

MEXICO OIL CONSERVATION COMM ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 23 1968
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-6-68	
Company PENNZOIL UNITED, INC.			Connection NONE		
Pool WILDCAT			Formation ATOKA		Unit
Completion Date 11-22-68		Total Depth -		Plug Back TD 11822'	Elevation 3238' GL
Form or Lease Name MOBIL 12 FEDERAL					
Csg. Size 7"	Wt. 20	d -	Set At 11850'	Perforations: From 10842' To 10863'	
Well No. No. 1					
Tbg. Size 2 3/8"	Wt. 4.7	d -	Set At 10792'	Perforations: From OPENED To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple DUAL			Packer Set At 10792'		Unit Sec. Twp. Rge. B 12 23 S 26 E
Producing Thru TUBING			Reservoir Temp. °F 164 @ 10700'		Baro. Press. - P _a 13.2
State NEW MEXICO					
L 10855	H -	G _g .576	% CO ₂ 0.63	% N ₂ 5.60	% H ₂ S 0.00
Prover			Meter Run X		
Taps FLANGE					

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	6"		1.00				4060	55	PKR	-	87.0
1.	6"	10/64	1.00	710	98	118	2279	72	-	-	1.75
2.	6"	8/64	1.00	700	56	108	2609	70	-	-	1.25
3.	6"	6/64	1.00	600	29	110	3249	70	-	-	1.00
4.	6"	4/64	1.00	500	10	112	3533	68	-	-	1.00
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 _{pv}	Rate of Flow Q, Mcfd
1	4.725 ✓	266.20 ✓	723.2	.9485 ✓	1.318	1.035 ✓	1627.8
2	4.725	199.84 ✓	713.2	.9569	1.318	1.037 ✓	1235.0
3	4.725	133.35 ✓	613.2	.9551	1.318	1.031 ✓	817.9
4	4.725	77.66 ✓	500.2	.9535	1.318	1.030 ✓	475.0
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	1.07	578 ✓	1.69 ✓	.934	A.P.I. Gravity of Liquid Hydrocarbons <u>DRY GAS</u> _____ Deg.
2.	1.06	568 ✓	1.66 ✓	.930	Specific Gravity Separator Gas <u>575</u> _____ XXXXXXXXXX
3.	0.91	570 ✓	1.57 ✓	.911	Specific Gravity Flowing Fluid <u>XXXXXX</u> _____
4.	0.89	572 ✓	1.57 ✓	.943	Critical Pressure <u>675</u> _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature <u>342</u> _____ R _____ R

$P_r = 5071.2$ $P_w = 2511.1$ $B_o = 1.1$ $\mu = 1.0$					
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.714$
1	-	3273.2	10713.7	15003.3	$\text{AOF} = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2614$
2		3835.2	14715.2	11000.7	
3		1349.2	1891.5	6601.6	
4		4587.2	21069.8	3747.3	
5					

Absolute Open Flow <u>2625</u> ✓	Mcfd @ 15.025	Angle of Slope Θ <u>46° 40'</u>	Slope, n <u>.880</u> ✓
Remarks:			
Approved By Commission: _____ Conducted By: _____ Calculated By: <u>JOE A. COLEMAN</u> Checked By: <u>JOE A. COLEMAN</u>			