

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11-25-69		DEC 4 1969	
Company PENNZOIL UNITED, INC.			Connection NONE		O. C. C. ARTESIA, OFFICE
Pool WILDCAT			Formation MORROW GAS		Unit 320
Completion Date 11-10-69		Total Depth 8857'		Plug Back TD 8766'	
Elevation 3454' GL		Farm or Lease Name VANDIVER			
Csg. Size 4 1/2"	Wt. 11.60	d 4.090	Set At 8857'	Perforations: From 8603' To 8637'	
Csg. Size 2 3/8"	Wt. 4.70	d 1.995	Set At 8531'	Perforations: From OPEN To ENDED	
Type Well - Single - Brdhead - G.C. or G.O. Multiple SINGLE				Packer Set At 8531'	
Producing Thru TUBING		Reservoir Temp. °F 154 @ 8500'		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 8620' *	H -	G _a 0.652	% CO ₂ 0.54	% N ₂ 0.40	% H ₂ S 0.00
Prover -		Meter Run X		Taps F	

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	4		1"				2440		PKR		72.0 Hrs
1.	4	12/64	1	500	23	104	1350	60	-	-	4.0
2.	4	11/64	1	500	18	100	1507	62	-	-	1.0
3.	4	10/64	1	490	13	94	1704	62	-	-	1.0
4.	4	9/64	1	480	8	86	1823	64	-	-	1.0
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 _{sp}	Rate of Flow Q, Mcfd
1	1.753	108.65 ✓	513.2	0.9602	1.238	1.036	636.0
2	1.753	96.17 ✓	513.2	0.9636	1.238	1.039	566.6
3	1.753	80.89 ✓	503.2	0.9628	1.238	1.040	479.6
4	1.753	62.80 ✓	493.2	0.9759	1.238	1.041	375.4
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS	Mcf/bbl.
1	0.78 ✓	564 ✓	1.52 ✓	0.931 ✓	-	-
2	0.76 ✓	560 ✓	1.51 ✓	0.927 ✓	-	-
3	0.75 ✓	554 ✓	1.49 ✓	0.924 ✓	-	-
4	0.73 ✓	546 ✓	1.47 ✓	0.922 ✓	-	-
5.						

NO.	P _r ²	P _w *	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	-	1808.2	3269.6	6971.7	1.469	1.437
2	-	2010.2	4040.9	8200.4		
3	-	2256.2	5085.9	9555.4		
4	-	2457.2	6037.8	11203.5		
5						

Absolute Open Flow 920		Mcf @ 15.025	Angle of Slope @ 45° 45'	Slope, n 0.942
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Remarks: * RHP @ (-5166') 8620' Used for Pressure Calculations

Approved By Commission: VRLS 12-4-69	Conducted By: COLEMAN PET. ENG. CO.	Calculated By: A. COLEMAN	Checked By: JOE A. COLEMAN
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