

N MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 9-1-65

AUG 21 1970

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-10-70			
Company PENNZOIL UNITED, INC.				Connection NONE				O.C.C. ARTESIA, OFFICE	
Pool UNDESIGNATED				Formation BONE SPRINGS				Unit -	
Completion Date 8-10-70		Total Depth 12500'		Plug Back TD 5437'		Elevation 3299' GL		Farm or Lease Name O'NEILL FEDERAL	
Csg. Size 9 5/8"	Wt. 10.	d 6.835	Set At 7200'	Perforations: From 5325' To 5330'				Well No. 1	
Tbg. Size 2"	Wt. 4.7	d 1.995	Set At 5357'	Perforations: From OPEN To INDEX				Unit Sec. Twp. Rge. L 11 24s 2E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 5259'		County LODY	
Producing Thru TUBING		Reservoir Temp. °F 112 @ 5200'		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State NEW MEXICO	
L 5328'	H -	G _g 0.717	% CO ₂ 4.69	% N ₂ 1.44	% H ₂ S NIL	Prover	Meter Run 4"	Taps F	

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. @ 100' W.T.	Temp. °F	Press. p.s.i.g.	
SI										
1.	1 1/4"	1	1	510	62	64	983	90	-	-
2.	1 1/4"	1	1	510	46	62	1060	84	-	-
3.	1 1/2"	1	1	510	32	63	1113	88	-	-
4.	1 1/2"	1	1	270	14	68	1222	83	-	-
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	4.753	180.11	523.2	0.9962	1.181	1.055	1062.6
2	4.753	155.13	523.2	0.9981	1.181	1.057	918.7
3	4.753	129.40	523.2	0.9971	1.181	1.055	764.1
4	4.753	52.97	283.2	0.9924	1.181	1.028	360.6
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 32354 Mcf/bbl.
1	0.76	524	1.38	0.898	A.P.I. Gravity of Liquid Hydrocarbons 55.6 Deg.
2	0.76	522	1.37	0.895	Specific Gravity Separator Gas 0.717 XXXXXXXXXX
3	0.76	523	1.38	0.898	Specific Gravity Flowing Fluid XXXXX
4	0.11	528	1.39	0.946	Critical Pressure 686 P.S.I.A. - P.S.I.A.
5					Critical Temperature 380 R - R

NO.	P _t ²	P _w ²	P _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 2.334$	(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 2.00$
1	-	1413.2	1997.1	1496.8		
2	-	1501.2	2253.6	1240.3		
3	-	1585.2	2512.9	981.0		
4	-	1760.2	3098.3	395.6		
5						

AOFP = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 2125$

Absolute Open Flow 2120 Mcfd @ 15.025		Angle of Slope 60° 40'	Slope, n 0.820
Remarks: * BHP @ (-2029') 5328' USED FOR PRESSURE CALCULATIONS			
Approved By Commission:	Conducted By: COLEMAN PET. ENG. CO.	Calculated By: JOE A. COLEMAN	Checked By: JOE A. COLEMAN