

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

Open Flow

Deliverability

Test Date:

8-13-15

API No. 15

15-097-20552-00-00

Company NOVY OIL AND GAS		Lease BOOTH			Well Number 1
County KIOWA	Location	Section 36	TWP 30S	RNG (E/W) 18W	Acres Attributed 640
Field ALFORD		Reservoir MISSISSIPPI		Gas Gathering Connection ONEOK FIELD SERVICES	
Completion Date August 31, 1979		Plug Back Total Depth 5060		Packer Set at None	
Casing Size 5 1/2	Weight 5.5	Internal Diameter 4.950	Set at	Perforations OPEN HOLE	To 5015-5060
Tubing Size 2 3/8	Weight 4.7	Internal Diameter 1.995	Set at 5015	Perforations	To
Type Completion (Describe) SINGLE GAS		Type Fluid Production WATER/OIL		Pump Unit or Traveling Plunger? Yes / No YES-PUMP UNIT	
Producing Thru (Annulus / Tubing) ANNULUS		% Carbon Dioxide 0.175		% Nitrogen 1.307	
Vertical Depth(H) 5038		Pressure Taps FLANGE			(Meter Run) (Prover) Size 3.068
Pressure Buildup: Shut in		8-9-15	20	at 0900	(AM) (PM) Taken
					8-12-15
					20
					at 0900
					(AM) (PM)
Well on Line: Started		8-12-15	20	at 0900	(AM) (PM) Taken
					8-13-15
					20
					at 0900
					(AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in 72.0 Hours

Static / Dynamic Property	Orifice Size (inches)	Casing 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						73.3	87.7			72.0	
Flow	.375	29.2	27.7	73	75	34.1	48.5			24.0	1.5

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _p) (F _a) Mcfd	Casing Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{dv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G
.6847	43.60	34.75	1.2541	0.9877	1.0036	29.6	NONE	0.6358

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 7.7$ $(P_w)^2 = 2.4$ $P_a = 55.3$ % $(P_c - 14.4) + 14.4 = 87.7$ $(P_a)^2 = 0.207$
 $(P_o)^2 =$

$(P_c)^2 - (P_a)^2$ 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. $P_c^2 - P_w^2$ 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" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
7.48	5.34	1.402	0.1467	0.850	-0.1247	1.3326	39.42

Open Flow 39 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 the 13 day of AUGUST, 20 15

Copy to KCC Wichita
Witness (if any)

Received
AUG 17 2015
8-17-2015
 CONSERVATION DIVISION
 WICHITA, KS

Precision Wire Line & Testing
 For Company
Mark J. Burch
 Checked by

For Commission