

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

Form C-122
 Revised 9-1-65

Well No. <u>2117</u>				Test Date <u>June 16, 1967</u>			
☒ Initial ☐ Annual ☐ Special							
Company <u>Texas Pacific Oil Company</u>				Connection <u>None</u>			
Tool <u>Caliper</u>				Formation <u>Yates</u>			
Test Date <u>May 17, 1967</u>		Total Depth <u>3800</u>		Plug Back TD <u>3763</u>		Elevation	
Form of Lease Name <u>State "A" Acct. 1</u>				Well No. <u>41</u>			
Req. Size	Wt.	d	Set At	Perforations:	From	To	
<u>2 7/8"</u>	<u>4.7</u>	<u>1.965</u>	<u>3320</u>	From <u>3320</u>	To <u>3400</u>		
Type Well - <u>Single - Brazenhead - G.G. or G.O. Multiple</u>				Packer Set At <u>3400</u>		County <u>Lea County,</u>	
Producing Thru <u>Bottom</u>		Reservoir Temp. °F <u>a</u>		Mean Annual Temp. °F		Baro. Press. - P_a <u>13.2</u>	
State <u>New Mexico</u>							
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run
		<u>.672</u>	<u>1.80</u>	<u>1.56</u>	<u>.34</u>	<u>2"</u>	

FLOW DATA						TUBING DATA		CASING DATA		Duration or Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
51							438		431		72
1.	2 x .500			20		73	337	71	426		1
2.	2 x .500			31		77	335	71	422		1
3.	2 x .750			72		67	256	73	347		1
4.	2 x 1.000			51		66	189	71	295		1
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, Mscf
1	1.270		33.2	.9931	1.000		370
2	1.270		44.2	.9940	1.000		497
3	5.443		65.2	.9933	1.000		676
4	17.39		64.2	.9933	1.000		1,531
5							

NO.	P_r	Temp. °R	T_r	Z	Gas Liquid Hydrocarbon Ratio _____ Mscf/Lb.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

$P_c = 200.0$				(1) $\frac{P_c^2}{P_c^2 - R^2} = 1.897$		(2) $\left[\frac{P_c^2}{P_c^2 - R^2} \right]^n = 1.637$	
NO.	P_r^2	P_w^2	$P_r^2 - P_w^2$				
1	110.6	439.2	192.9	0.0			
2		439.2	183.4	12.5			
3	72.9	300.2	219.7	71.2			
4	39.2	300.2	95.0	105.9			
5							

$ACF = Q \left[\frac{P_r^2}{P_c^2 - R^2} \right]^n = 2,245$
 (1) $\frac{P_c^2}{P_c^2 - R^2} = 1.897$
 (2) $\left[\frac{P_c^2}{P_c^2 - R^2} \right]^n = 1.637$

Actual Gas Flow <u>2,245</u> Mscf @ 15.025 Angle of Slope θ <u>51</u> Slope, n <u>.817</u>
Remarks _____
P Slope = <u>.817</u>
Approved By Commission: _____ Conducted By: _____ Calculated By: _____ Checked By: _____
Don Reed & J. W. Littlefield Don Reed & Jack Littlefield

