

MULTIPOINT, ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5/24/82		JUN 10 1982	
Company Tenneco Oil Company		Connection None		O. C. D.	
Well Catclaw		Formation Morrow		Unit ARTESIA, OFFICE	
Completion Date 5/22/82		Total Length 10483		Plug Hole TD 10418	
Elevation 3356' GL		Form. or Lease Name Catclaw Draw Unit		Well No. 17	
Cat. Size 5 1/2	Wt. 17.0	Gr. 4.892	Set At 10483	Perforations: From 10212 To 10388	Unit B
Log. Size 2 3/8	Wt. 4.6	Gr. 1.995	Set At 10160	Perforations: From Open To Ended	Sec. 14
Type Well - Single - Blindhead - G.C. or G.O. Multiple Single				Packer Set At 10,160 10,313	Twp. 21s
Producing Thru Tubing		Reservoir Temp. °F 177 @ 10300		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico		County Eddy	
L 10300'	H -	G _g 0.6101	% CO ₂ 1.782	% N ₂ 0.390	% H ₂ S -
Prover -		Meter Run 2.900x1.000		FLG	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1	2.900	6/64	1.000	500	6	82	2165	60	Packer		71.0 Hrs.
2	2.900	7/64	1.000	500	16	79	2118	60			1.0 Hr.
3	2.900	8/64	1.000	500	38	79	1978	60			1.0 Hr.
4	2.900	10/64	1.000	510	62	76	1742	60			1.0 Hr.
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 _{sp}	Rate of Flow Q, Mscf/d
1	4.801	55.49	513.2	0.9795	1.280	1.039	347.04
2	4.801	90.62	513.2	0.9822	1.280	1.039	568.30
3	4.801	139.65	513.2	0.9822	1.280	1.039	875.79
4	4.801	180.11	523.2	0.9850	1.280	1.040	1133.83
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/d
1	0.76	542	1.52	0.927	A.P.I. Gravity of Liquid Hydrocarbons	-	
2	0.76	539	1.51	0.926	Specific Gravity Separator Gas	0.6101	XXXXXX
3	0.76	539	1.51	0.926	Specific Gravity Flowing Fluid	XXXXXX	
4	0.77	536	1.51	0.925	Critical Pressure	678	
5					Critical Temperature	356	

1. 2880.2 P _r ² 8295.6				$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.808$		$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 11.814$	
NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²		
1		2786.2	7762.9	532.7			
2		2719.2	7394.0	901.6			
3		2533.2	6417.1	1878.5			
4		2311.2	5341.6	2954.0			
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Absolute Open Flow	2057	Mold & 15.025	Angle of Slope	60° 0'	Slope, n	0.577
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Remarks: *Bottom Hole Pressures @ (1-6944) 10,300' Used for Pressure Calculations

Approved By Division <i>Olson</i>	Controlled By Jarrell Well Testing, Inc.	Calculated By D. Dickerson	Checked By Joe A. Coleman PE #2208
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