

**KANSAS CORPORATION COMMISSION**  
**ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 1/10/2017      API No. 145-21822-00-00

Company Shelby Resources		Lease Frick Family Farms			Well Number 1-18		
County Pawnee	Location 1003 FSL 2001	Section 18	TWP 22	RNG (E/W) 16w	Acres Attributed 320		
Field Simpson		Reservoir Simpson				Gas Gathering Connection IACX	
Completion Date 10/26/2016		Plug Back Total Depth 4137		Packer Set at none			
Casing Size 5.500	Weight 4.950	Internal Diameter 15.500	Set at 4184	Perforations 4015	To 4025		
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 4112	Perforations	To		
Type Completion (Describe) Tubing Conveyed		Type Fluid Production none		Pump Unit or Traveling Plunger? no			
Producing Thru (Annulus/Tubing) tubing		% Carbon Dioxide 0.249		% Nitrogen 12.665		Gas Gravity- Gg 0.662	
Vertical Depth (H) 4020		Pressure Taps flange			Meter Run Size 2.067		
Pressure Buildup: Shut in 1/7/2017@0900		TAKEN		1/10/2017@0930			
Well on Line: Started 1/10/2017@0930		TAKEN		1/11/2017@0930			

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						1342	1356	1280	1294	72.5	
Flow	0.750	36.0	108.20	47		1170	1184	1130	1144	24.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
2.779	50.4	73.85	1.2291	1.0127	1.0042	256		0.662

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 1839.8      (P<sub>w</sub>)<sup>2</sup> = 1402.8      P<sub>d</sub> = 3.7      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 2.50

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
1839.61	437.02	4.209	0.6242	1.000	0.6242	4.209	1079
1837.32	437.02	4.204	0.6237	1.000	0.6237	4.204	1078

OPEN FLOW      1079      Mcfd @ 14.65 psia      DELIVERABILITY      1078      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 herein and that said report is true and correct. Executed this the 13<sup>th</sup> day of January, 2017.

KANSAS CORPORATION COMMISSION

JAN 18 2017

CONSERVATION DIVISION  
WICHITA, KS

Witness (if any)

For Commission

For Company

Checked by