

NEW XICO 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 2-5-71	
Company PENNZOIL UNITED, INC.		Connection NONE	
Pool UNDESIGNATED		Formation SAN ANDRES	
Completion Date 1-25-71		Total Depth 4,350'	
Perforations: From 4231 To 4261		Elevation 4252	
Farm or Lease Name SUPERIOR STATE		Well No. 1	
Casing Size 4 1/2" ID		Set At 4,350'	
Perforations: From 4231 To 4261		Unit L	
Tubing Size 2 3/8" ID		Set At 4,225'	
Perforations: From OPEN To ENDED		Sec. 8	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Twp. 7S	
Packer Set At 4,220'		Rge. 35E	
Producing Thru TUBING		County ROOSEVELT	
Reservoir Temp. °F 108 @ 4,246'		State NEW MEXICO	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 4246		H 4246	
Gg 0.7613		% CO ₂ 6.74	
% N ₂ 14.13		% H ₂ S EXCEEDS	
Prover MEASUREMENT		Meter Run 2"	
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							1117	60			94.25
1.	2.067	1.500		460	60	76	900	64	PACKER		2.75
2.	2.067	1.500		462	42	78	980	64			75
3.	2.067	1.500		464	25	78	1015	64			50
4.	2.067	1.500		462	14	78	1055	64			50
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	12.76	168.5	473.2	.9850	1.146	1.044	2,534
2	12.76	141.3	475.2	.9831	1.146	1.045	2,123
3	12.76	109.2	477.2	.9831	1.146	1.045	1,640
4	12.76	81.6	475.2	.9831	1.146	1.045	1,226
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1	.70	536	1.43	.917	A.P.I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2	.71	538	1.43	.916	Specific Gravity Separator Gas	.761	XXXXXXX
3	.71	538	1.43	.916	Specific Gravity Flowing Fluid	XXXXX	
4	.71	538	1.43	.916	Critical Pressure	672.2	P.S.I.A.
5					Critical Temperature	375.5	R

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		1074.2	1153.9	510.7
2		1154.2	1332.2	332.4
3		1189.2	1414.2	250.4
4		1229.2	1510.9	153.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.26$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5,000$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.973$

Absolute Open Flow	5,000	Mcf/d @ 15.025	Angle of Slope °	59	Slope, n	601
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Remarks: EXCESSIVE H₂S CONTENT MAY HAVE AFFECTED THE ACCURACY OF THE RATES.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
<i>[Signature]</i>	A.G.A.	A.G.A.	I.W.W.

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OIL CONSERVATION COMM.
HOUSTON, TX. 77001