

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

Form C-122
Revised 9-1-65

Type of Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-5-80	
Company THE SUPERIOR OIL COMPANY				Pipeline TRANSWESTERN PIPELINE	
Well No. MORROW				Unit	
Wellbore Hole 3-8-80		Depth, ft. 14,696		Elevation 14,576	
Liner 3 1/2		Set At 14,696		Perforations 14,401 TO 14,446	
Pipe Size 2 7/8		Set At 13,770		OPEN TO END	
Type of Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At PBR @ 13,770	
Producing thru TUBING		Reservoir Temp. °F 218°		Baro. Press. - P _a 13.2	
15,956		14,401		NEW MEXICO	
15,956		.584		4 FLG	
.0029		.0027			
15,956		.584		4 FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO	Prover Line Size	X	Orifice Size	Press. psia	Diff. in. H ₂ O	Temp. °F	Press. psia	Temp. °F	Press. psia		Temp. °F
1	4 X 1.500			830	9	75	4377				45 MIN.
2	4 X 1.500			840	24	66	3979	75			1 HR.
3	4 X 1.500			840	30	66	3624	78			1 HR.
4	4 X 1.500			840	42	66	3437	80			1 HR.
5	4 X 1.500			840		66	3170	83			1 HR.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w f_m}$	Pressure P	Flow Temp. Factor FL	Gravity Factor Fg	Super. Compens. Factor, F _{pv}	Rate of Flow Q, Mscf
1	10.84	87.11	843.2	.9859	1.309	1.061	1293
2	10.84	143.10	853.2	.9943	1.309	1.067	2154
3	10.84	159.99	853.2	.9943	1.309	1.067	2408
4	10.84	189.30	853.2	.9943	1.309	1.067	2850
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NO.	P _r	Temp. °R	T _r	Z	G & Liquid Hydrocarbon Ratio	DRY	Mcf/bbl.
1	1.25	535	1.53	.888	Specific Gravity Separator Gas .584		
2	1.27	526	1.50	.878	Specific Gravity Flowing Fluid		
3	1.27	526	1.50	.878	Operating Pressure 672		
4	1.27	526	1.50	.878	Operating Temperature 350		
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NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.141$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.843$
1	3996.9	15975.2	3298.7			
2	3649.0	13315.2	5958.7			
3	3465.2	12007.6	7266.3			
4	3204.9	10271.4	9002.5			
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Absolute Gas Flow 5,252		Meter @ 15.025		Angle of Slope @ 51.250		Slope, n 803	
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Remarks: NO FLUID	
* EQUIVALENT LENGTH	

Approved By Commissioner <i>John W. Ramsey</i>	Conducted By: W.S.	Calculated By: R.R.	Checked By: J.W.W.
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