

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-20-87																																																																																	
Company Amoco Production Company		Connection																																																																																	
Pool Bravo Dome		Formation Tubb																																																																																	
Completion Date 12-30-80		Total Depth 2530'	Plug Back TD 2390'																																																																																
Elevation 4720'		Farm or Lease Name																																																																																	
Csg. Size 5.50	Wt. 14#	d 4.90	Set At 2530'																																																																																
Perforations: From 2142'	To 2354'		Well No. 1934-111G																																																																																
Perf. Size 2.875	Wt. 6.5	d 2.441	Set At 2125																																																																																
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 2096'	Unit BDCDGU																																																																																
Producing Thru Tubing	Reservoir Temp. °F 90	Mean Annual Temp. °F 50	Baro. Press. - P _g 12.25																																																																																
L	H	G _g	% CO ₂ 100																																																																																
			% N ₂ 0																																																																																
			% H ₂ S. 0																																																																																
Prover		Meter Run 4.0	Taps																																																																																
State New Mexico		County Union																																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th align="center" colspan="4">FLOW DATA</th> <th align="center" colspan="2">TUBING DATA</th> <th align="center" colspan="2">CASING DATA</th> <th align="center" 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>Diff. h_w</th> <th>Temp. °F</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>4.026 x</td> <td>2.50</td> <td>195</td> <td>24</td> <td>59</td> <td>290</td> <td>196</td> <td>59</td> <td>0</td> <td></td> <td>24 hrs</td> </tr> <tr> <td>2.</td> <td>4.026 x</td> <td>2.50</td> <td>201</td> <td>22</td> <td>59</td> <td>202</td> <td>59</td> <td>59</td> <td>0</td> <td></td> <td>24 hrs</td> </tr> <tr> <td>3.</td> <td>4.026 x</td> <td>2.50</td> <td>212</td> <td>17</td> <td>60</td> <td>212</td> <td>60</td> <td>60</td> <td>0</td> <td></td> <td>24 hrs</td> </tr> <tr> <td>4.</td> <td>4.026 x</td> <td>2.50</td> <td>225</td> <td>12</td> <td>60</td> <td>225</td> <td>60</td> <td>60</td> <td>0</td> <td></td> <td>24 hrs</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	1.	4.026 x	2.50	195	24	59	290	196	59	0		24 hrs	2.	4.026 x	2.50	201	22	59	202	59	59	0		24 hrs	3.	4.026 x	2.50	212	17	60	212	60	60	0		24 hrs	4.	4.026 x	2.50	225	12	60	225	60	60	0		24 hrs	5.											
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.	4.026 x	2.50	195	24	59	290	196	59	0		24 hrs																																																																								
2.	4.026 x	2.50	201	22	59	202	59	59	0		24 hrs																																																																								
3.	4.026 x	2.50	212	17	60	212	60	60	0		24 hrs																																																																								
4.	4.026 x	2.50	225	12	60	225	60	60	0		24 hrs																																																																								
5.																																																																																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th align="center" colspan="8">RATE OF FLOW CALCULATIONS</th> </tr> <tr> <th>NO.</th> <th>Coefficient (24 Hour)</th> <th>$\sqrt{h_w P_m}$</th> <th>Pressure P_m</th> <th>Flow Temp. Factor F_t</th> <th>Gravity Factor F_g</th> <th>Super Compress. Factor, F_{pv}</th> <th>Rate of Flow Q, Mcfd</th> </tr> <tr> <td>1.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2050</td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1905</td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1726</td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1542</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>											RATE OF FLOW CALCULATIONS								NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd	1.							2050	2.							1905	3.							1726	4.							1542	5.																								
RATE OF FLOW CALCULATIONS																																																																																			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd																																																																												
1.							2050																																																																												
2.							1905																																																																												
3.							1726																																																																												
4.							1542																																																																												
5.																																																																																			
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>0</u> Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas <u>1.529</u> X X X X X X X X Specific Gravity Flowing Fluid <u>X X X X X</u> _____ Critical Pressure <u>1072</u> P.S.I.A. _____ P.S.I.A. Critical Temperature <u>496</u> R _____ R																																																																														
1.																																																																																			
2.																																																																																			
3.																																																																																			
4.																																																																																			
5.																																																																																			
P _c <u>302.25</u> P _w <u>91.355</u>					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9037$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9037$																																																																														
NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3902$																																																																														
1.		208.25	43,368	47,987																																																																															
2.		214.25	45,903	45,452																																																																															
3.		224.25	50,288	41,067																																																																															
4.		237.25	56,287	35,067																																																																															
5.																																																																																			
Absolute Open Flow <u>3902</u> Mcfd @ 15.025					Angle of Slope @ <u>45</u>		Slope, n <u>1.0</u>																																																																												
Remarks: <u>Test was run from a low flowing tubing pressure to a high flowing tubing pressure to minimize liquid loading effects.</u>																																																																																			
Approved by Commission:			Conducted By: RANDY MAHANNAH		Calculated By: RICHARD ROETH		Checked By:																																																																												