

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

Form C-122
Revised 4-1-65

Type Test ☒ Multi ☐ One Point		Date 6-28-76	
Company Doyle Hartman		None	
Tool Jelmat		Yates	
Completion Date 6-28-76		Total Depth 3760	
Casing Size 4 1/2		Casing Weight 10.5	
Casing Set At 3760		Perforations: From 3071 To 3535	
Casing Size 2 3/8		Casing Weight 4.7	
Casing Set At 3050		Perforations: From open To end	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At None	
Producing Thru Thz.		Reservoir Temp. °F 9	
Mean Annual Temp. °F 13.2		Baro. Press. - P _a New Mexico	
L		H	
Gg		% CO ₂	
% N ₂		% H ₂ S	
Prover		Meter Run	
Taps			
3050 3050 668			

FLOW DATA						TUEING 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	6" Positive Chokes										
1.	3/16			303		88	333		328		72
2.	1/4			275		88	303		299		1 hr.
3.	5/16			214		88	275		274		30 Min.
4.	3/8			169		88	214		233		1 hr.
5.	1/2			112		88	169		219		1 hr.
							112		182		1 hr.

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	.6101		316.2	.9741	1.224	1.028	236
2	1.112		288.2	.9741	1.224	1.026	392
3	1.771		227.2	.9741	1.224	1.021	490
4	2.591		182.2	.9741	1.224	1.016	572
5	4.722		125.2	.9741	1.224	1.011	713

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	No fluid	Mcf/bbl.
1	.47	548	1.45	.946	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2	.43	548	1.45	.950	Specific Gravity Separator Gas	.668	X X X X X X X X
3	.34	548	1.45	.960	Specific Gravity Flowing Fluid	X X X X X	
4	.27	548	1.45	.969	Critical Pressure	670	P.S.I.A.
5	.19	548	1.45	.979	Critical Temperature	378	R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1	312.2	97.5	22.4	
2	287.2	82.5	37.4	
3	246.2	60.6	59.3	
4	232.2	53.9	66.0	
5	195.2	38.1	81.8	

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.464$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.464$	
AOF = $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.044$			

Absolute Open Flow	1,044	Mcf @ 15.025	Angle of Slope θ	45	Slope, n	1.000
--------------------	-------	--------------	------------------	----	----------	-------

Remarks: Fluid made during test was too small to measure	
--	--

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan	Joe B. Murray	