

NEW XICO OIL CONSERVATION COMMISSIC
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-10-79			
Company The Superior Oil Company				Connection Transwestern Gas Pipeline Company					
Pool Bell Lake, South				Formation Morrow				Unit	
Completion Date 5-26-78		Total Depth 17,625'		Pack Back TL 15,490'		Elevation 3576' GL		Farm or Lease Name Government L	
Csg. Size 7 5/8"	Wt. 39#	d 6.625	Set At 15,301	Perforations: From 14,268' To 14,284'				Well No. 1	
Thq. Size 3 1/2	Wt. 9.3	d 2.992	Set At 13,962	Perforations: From None To				Unit G	Sec. Twp. Rye. 18 245 34E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 13,940		County	
Producing Thru Tubing		Reservoir Temp. °F 200°@ 14,000'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 13962	H 13962	Gg .582	% CO ₂ .42%	% N ₂ .23%	% H ₂ S 0	Prover	Meter Run 4"	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	4.026	x	1.5"				6700	75	pk.	--	
1.	4.026	x	1.5"	730	26	70	5950	75	pk.	--	2 hr.
2.	4.026	x	1.5"	740	38	60	5700	75	pk.	--	2 hr.
3.	4.026	x	1.5"	745	51	50	5500	75	pk.	--	2 hr.
4.	4.026	x	1.5"	750	85	45	5000	75	pk.	--	2 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	10.84	139.00	743.2	0.990	1.311	1.051	2055
2	10.84	169.18	753.2	1.000	1.311	1.059	2546
3	10.84	196.64	758.2	1.010	1.311	1.066	3009
4	10.84	254.70	763.2	1.015	1.311	1.068	3924
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	550	Mcf/bbl.
1	1.10	530	1.53	.905	A.P.I. Gravity of Liquid Hydrocarbons	56	Deg.
2	1.12	520	1.50	.891	Specific Gravity Separator Gas	.582	X X X X X X X X
3	1.13	510	1.47	.880	Specific Gravity Flowing Fluid	X X X X X	.587
4	1.13	505	1.46	.876	Critical Pressure	673	P.S.I.A. 673 P.S.I.A.
5					Critical Temperature	346	R 350 R

P _c 6713.2 P _c ² 45,067			
NO.	P _t ²	P _w	P _w ²
1	35,560		35,588
2	32,641		32,683
3	30,395		30,454
4	25,132		25,225
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{45067}{19842}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.084$$

$$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8177$$

Absolute Open Flow	8177	Mcf/d @ 15.025	Angle of Slope θ	48.2	Slope, n	0.895
Remarks:						

Approved By Commission:	Conducted By: Herschel Murff	Calculated By: Rene Santos	Checked By: <i>D. King</i>
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Hobbs Dist(0+1), WNM, GET, JIB, Reg. Group, C. File