

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

Form C-122
Revised 9-1-65

RECEIVED
APR 9 1971
O.C.C.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-2-71			
Company Pennzoil United, Inc. ✓						Connection None			
Pool Wildcat						Formation Morrow		Unit O.C.C. ARTESIA, OFFICE	
Completion Date 3-22-71			Total Depth 10,796		Plug Back TD 10,752		Elevation 3727 DF		Farm or Lease Name Aid-State
Csg. Size 5 1/2	Wt. 20.0 17.0	d 4.408 4.892	Set At 10,796	Perforations: From 10,608 To 10,707				Well No. 1	
Tbg. Size 2 3/8 EUE	Wt. 4.7	d 1.995	Set At 10,710	Perforations: From To				Unit Sec. Twp. Rge. A 24 17S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10,562		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 156 @ 10,500		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 10,658	H 10,658	Gg .667	% CO ₂ .0034	% N ₂ .0068	% H ₂ S 0	Prover	Meter Run X	Taps	

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	
SI							3112	47			
1.	3.068		2.00	470	7	67	2310	64			1.0 Hr
2.	3.068		2.00	480	10	75	1382	65			1.0 Hr
3.	3.068		2.00	490	14	75	870	66			1.0 Hr
4.	3.068		2.00	490	16	75	575	67			1.0 Hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	21.32	58.158	483.2	.9933	1.224	1.050	1586
2	21.32	70.228	493.2	.9840	1.224	1.050	1893
3	21.32	83.933	503.2	.9840	1.224	1.051	2265
4	21.32	89.728	503.2	.9840	1.224	1.051	2421
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	36012	cf/bbl.
1.	.719	527	1.38	1.052	A.P.I. Gravity of Liquid Hydrocarbons	53.5 @ 60°F	Deg.
2.	.734	535	1.404	1.050	Specific Gravity Separator Gas	.667	XXXXXXX
3.	.749	535	1.404	1.051	Specific Gravity Flowing Fluid	XXXXX	
4.	.749	535	1.404	1.051	Critical Pressure	671.7	P.S.I.A.
5.					Critical Temperature	380.9	R

P _c 3941.1	P _c ² 15532		
NO	P _t ²	P _w	P _w ²
1	2323.2	3478.4	12098
2	1395.2	1903.9	3625
3	883.2	813.0	661
4	588.2	542.0	320
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{15,532}{3,625}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2496$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3187$$

Absolute Open Flow	2496	Mcfd @ 15.025	Angle of Slope @	51° 27'	Slope, n	.79663
Remarks:						

Approved By Commission:	Conducted By: West Texas Engineering Service, Inc.	Calculated By:	Checked By:
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J N Casparis

H L Hagler