pawnee	Location 330FNL & 900FWL	Section 19	TWP 21S	RNG (E/W) 15W	Acres Attributed	
Field		Reservoir Arbuckle		Gas Gathering Connection SemGas		
Completion Date 8/5/08		Plug Back Total Depth 3948		Packer Set at none		
Casing Size 5.5	Weight	Internal Diameter	Set at 3962	Perforations 3810	To 3814	
Tubing Size 2.875	Weight	Internal Diameter	Set at 3810	Perforations	To	
Type Completion (Describe) single		Type Fluid Production SW		Pump Unit or Traveling Plunger? Yes / No yes - pump unit		
Producing Thru (Annulus / Tubing) annulus		% Carbon Dioxide .3230		% Nitrogen 5.5731		Gas Gravity - G _g .634
Vertical Depth(H)		Pressure Taps flange			(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 8/24		20	10	at 8:45 am (AM) (PM)	Taken 8/27 20 10 at 8:45 am (AM) (PM)	
Well on Line: Started 10/04		20	10	at 3:00 pm (AM) (PM)	Taken 10/05 20 10 at 3:00 pm (AM) (PM)	

OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P _m)	Pressure Differential in 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						1128	1142.4			72	
Flow	.750	138.7	.9	90		868	882.4			24	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{ps}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
2.779	153.1	11.74	1.256	.9723	1.011	40		.634

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 1305.077$; $(P_w)^2 = 778.629$; $P_d = \underline{\hspace{2cm}}$ % $(P_c - 14.4) + 14.4 = \underline{\hspace{2cm}}$; $(P_w)^2 = 0.207$; $(P_d)^2 = \underline{\hspace{2cm}}$

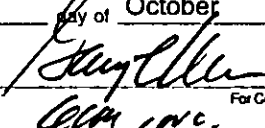
$(P_c)^2 - (P_w)^2$ or $(P_c)^2 - (P_d)^2$	$(P_w)^2 - (P_w)^2$	Choose formula 1 or 2: 1. $P_c^2 - P_w^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w^2$	LOG of formula 1. or 2. and divide by: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
1304.87	526.448	2.478	.3941	.848	.3342	2.16	86

Open Flow **86** Mcfd @ 14.65 psia X .50 = Deliverability **42** 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 16th day of October, 20 10.

Witness (if any)

For Commission


 For Company
 RECEIVED
 MAR 04 2011
 Checked by

KCC WICHITA