

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-22-90	
Company TEXACO PRODUCING INC.				Connection SALES	
Pool EUMONT YATES TRIVERS ON (PRO GAS)				Formation QUEEN	
Completion Date 5-18-90		Total Depth 3700'		Plug Back TD 3690'	
Elevation GR-3595		Farm or Lease Name SKELLY "B" STATE COM.			
Csq. Size 5 1/2"	Wt. 15.5 #	d 4.950	Set At 3700'	Perforations: From 3510' To 3668'	
Thq. Size 2.375	Wt. 4.7 #	d 1.995	Set At 3400'	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. SINGLE				Packer Set At 3400'	
Producing Thru TUBING		Reservoir Temp. °F 97 @ 3700		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO			
L 3400	H 3400	G _g .707	% CO ₂ 3.89	% N ₂ 2.07	% H ₂ S
Prover		Meter Run 2.067		Taps FLANGE	

FLOW DATA							TUBING DATA		CASING DATA		Duration of 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	
SI	2.067	x	1.50				342.0	60	PKR		48 SI
1.	2.067	x	1.50	50	10	60	337.0	60			1 hr.
2.	2.067	x	1.50	94	26	60	314.0	60			1 hr.
3.	2.067	x	1.50	92	49	60	282.0	68			1 hr.
4.	2.067	x	1.50	77	47	60	200.0	70			1 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.	12.76	25.14	63.2	1.000	1.189	1.014	386.0
2.	12.76	52.79	107.2	1.000	1.189	1.014	812.0
3.	12.76	71.80	105.2	1.000	1.189	1.014	1105.0
4.	12.76	65.11	90.2	1.000	1.189	1.014	1002.0
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.	.20	520	1.37	.972	5000	55	.707	X X X X X X X X	682	379
2.	.20	520	1.37	.972				X X X X X	682	382
3.	.20	520	1.37	.972						
4.	.20	520	1.37	.972						
5.										

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1	122.6	352.7	124.4	1.8
2	107.1	339.3	115.1	11.1
3	87.1	319.5	102.1	24.1
4	45.5	240.8	58	68.2
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{126.2}{11.1}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2903$$

$$AOG = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2223 \text{ MCFD}$$

Absolute Open Flow 2223 Mcfd @ 15.025 Angle of Slope θ 67.5 Slope, n .4142

Remarks:

Approved By Division _____ Conducted By: J.W. Mc Mahan Jr. Calculated By: T.M. Morgan Checked By: _____