

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

Test Date:
4/12 to 4/13/12

API No. 15
053-20205-00-00

Company Rupe Oil Company		Lease Helwick		Well Number 1	
County Ellsworth	Location E/2 NE NW	Section 32	TWP 15S	RNG (E/W) 08W	Acres Attributed
Field Grubb		Reservoir Lee Compton		Gas Gathering Connection Rupe Oil	
Completion Date 2/27/78		Plug Back Total Depth 2380		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 2727	Perforations 2274	To 2284
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 .100		% Nitrogen 24.100	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 4/09		20 12 at 10:15 am		(AM) (PM) Taken 4/12	
Well on Line: Started 4/12		20 12 at 10:15 am		(AM) (PM) Taken 4/13	

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						155.7	170.1			72	
Flow	.500	54	5	66		126.3	140.7			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 _{tt}	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
1.219	68.4	18.49	1.133	.9943	-----	25		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = **28.934** ; (P_w)² = **19.796** ; 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)
28.727	9.138	3.143	.4973	.850	.4227	2.65	66
				assigned			

Open Flow **66** Mcfd @ 14.65 psia X .50 = Deliverability **33** 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 17th day of April, 20 12.

RECEIVED
APR 18 2012

Witness (if any) _____ For Company *[Signature]*
For Commission _____ Checked by _____

KCC WICHITA