

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test

(See Instructions on Reverse Side)

- Open Flow
- Deliverability

Test Date
10/09 to 10/10/14

API No 15
053-20,205-00-00

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 10/06	20 14	at 10:15 am	(AM) (PM) Taken 10/09	20 14 at 10:15 am (AM) (PM)
Well on Line	Started 10/09	20 14	at 10:15 am	(AM) (PM) Taken 10/10	20 14 at 10:15 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 _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						159.7	174.1			72	
Flow	.500	60	4	55		98.2	112.6			24	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _v) (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
1.219	74.4	17.25	1.133	1.005	-----	24		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 30.310 (P_w)² = 12.678 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)
30.103	18.632	1.615	.2081	.850	.1769	1.50	36
				assigned			

Open Flow **36** 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, 2014

Received
KANSAS CORPORATION COMMISSION

For Company

Witness (if any) _____

OCT 15 2014

Checked by GLM