

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:
1/20/14

API No. 15
009-25756-00-00

Company F.G.Holl Co, LLC		Lease Nicholson Schmidt Unit		Well Number 1-28	
County Barton	Location 650FNL&1500FWL	Section 28	TWP 20S	RNG (E/W) 15W	Acres Attributed
Field Converse		Reservoir Conglomerate		Gas Gathering Connection none	
Completion Date 2/12/13		Plug Back Total Depth 4009		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 4027	Perforations 3744	To 3766
Tubing Size 2.375	Weight	Internal Diameter	Set at 3711	Perforations	To
Type Completion (Describe) single		Type Fluid Production SW/Oil		Pump Unit or Traveling Plunger? Yes / No No	
Producing Thru (Annulus / Tubing) tubing		% Carbon Dioxide .3207		% Nitrogen 8.1712	
Gas Gravity - G _g .640		Vertical Depth(H) none		Pressure Taps none	
				(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 1/17		20 14 at 10:00 am (AM) (PM)		Taken 1/20	
				20 14 at 10:00 am (AM) (PM)	
Well on Line: Started 1/20		20 14 at 10:00 am (AM) (PM)		Taken 1/21	
				20 14 at 10:00 am (AM) (PM)	

OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential In Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						820	834.4	799	813.4	72	
Flow	1.000	85	49.7	42		750	764.4	502	516.4	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 _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
5.073	99.4	70.28	1.250	1.018	-----	454		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 696.223 : (P_w)² = 584.307 : P_d = _____ % (P_c - 14.4) + 14.4 = _____ : (P_a)² = 0.207
(P_d)² = _____

(P _c) ² - (P _d) ² or (P _c) ² - (P _w) 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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
696.016	111.916	6.219	.7937	.883	.7008	5.02	2279

Open Flow **2279** Mcfd @ 14.65 psia X .50 = Deliverability **1139.5** 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 30th day of April, 20 14.

KCC WICHITA

Witness (if any)

MAY 02 2014

For Company

For Commission

Checked by

RECEIVED