

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test

- Open Flow
 Deliverability

Test Date
10/09 to 10/10/14

API No. 15
053-20,306 -00 -00

Company Rupe Oil Company			Lease Griffin		Well Number 1
County Ellsworth	Location NW	Section 05	TWP 16S	RNG (E/W) 08W	Acres Attributed
Field Grubb		Reservoir LeeCompton/QueenHill		Gas Gathering Connection Rupe Oil	
Completion Date 01/73		Plug Back Total Depth 1975		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 1959	Perforations	To
Tubing Size 2.375	Weight	Internal Diameter	Set at	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 .150		% Nitrogen 24.670	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup	Shut in	<u>10/06</u>	20 <u>14</u> at <u>10:00 am</u>	(AM) (PM) Taken	<u>10/09</u>
					20 <u>14</u> at <u>10:00 am</u> (AM) (PM)
Well on Line	Started	<u>10/09</u>	20 <u>14</u> at <u>10:00 am</u>	(AM) (PM) Taken	<u>10/10</u>
					20 <u>14</u> at <u>10.00 am</u> (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 _t) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						139.7	154.1			72	
Flow	.625	60	4	45		65.3	79.7			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
1.914	65.4	16.17	1.151	1.015	-----	36		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

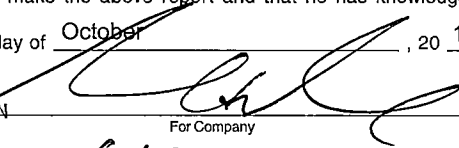
(P_c)² = 23.746 (P_w)² = 6.352 P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_a)² = 0.207
(P_d)² = _____

(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 $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
23.539	17.394	1.353	1313	.850	.1116	1.29	46
				assigned			

Open Flow 46 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 10th day of October, 20 14

Received
KANSAS CORPORATION COMMISSION

Witness (if any) _____ For Company 

OCT 15 2014

For Commission _____ Checked by GL Mine