

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

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

API No. 15
145-21578-00-00

Company F.G. Holl		Lease Ward B			Well Number 2-30	
County Pawnee	Location SWSWNE	Section 30	TWP 21S	RNG (E/W) 15W	Acres Attributed	
Field		Reservoir Arbuckle		Gas Gathering Connection SemGas		
Completion Date 11/3/08		Plug Back Total Depth 3978		Packer Set at none		
Casing Size 5.5	Weight	Internal Diameter	Set at 4042	Perforations 3870	To 3894	
Tubing Size 2.875	Weight	Internal Diameter	Set at 3978	Perforations	To	
Type Completion (Describe) single		Type Fluid Production SW		Pump Unit or Traveling Plunger? Yes / No no		
Producing Thru (Annulus / Tubing) tubing		% Carbon Dioxide .4170		% Nitrogen 7.155		Gas Gravity - G _g .640
Vertical Depth(H)		Pressure Taps flange			(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in		8/23	20	10	at 9:15 am	(AM) (PM) Taken 8/26
Well on Line: Started		10/04	20	10	at 3:15 pm	(AM) (PM) Taken 10/05

OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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						1184	1198.4	1184	1198.4	72	
Flow	.750	139.3	17.5	85		1124	1138.4	661	675.5	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 _{tt}	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
2.779	153.7	51.86	1.250	.9768	1.010	178		.640

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 1436.162 ; (P_w)² = 1295.954 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_a)² = 0.207 ; (P_d)² = _____

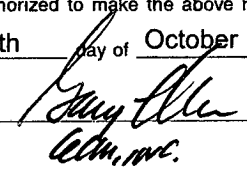
(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
1435.955	140.208	10.24	1.010	.681	.6878	4.87	866

Open Flow **866** Mcfd @ 14.65 psia X .50 = Deliverability **433** 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
Checked by _____

RECEIVED
MAR 04 2011
KCC WICHITA