

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/8/00		RECEIVED OOD ARTESIA	
Company POGO PRODUCING CO.				Correlation 3-10-00			
Pool McMillan Morrow				Formation MORROW		Unit	
Completion Date 3-7-00		Total Depth 10,500		Plug Back TD 10,490		Elevation 3341 GR	
Casing Size 5.5		Wt. 17.0		d 4.892		Set At 10271	
Thru Size 2.875		Wt. 6.5		d 2.441		Set At 10202	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10163		Farm or Lease Name DAVIS "7"	
Producing Thru TUBING		Reservoir Temp. °F 161 @ 10271		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 10271		H 10271		G _g 0.631		% CO ₂ 0.968	
				% N ₂ 0.280		% H ₂ S	
Prover		Meter Run 4.026		Tape FLANGE			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1	4.026	2.5	226.9	22.1	49	2890	75				24
2	4.026	2.5	226.9	28.1	47	2900	74				
3	4.026	2.5	226.9	33.6	43	2811	76				
4	4.026	2.5	236.8	41.0	40	2736	77				
5											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	32.64	72.83	240.1	1.0107	1.2589	1.0243	3098
2	32.64	82.12	240.1	1.0127	1.2589	1.0247	3502
3	32.64	89.87	240.1	1.0168	1.2589	1.0255	3851
4	32.64	101.19	250.0	1.0198	1.2589	1.0272	4556
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	68.160 Mcf/bbl.
1	.36	509	1.39	0.953	A.P.I. Gravity of Liquid Hydrocarbons	65 Deg.
2	.36	507	1.38	0.952	Specific Gravity Separator Gas	0.631
3	.36	503	1.37	0.951	Specific Gravity Flowing Fluid	0.668
4	.37	500	1.36	0.948	Critical Pressure	675 P.S.I.A.
5					Critical Temperature	366 R

NO.	P _i ²	P _w ²	P _r ²	P _e ²	P _e ² - P _w ²	(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 3.8233$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 3.2923$
1		2900	8412	1913			
2		2917	8506	1814			
3		2829	8005	2320			
4		2761	7623	2700			
5							

Absolute Open Flow		14342	Mcf/d @ 15.025	Angle of Slope	48.4	Slope, n	0.8885
Remarks:							
Approved by Commission:		Conducted By:		Calculated By:		Checked By:	