

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

Form C-122
Revised 9-1-65

RECEIVED

File *11-22-76* *152 file*

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-18-76		DEC 7 1976	
Company J.C. D.W. Williamson & Underwood et al.			Connection El Paso Natural Gas Company		
Pool Wildcat Atoka Barton Flat East 8. Benton Flat Atoka			Formation Atoka		
Completion Date 10-18-76		Total Depth 11672		Plug Back TD 10,990	
Csg. Size 5 1/2		Wt. 17		Elevation 3280.7 ft.	
Tbg. Size 2 3/8		Wt. 4.7		Form or Lease Name Williamson Federal	
Set At 11,670		Perforations: From 10,927 To 10,931		Well No. 1	
Set At 10,891		Perforations: From open ended To		Unit Sec. Twp. Rge. J 9 20 29	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 183 @ 10,891		State New Mexico	
Mean Annual Temp. °F 13.2		Baro. Press. - P _a		Meter Run 4	
L 10,891		H 10,891		Taps Flg.	

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							3329		shut-in		96 hrs.
1.	4 x	1.500	402	2.3	74	3062					1 hr.
2.	4 x	1.500	409	8.4	74	2687					1 hr.
3.	4 x	1.500	409	15.2	72	2550					1 hr.
4.	4 x	1.500	409	23.0	68	2320					1 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	30.90	415.2	.9868	1.247	1.039	428
2.	10.84	59.55	422.2	.9868	1.247	1.039	825
3.	10.84	80.11	422.2	.9887	1.247	1.040	1113
4.	10.84	98.54	422.2	.9887	1.247	1.041	1371
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.62	534	1.44	.927	53.7	
2.	.63	534	1.44	.926	52.6 @ 60	
3.	.63	532	1.43	.924		
4.	.63	528	1.42	.923		
5.						

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2}$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n$
1		3076.6	9465.5	1704.8	1.971	1.937
2		2704.3	7313.2	3857.1		
3		2571.0	6610.0	4560.3		
4		2345.6	5501.8	5668.5		
5						

Absolute Open Flow 2.656 Mcfd @ 15.025 Angle of Slope θ 45.75 Slope, n .974

Remarks: 2.9 Bbl. condensate and 2.3 Bbl. water during test.

Approved By Commission:	Conducted By: Bessie Roston	Calculated By: Bessie Roston	Checked By:
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