

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

☒ Initial ☐ Annual ☐ Special		Test Date 7-14-90
Company AMOCO PRODUCTION CO.		Connection PHILLIPS PIPELINE
Field WOLF CAMP		Formation O. C. D.
Completion Date 7-3-90	Total Depth 9778	Plug Back TD 6781
Perforations From 6550 To 6725		Unit 1
Perforations From 0 To 0	Flow or Lease Name HONDO FSD GAS CO.	
SINGLE GAS		EDDY
Reservoir Temp. °F 6637	Mean Annual Temp. °F 60.0	Gas Pressure - P _g 13.2
L 6637	H 6637	G _g .734
% CO ₂ .16	% N ₂ 2.52	% H ₂ S .00
Pressure 4.0	Temperature FLANGE	Location NEW MEXICO

FLOW DATA						TUBING DATA		CASING DATA		Duration of Test
NO.	Flow Line Size	X Orifice Size	Press. psia	Diff. in. H ₂ O	Temp. °F	Press. psia	Temp. °F	Press. psia	Temp. °F	of Time
1	4.03 x 2.000	26	1.0	66	1997	60	0	0	1.0	
2	4.03 x 2.000	33	4.4	70	1887	60	0	0	1.0	
3	4.03 x 2.000	46	19.4	66	1845	60	0	0	1.0	
4	4.03 x 2.000	71	53.3	56	1805	60	0	0	1.0	
5					1552	60	0	0	1.0	

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _{in}	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress Factor F _{sp}	Rate of Flow Q, Mscf/d
1	19.81	6.30	39.7	.9943	1.1672	1.0075	146
2	19.81	14.28	46.2	.9905	1.1672	1.0073	330
3	19.81	32.88	59.3	.9943	1.1672	1.0075	756
4	19.81	67.16	84.6	1.0039	1.1672	1.0103	1575
5							

NO.	P ₁	Temp. °R	T ₁	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	.06	526	1.34	.985	116.0	57.9	.734	XXXXXX	662	393
2	.07	530	1.35	.985						
3	.09	526	1.34	.985						
4	.13	516	1.31	.980						
5										

$P_c = 2010.2$ $P_c^2 = 4041$	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.5964$	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.5964$																														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P₁²</th> <th>P_w</th> <th>P_w²</th> <th>P₁² - P_w²</th> </tr> <tr> <td>1</td> <td>3611</td> <td>1899</td> <td>3606</td> <td>435</td> </tr> <tr> <td>2</td> <td>3453</td> <td>1857</td> <td>3449</td> <td>592</td> </tr> <tr> <td>3</td> <td>3306</td> <td>1820</td> <td>3311</td> <td>730</td> </tr> <tr> <td>4</td> <td>2450</td> <td>1576</td> <td>2485</td> <td>1556</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	NO.	P ₁ ²	P _w	P _w ²	P ₁ ² - P _w ²	1	3611	1899	3606	435	2	3453	1857	3449	592	3	3306	1820	3311	730	4	2450	1576	2485	1556	5					$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4090$	
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Absolute Open Flow 4090	Mod # 15.025	Angle of Slope 45.0	Slope, n 1.000
Remarks: CHOKER SIZES 1ST RATE 6/64 2ND RATE 8/64 3RD RATE 11/64 4TH RATE 17/64			

Approved by Division BENNETT-CATHEY	Conducted By JIM SMITH	Calculated By MONTY RANDOLPH
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