

clsp
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date MAY 09 1983	
Conn. = W. A. MONCRIEF, JR. ✓				Connection EPNG		
Pool Baldridge Canyon <i>Morrow</i>				Formation Morrow		
Completion Date 5-4-83 <i>4-21-83</i>		Total Depth 11,136 <i>11,120</i>		Plug Back TD 11,044		
Elevation 4639 GL		Farm or Lease Name Ridge Fed.				
Casing Size 4 1/2		Well No. 1		Well No.		
Weight 11.6		Set At 11,120		Perforations: From 10,842 To 11,018		
Thickness 2 3/8		Weight 4.7		Set At 10,770		
Perforations: From Open To		Unit C		Sec. Twp. Rge. 23 24 24		
Type of Well - Single - Drillinghead - G.C. or G.O. Multiple Single				Packer Set At 10,770		
Producing Thru Tbg.		Reservoir Temp. °F 182 @ 10842 (Est.)		Mean Annual Temp. °F 13.2		
Baro. Press. - P _a		State New Mexico				
10,770		H 10,770		G _g .588		
% CO ₂ 1.10		% N ₂ .30		% H ₂ S .03 GRS.		
Prover		Meter Run		Taps		

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							3032				
1.	4.036 X 1.250			624	4.84	93	2967				30 min.
2.	4.036 X 1.250			617	12.96	90	2889				30 min.
3.	4.036 X 1.250			631	24.01	84	2758				60 min.
4.	4.036 X 1.250			640	44.89	76	2552				60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	55.53	637.2	.9697	1.304	1.041	546
2	7.469	90.37	630.2	.9723	1.304	1.042	892
3	7.469	124.37	644.2	.9777	1.304	1.045	1238
4	7.469	171.24	653.2	.9850	1.304	1.048	1722
5							

NO.	P _r	Temp. °R	T _r	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	.94	553	1.57	.922	No		.588	X X X X X X X X	672	350
2	.93	550	1.56	.921			X X X X X			
3	.95	544	1.55	.916						
4	.97	536	1.52	.911						
5										

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1	3045.2	2981.8	9273.2	8891.3	381.9
2		2906.6		8448.4	824.8
3		2780.0		7728.5	1544.7
4		2583.4		6673.9	2600.0
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.567$

AOF = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.725$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.163$

Absolute Open Flow	3,725	Mcfd @ 15.025	Angle of Slope α	58.75	Slope, n	.607
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Remarks: Made no fluid during test.

Approved By Division	Conducted By: EL PASO EXPLORATION CO. Reston & McGowen	Calculated By: EL PASO EXPLORATION CO. Bob McMurray	Checked By:
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