

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

Form C-122
Revised 9-1-65

Well File

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-30-70		RECEIVED JUL 6 - 1970	
Company Pennzoil United, Inc.		Connection			
Pool Wildcat		Formation Morrow		Unit U.S. 10000	
Completion Date 6-13-70		Total Depth 12,068		Plug Back TD 12,028	
Elevation 3235 Gr		Form or Lease Name Gulf-Federal		No.	
Csg. Size 5 1/2	Wt. 20	Set At 6704	Perforations: From 11,647 To 11,683		No.
Tbg. Size 2" CSHyd	Wt. 3.25	Set At 11,550	Perforations: From To		Unit Sec. Twp. Rge. K 1 23-S 26-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 11,420		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 196 @ 11,665		Mean Annual Temp. °F 13.2	
Baro. Press. - P _a 13.2		State New Mexico			
L 11,665	H 11,665	G _g .561	% CO ₂ 1.07	% N ₂ .32	% H ₂ S 0
Prover		Meter Run X		Taps	

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				*			3616.2	70	Packer		74 Hours
1.	4	2	300	53	56	3071.2	67				Hour
2.	4	2	360	62	61	2828.2	66				1 Hour
3.	4	2	450	70	58	2538.2	64				1 Hour
4.	4	2	690	70	66	2049.2	65				1 Hour
5.											

RATE OF FLOW CALCULATIONS								D. C. C.	
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	ARTESIA, OFFICE Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd		
1	19.81	126.09	300	1.004	1.335	1.023	3425		
2	19.81	149.39	360	.9990	1.335	1.027	4053		
3	19.81	177.48	450	1.002	1.335	1.034	4863		
4	19.81	219.77	690	.9943	1.335	1.051	6074		
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NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcf/bbl.
1	5.52	516	592	1.501	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2	5.26	521	591	1.521	Specific Gravity Separator Gas	.561	XXXXXXX
3	4.88	518	590	1.571	Specific Gravity Flowing Fluid	XXXXX	
4	4.27	526	591	1.531	Critical Pressure	677 (Calc)	P.S.I.A. 677 Table
5					Critical Temperature	343 (Calc)	R 339 Table R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.094$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.094$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12,721$
1		3388	11,479	1598	
2		3209	10,298	2779	
3		2987	8922	4155	
4		2614	6833	6244	
5					

Absolute Open Flow		12,721	Mcf/d @ 15.025	Angle of Slope	45°	Slope, n	1.00
Remarks: *Meter calibrated to read p s i a							
Approved By Commission:		Conducted By:		Calculated By:		Checked By:	
		W M Cates		H L Hagler		H L Hagler	