

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-27-90	
Company TEXACO PRODUCING INC.				Connection SALES	
Pool EWMONT GATES 7 RIVERS ON (PRO GAS)				Formation QUEEN	
Completion Date 5-20-90		Total Depth 3750'		Plug Back TD 3745'	
Elevation GR-3622'		Farm or Lease Name O. L. COLEMAN			
Csq. Size 5.5	Wt. 15.5#	d 4.950	Set At 3750'	Perforations: From 3588' To 3736'	
Thq. Size 2.375	Wt. 4.7#	d 1.995	Set At 3469	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE GG				Packer Set At 3469'	
Producing Thru TUBING		Reservoir Temp. °F 108 @ 3750'		Baro. Press. - P _a 13.2	
Mean Annual Temp. °F 60		State NEW MEXICO			
L 3469	H 3469	G _g .766	% CO ₂ 9.47	% N ₂ 1.5	% H ₂ S
Prover		Meter Run 3.068		Taps FLWGE	

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							278	70	PACKER		SI 72 in.
1.	3.068	1.500	30	27	70	202	70				1.0 hr.
2.	3.068	1.500	28	31	70	167	72				1.0 hr.
3.	3.068	1.500	32	49	70	106	72				1.0 hr.
4.	3.068	1.500	33	72	70	75	65				1.0 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	11.13	34.15	43.2	.9905	1.143	1.015	438
2	11.13	35.74	41.2	.9905	1.143	1.015	457
3	11.13	47.06	45.2	.9905	1.143	1.015	603
4	11.13	57.67	46.2	.9905	1.143	1.015	738
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.2	530	1.36	.971	1500	55	.766	XXXXXX	703	389
2	.2	532	1.37	.971				XXXXXX		
3	.2	532	1.37	.971						
4	.2	525	1.35	.971						
5										

NO.	P _r ²	P _w ²	P _w ²	P _c ² - P _w ²
1	46.3	221.1	48.9	35.9
2	32.5	188.1	35.4	49.4
3	14.2	138.6	19.2	65.6
4	7.8	123.3	15.2	69.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{84800}{69600}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 848$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2101$

Absolute Open Flow	848	Mcfd @ 15.025	Angle of Slope	46°	Slope, n	.9656
Remarks:						
Approved By Division						
Conducted By:		S. E. Bryant / rmm		Calculated By:		T. M. Morgan
Checked By:						