

PENNZOIL

JUN 10 1976

MIDLAND

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 6-2-76			
Company Pennzoil Company				Connection to air					
Pool Wildcat				Formation Atoka				Unit	
Completion Date 6-2-76		Total Depth 12,590'		Plug Back TD 11,978		Elevation 3328 KB		Farm or Lease Name Penn Federal	
Csq. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 12,070'	Perforations: From 11,738' to 11,746'			Well No. 1		
Tbg. Size	Wt.	d	Set At	Perforations: From To			Unit F	Sec. 31	Twp. 20S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Eddy			
Producing Thru Casing		Reservoir Temp. °F @		Mean Annual Temp. °F 60		Buro. Press. - P _g 13.2		State New Mexico	
L 11738	H 11738	Gg 0.576	% CO ₂ .63	% N ₂ 0.60	% H ₂ S -----	Prover	Meter Run	Taps Positive Chokes	

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	Positive Chokes						4357				81 Hrs.
1.	24/64						600				1 Hr
2.	20/64						750				1 Hr
3.	16/64						1000				1 Hr
4.	12/64						Froze off				
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1			613.2				2000
2			763.2				1750
3			1013.2				1250
4							Froze off
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/ubl.	
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.					Specific Gravity Separator Gas 0.576	X X X X X X X X
3.					Specific Gravity Flowing Fluid X X X X X	
4.					Critical Pressure 672 P.S.I.A.	P.S.I.A.
5.					Critical Temperature 346 R	R

P _c 4370.2		P _w 19,098.6		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.023$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.023$	
NO.	P _t ²	P _w ²	P _c ²	P _c ² - P _w ²	ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,046$		
1		654.5	428.4	18670.2			
2		777.4	604.3	18494.3			
3		1022.8	1046.2	18052.4			
4							
5							

Absolute Open Flow 2,046 Mcfd @ 15.025		Angle of Slope θ 45°		Slope, n 1.00 limited	
Remarks: Point alignment to flat, a slope of 45° was drawn through high rate of flow.					
Approved By Commission:		Conducted By:		Calculated By: R.R.	
				Checked By: J.W.	