

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

RECEIVED Form C-122
Revised 9-1-65 *File*

APR 18 1983

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-29-83		O. C. D. 1980 ES ARTESIA, OFFICE	
Company JULIAN ARD ✓						Connection AIR NEW WELL		660 FE	
Pool UN-DESIGNATED <i>W/C Penn</i>						Formation MORROW <i>Penn</i>		Unit	
Completion Date 3-25-83		Total Depth 6890		Plug back TD 6360		Elevation 3931.1		Farm or Lease Name ACME	
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 6883 6360	Perforations: From 6268 To 6890 6276		Well No. 1		Unit Sec. Twp. Rge. I 4 8S 27E	
Tub. Size 2.375	Wt. 4.7	d 1.995	Set At 6205	Perforations: From 0 To 0		County CHAVES		State NEW MEXICO	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 6200		Meter Run 3.1	
Producing Thru TUBING		Reservoir Temp. °F 135° 6272		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		Type FLANGE	
L 6272	H 6272	Gg 0.610	% CO ₂ 0.35	% N ₂ 6.49	% H ₂ S 0	Prover 0			

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.		CHOKE
SI							1830	64°	650	0	72.0
1.	3.068 X 0.500			220	11.0	79°	1511	64°	650	4/64	1.0
2.	3.068 X 0.500			250	15.5	96°	1315	66°	650	4.5/64	1.0
3.	3.068 X 0.500			215	25.0	95°	1068	68°	650	5/64	1.0
4.	3.068 X 0.500			180	37.5	94°	780	68°	650	6/64	1.0
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 Compens. Factor, F _{pv}	Rate of Flow Q, Mgd
1	1.18	50.65	233.2	0.9822	1.2804	1.0156	77
2	1.18	63.87	263.2	0.9671	1.2804	1.0156	95
3	1.18	75.53	228.2	0.9680	1.2804	1.0135	112
4	1.18	85.12	193.2	0.9688	1.2804	1.0115	126
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.35	539	1.57	0.969	0	0	.610	.610	662	343
2	0.40	556	1.62	0.970						
3	0.34	555	1.62	0.973						
4	0.29	554	1.61	0.977						
5										

P_r 1842.2 P_w 3394

NO.	P _r	P _w	P _r ²	P _w ²
1	2323	1523	2321	1073
2	1764	1327	1761	1633
3	1169	1080	1166	2227
4	629	793	628	2766
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.2271$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.1150$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 141$

*Post ID-2
4-22-83
Comp. + BK*

Absolute Open Flow	141	Mgd @ 15.625	Angle of Slope °	62.0	Slope, n	0.532
Remarks:						
Approved by Contribution:	Conducted By:	Calculated By:	Checked By:			
	RICHARD TOWNLEY	BENNETT & CATHEY				