

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

Form G-122 -
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-23-77		JUL 6 1977		
Company Morris R. Antweil					Connection Pending				
Pool Wildcat					Formation Morrow		Unit O.C.C. ARTESIA, OFFICE		
Completion Date 6-23-77		Total Depth 8830		Plug Back TD 8725		Elevation 3573 GR.		Farm or Lease Name PENASCO	
Csg. Size 5.5	Wt. 17#	d 4.892	Set At 8830	Perforations: From 8634 To 8662		Well No.			
Tub. Size 2-3/8	Wt. 4.70	d 1.995	Set At 8573	Perforations: From To		Unit Sec. Twp. Rge. 0 20- 185-25-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8573		County EDDY		
Producing Thru Tubing		Reservoir Temp. °F 160 @ 8573		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 8573	H 8573	G _g .614	% CO ₂ .547	% N ₂ .761	% H ₂ S 0.0	Prover	Meter Run 3.068	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							2703		Packer		Days
1.	3.068"x1.250"			300	36	94	2639	74			1 hr.
2.	3.068"x1.250"			382	53	71	2609	74			1 hr.
3.	3.068"x 1.250"			604	67	60	2558	74			1 hr.
4.	3.068"x 1.500"			610	52	43	2489	74			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.577	106.185	313.2	.9688	1.2762	1.054	1049
2	7.577	144.726	395.2	.9896	1.2762	1.083	1500
3	7.577	203.353	617.2	1.0000	1.2762	1.167	2295
4	11.13	180.018	623.2	1.0168	1.2762	1.209	3143
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.47	554	1.20	.091	382	52.6	.614	X X X X X X X X	672	359
2	.59	531	1.15	.852			X X X X X	.622	P.S.I.A.	R
3	.92	520	1.13	.734						
4	.93	503	1.09	.684						
5										

P _c 2716.2 P _c ² 7377.7				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 8.636$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.636$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 27,143.$		
1	7034.2	2657.5	7062.3	315.4			
2	6875.9	2633.3	6934.3	443.4			
3	6611.1	2597.8	6748.6	629.1			
4	6261.0	2554.1	6523.4	854.3			
5							

Absolute Open Flow 27,143 Mcfd @ 15.025		Angle of Slope θ 45.0		Slope, n 1.000	
Remarks:					

Approved By Commission:	Conducted By: Cone & Kerley, Inc.	Calculated By: <i>Bill Kerley</i>	Checked By:
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POSTED
ID-24000R
7-8-77