

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-21-82		APR 28 1982	
Company Hondo Oil and Gas Company		Connection None		O. C. D. ARTESIA, OFFICE	
Pool Empire South Empire Pool		Formation Morrow		Unit	
Completion Date 4-19-82		Total Depth 10740		Plug Back TD 10710	
Elevation KB 3657.83		Farm or Lease Name Featherstone State			
Casing Size 5 1/2"	Perf. 17#	Set At 4.892"	10740	Perforations: From 10414 To 10424	Well No. 1
Perf. Size 2 3/8"	4.7#	1.995	10342.78	From 10342.78 To 10345.68	Unit Sec. Twp. Page I 3 18S 28E
Type Well - Single - Broadhead - G.C. or G.O. Multiple Single				Packer Set At 10339.68	
Producing Thick Tbg.				State New Mexico	
Reservoir Temp. °F 161 @ 10419		Mean Annual Temp. °F 60°		Baro. Press. - P _s 13.2	
L 10342.78	H 10342.78	G _g .644	% CO ₂ .44	% H ₂ .48	% H ₂ S .05 Gr/100
Prover		Meter Run 4"		Type 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							3070		Pkr.		41 Hr.
1.	4 x 2.500			459	6.2	77	3020	64	Pkr.		1 Hr.
2.	4 x 2.500			467	18.5	67	2950	66	Pkr.		1 Hr.
3.	4 x 2.500			485	42.0	49	2755	68	Pkr.		1 Hr.
4.	4 x 2.500			853	71.0	58	2040	64	Pkr.		1 Hr.
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mhd
1	32.64	54.11	472.2	.9840	1.246	1.040	2252
2	32.64	94.25	480.2	.9933	1.246	1.045	3979
3	32.64	144.65	498.2	1.011	1.246	1.054	5980
4	32.64	247.99	866.2	1.002	1.246	1.089	11005
5.							

NO.	P _r	Temp. °F	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.70	537	1.46	.924	28.45	
2	.71	527	1.43	.916	58.24	
3	.74	509	1.38	.900		
4	1.29	518	1.41	.844		
5						

NO.	P _r	* I _w	P _r ²	P _r ² - I _w ²	(1) $\frac{P_r^2}{P_r^2 - I_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - I_w^2} \right]^n =$
1		4214.2	17759.5	152.0	3.732	2.641
2		4186.2	17524.3	387.2		
3		4146.2	17191.0	720.5		
4		4041.2	16331.3	1580.2		
5						

Absolute Open Flow	66025	Mhd @ 15.025	Angle of Slope	53.59°	Slope, n	.7375
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Remarks: *BHP measured via bomb @ mid point perms. 10419
Produced 34 bbls. cond. and 0 bbls. water.

Approved By Division	Conducted By: James D. Cogburn	Calculated By: James D. Cogburn	Checked By: S. D. Smith
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Posted ID-2
5-14-82
Comp YBB