

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

File # Form C-122
122 Revised 9-1-65

JAN 11 1980

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-17-79		SPUD DATE: 9-29-79	
Company Mewbourne Oil Company				ARTESIAN OFFICE None			
Pool Undesignated				Formation Wolfcamp		Unit A	
Completion Date 12-4-79		Total Depth 10625 9050		Plug Back TD 8450		Elevation N/A	
Csg. Size 4 1/2		ID 12.7		Set At 3.950		Perforations: From 7986 To 8006	
Trq. Size 2 3/8		ID 4.7		Set At 1.995		Perforations: From open To ended	
Type well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7844		County Eddy	
Producing Thru Tbg. L		Reservoir Temp. *F 154 @ 8000'		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2	
H 8000'		G _g .687		% CO ₂ .34		% N ₂ 1.63	
				% H ₂ S .36		Prover 3"	
						Meter Run Flange	

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
1.	3	x	.750	550	5.0	58	2357				1 hr.
2.	3	x	.750	560	16.0	60	2134				1 hr.
3.	3	x	.750	560	22.0	60	1840				1 hr.
4.	3	x	.750	560	7.0	40	1385				1 hr.
5.							1305				

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mgd
1.	2.672	53.07	563.2	1.002	1.206	1.068	183
2.	2.672	95.77	573.2	1.000	1.206	1.069	330
3.	2.672	112.30	573.2	1.000	1.206	1.069	387
4.	2.672	63.34	573.2	1.020	1.206	1.079	225
5.							

NO.	P _t	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.	.84	518	1.35	.877	6.793	48 @ 60	.687	1.106	669	385
2.	.86	520	1.35	.875						
3.	.86	520	1.35	.875						
4.	.86	500	1.30	.859						
5.										

NO.	B.H.P.	P _w	P _w ²	P _e ² - P _w ²	(1) $\frac{P_e^2}{P_e^2 - P_w^2} =$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n =$
1	3091.2	2455.7	6030.5	625.4	6.061	6.061
2	3031.2	2406.6	5791.7	864.2		
3	2971.2	2357.5	5557.8	1098.1		
4	2907.2	2305.4	5314.9	1341.0		
5	3170.2					

Absolute Open Flow		2,346 Mgd @ 15.025	Angle of Slope @	45	Slope, n	1.000
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Remarks: * All pressures obtained from bottom hole bomb set at 8000'.
** Bottom hole shut-in pressure. Well made 6.9 barrels of oil during test.

Approved By Commission:	Conducted By: Mewbourne Oil Company	Calculated By: Bob McMurray	Checked By:
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