

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-63

Type Test 4POINT ☒ Initial ☐ Annual ☐ Special						Test Date 7-12-86	
Company POGO PRODUCING				Connection TO AIR			
Pool				Formation ATOKA		Unit A	
Completion Date 7-11-86		Total Depth		Plug Back To 12455		Elevation 2965	
Casing Size 7.0		Wt. 32.0		Set At 12044		Perforations: From 11796 To 11806	
Tub. Size 2.375		Wt. 4.7		Set At 11735		Perforations: From To	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 11735	
Producing Thru TUBING		Reservoir Temp. °F 180 @ 11801		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 11801		H 11801		G _g 0.583		% CO ₂ 0.60	
				% N ₂ 0.50		% H ₂ S 0	
				Prover 0		Motor Run 4.0	
						Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. In. H ₂ O	Temp. °F	Press. p.s.i.g.	CHOKE	Press. p.s.i.g.	
SI							7157		8604	180
1.	4.03 X	1.375		510	3.0	98	6597	5.25/64	8029	180
2.	4.03 X	1.375		515	6.2	98	6350	8/64	7766	180
3.	4.03 X	1.375		510	13.7	99	5855	10/64	7312	180
4.	4.03 X	1.375		510	28.0	96	5110	14/64	6479	180
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	9.07	39.62	523.2	0.9653	1.3097	1.0322	469
2	9.07	57.46	528.2	0.9653	1.3097	1.0325	680
3	9.07	84.82	523.2	0.9645	1.3097	1.0319	1003
4	9.07	121.04	523.2	0.9671	1.3097	1.0327	1436
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.77	558	1.59	0.939	0	0
2	0.78	558	1.59	0.938	A.P.I. Gravity of Liquid Hydrocarbons	0.583
3	0.77	559	1.59	0.939	Specific Gravity Separator Gas	XXXXXXX
4	0.77	556	1.58	0.938	Specific Gravity Flowing Fluid	XXXXX
					Critical Pressure	675 P.S.I.A.
					Critical Temperature	351 °R

NO.	P ₁ ²	P _w ²	P _r ²	P _c ² - P _w ²
1	7198.7	6664	44411	7410
2		6421	41228	10593
3		6002	36048	15773
4		5249	27553	24268
5				

(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 2.1354$

AOR = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2844$

(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.9807$

Absolute Open Flow	2844	Mcf @ 15.025	Angle of Slope °	48.0	Slope, n	0.901
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Remarks: MEASURED WITH AMERADA PRESSURE ELEMENT

Approved By Commission	Conducted By: BENNETT & CATHEY	Calculated By: RICHARD TOWNELY	Checked By:
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