

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

Form C-122
Revised 9-1-65

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Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-25-73		OCT 10 1973																																																															
Company El Paso Natural Gas Company			Connection None																																																																
Pool Wildcat Rocky Arroyo			Formation Morrow																																																																
Completion Date 8-28-73		Total Depth 9256		Plug Back TD Elevation																																																															
Csg. Size 5 1/2		Wt. 15.5		Set At 9256																																																															
Perforations: From 7292 To 7347		Perforations: From 9038 To 9052		Well No. 1																																																															
Unit F		Sec. 8		Twp. 22																																																															
Range 22		County Eddy		State New Mexico																																																															
Producing Thru Tbg.		Reservoir Temp. °F 74		Mean Annual Temp. °F 13.2																																																															
Baro. Press. - P _a 9045		Prover *Positive chokes		Meter Run Taps																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X</th> <th>Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>1.</td> <td>* 2</td> <td>x</td> <td>1/8</td> <td>2517</td> <td>74</td> <td>74</td> <td>74</td> <td>94</td> </tr> <tr> <td>2.</td> <td>* 2</td> <td>x</td> <td>3/16</td> <td>2218</td> <td>78</td> <td>78</td> <td>78</td> <td>1 hr.</td> </tr> <tr> <td>3.</td> <td>* 2</td> <td>x</td> <td>7/32</td> <td>1582</td> <td>78</td> <td>78</td> <td>78</td> <td>1 hr.</td> </tr> <tr> <td>4.</td> <td>* 2</td> <td>x</td> <td>1/4</td> <td>1274</td> <td>79</td> <td>79</td> <td>79</td> <td>1 hr.</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td>1132</td> <td>80</td> <td>80</td> <td>80</td> <td></td> </tr> </table>						FLOW DATA				TUBING DATA		CASING DATA		Duration of Flow	NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	1.	* 2	x	1/8	2517	74	74	74	94	2.	* 2	x	3/16	2218	78	78	78	1 hr.	3.	* 2	x	7/32	1582	78	78	78	1 hr.	4.	* 2	x	1/4	1274	79	79	79	1 hr.	5.				1132	80	80	80	
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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.	.2618		2231.2	.9831	1.267	1.152	838																																																												
2.	.6101		1595.2	.9831	1.267	1.129	1369																																																												
3.	.8419		1287.2	.9822	1.267	1.105	1490																																																												
4.	1.112		1145.2	.9813	1.267	1.095	1734																																																												
5.																																																																			
NO.	P _f	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ None _____ Deg. Specific Gravity Separator Gas .623 _____ X X X X X X X X Specific Gravity Flowing Fluid _____ X X X X X Critical Pressure _____ 671 _____ P.S.I.A. Critical Temperature _____ 365 _____ R																																																														
1.	3.33	538	1.47	753																																																															
2.	2.38	538	1.47	784																																																															
3.	1.92	539	1.48	819																																																															
4.	1.71	540	1.48	834																																																															
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P _c 2530.2 P _c 2610.9 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P_c²</th> <th>P_w</th> <th>P_w²</th> <th>P_c² - P_w²</th> </tr> <tr> <td>1.</td> <td></td> <td></td> <td>4997.0</td> <td>1404.9</td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td>2596.1</td> <td>3805.8</td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td>1719.5</td> <td>4682.4</td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td>1397.6</td> <td>5004.3</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²	1.			4997.0	1404.9	2.			2596.1	3805.8	3.			1719.5	4682.4	4.			1397.6	5004.3	5.					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.279$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.279$ ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2218$																																
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Absolute Open Flow 2218 Mcfd @ 15.025					Angle of Slope _____ Slope, n 1.000																																																														
Remarks: Slope of curve was flat. Slope of 1.000 drawn through high rate. Trace of condensate produced through test. A package leakage test was run at time of test.																																																																			
Approved by Commission:		Conducted By: J. C. Roberts & R. Kiker		Calculated By: J. C. Roberts		Checked By:																																																													

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OCT 4 1973

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO