

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8- 6-79			
Company Union Oil Co. of California				Connection					
Pool Wildcat				Formation Morrow				Unit	
Completion Date 7-31-79		Total Depth 13,660'		Plug Back TD 13,571'		Elevation 3583.6' GR.		Farm or Lease Name Maduro Unit Federal	
Csg. Size 5-1/2" OD	Wt. 17#	d 4.892"	Set At 13,660'	Perforations: From 13,446' To 13,457'		Well No. 1			
Tbg. Size 2-7/8" OD	Wt. 6.5#	d 2.441"	Set At 13,320'	Perforations: From To		Unit Sec. Twp. Rge. J 29 19-S 33-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 13,320'		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 170 @ 13,450'		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2		State New Mexico	
L 13,450'	H 13,450'	G _g .666	% CO ₂ .02	% N ₂ .01	% H ₂ S 0.0	Prover 0.0	Meter Run 4.0	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							4300	80			1.2 Hrs.
1.	4.0	x	2.0	450	45.0	78	2900	78	0	0	1.0 Hr.
2.											
3.											
4.											
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	19.81	144.37	463.2	0.9831	1.2254	1.0450	3,601
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 30.0 Mcf/bbl.
1	.69	558	1.42	0.916	A.P.I. Gravity of Liquid Hydrocarbons 48.5 Deg.
2.					Specific Gravity Separator Gas 0.666 XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXXX .776
4.					Critical Pressure 669 P.S.I.A. 664 P.S.I.A.
5.					Critical Temperature 379 °R 413 °R

P _c 4283	P _c ² 18344	
NO.	P _t ²	P _w
1		2909
2		
3		
4		
5		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.8567$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6,686$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8567$$

Absolute Open Flow 6,686 Mcfd @ 15.025	Angle of Slope ϕ 45	Slope, n 1
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Remarks: **Calculations completed using Garrett Computing System's AOF program.**

Approved By Commission:	Conducted By: D. K. Spradlin	Calculated By: G. D. McKinney	Checked By: L. H. Pardue
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AUG 31 1977
O.C.D. HOBBS, OFFICE