

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

Form C-122
Revised 9-1-65

RECEIVED

NOV 18 1971

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 11-15-71		RECEIVED	
Company Pennzoil United, Inc.				Connection Transwestern			
Pool <i>Aid State Gas</i> Undesignated				Formation Morrow		Unit ARTCSIA, OFFICE A	
Completion Date 3-22-71		Total Depth 10,796		Plug Back TD 10,752		Elevation 3727 DF	
Csq. Size 5 1/2	Wt. 15.5	d 4.408	Set At 10,796	Perforations: From 10,608 To 10,707		Well No. 1	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,710	Perforations: From To		Unit Sec. Twp. Rge. A 24 17-S 28-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas				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	
L 10,658		H 10,658	G _g 0.667	% CO ₂ 0.0034	% N ₂ 0.0068	% H ₂ S 0	Prover X Meter Run X Taps F

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				*			2602	52	Packer		72.5 Hrs
1.	2.061	x	1.250	66	8	44	2140	60			1 Hr 10 Min
2.	2.061	x	1.250	65	26	43	1755	63			1 Hr 15 Min
3.	2.061	x	1.250	65	40	44	1515	66			1 Hr 15 Min
4.	2.061	x	1.250	61	54	43	1375	66			
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	8.120	89.58	1003.2	1.016	1.224	1.134	1025
2	8.120	160.29	988.2	1.017	1.224	1.132	1834
3	8.120	198.81	988.2	1.016	1.224	1.132	2272
4	8.120	223.88	928.2	1.017	1.224	1.122	2539
5							

NO.	P _t	Temp. *R	T _f	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.	1.50	504	1.33	.777	34.6	54	.667	X X X X X X X X	670	373
2.	1.47	503	1.33	.781				X X X X X	670	378
3.	1.47	504	1.33	.781						
4.	1.38	503	1.33	.794						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	2281.4	5205	1634	
2	1893.2	3584	3255	
3	1660.2	2756	4083	
4	1537.2	2363	4476	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{6839}{4476}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4598$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3706$

Absolute Open Flow 3706 Mcfd @ 15.025 Angle of Slope θ 48° Slope, n .894

Remarks: *Pressure Reading from Chart X 15 = Line Pressure 100" x 1500 psi Meter

Approved By Commission: _____ Conducted By: _____ Calculated By: _____ Checked By: _____