

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 03-13-90		MAY 21 8 33 AM '90	
Company TEXACO, INC.				Connection NONE		CART AREA	
Pool Wildcat Atoka				Formation ATOKA		Unit	
Completion Date 03-06-90		Total Depth 15,060		Plug Back TD 14,410		Elevation	
Farm or Lease Name COTTON DRAW UNIT				Well No. 67			
Csq. Size 5 1/2	Wt. 26	d	Set At 15,060	Perforations: From 14,060 To 14,071		Unit Sec. Twp. Rge. K 35 24S 31E	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 13,913	Perforations: From OPEN To END		County LEA Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 13,913		State N.M.	
Producing Thru TBG		Reservoir Temp. °F 213 @ 13,913		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 13,913	H 13,913	G _g .568	% CO ₂ .51	% N ₂ .94	% H ₂ S -----	Prover	Meter Run 2.892
						Taps FLG/	

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							8100		PKR		48 hrs.
1.	3	X	1.250	496	18.00	80	7700		PKR		60 min.
2.	3	X	1.250	540	63.00	77	7025		PKR		60 min.
3.	3	X	1.750	577	27.00	75	6600		PKR		90 min.
4.	3	X	1.750	630	58.00	72	6025		PKR		75 min.
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.	7.615	95.74	509.2	.9813	1.327	1.040	987
2.	7.615	186.69	553.2	.9850	1.327	1.044	1,940
3.	15.87	126.24	590.2	.9859	1.327	1.046	2,742
4.	15.87	193.15	643.2	.9896	1.327	1.051	4,231
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.75	540	1.58	.925	A.P.I. Gravity of Liquid Hydrocarbons	DRY	Eq.
2.	.82	537	1.57	.918	Specific Gravity Separator Gas	.568	X X X X X X X X
3.	.87	535	1.56	.914	Specific Gravity Flowing Fluid	X X X X X	
4.	.95	532	1.56	.906	Critical Pressure	673	P.S.I.A.
5.					Critical Temperature	341	R

P _c 8113.2 P _c ² 65824.0						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2,320$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,320$
1		7717.3	59556.2	6267.8		
2		7054.4	49764.4	16059.6		
3		6646.3	44172.7	21651.3		
4		6119.5	37448.5	28375.5		
5						

Absolute Open Flow 9,816 Mcfd @ 15.025				Angle of Slope 45	Slope, n 1,000
Remarks: Well made 1.00 BBL W20 during test					
Approved By Division		Conducted By:		Calculated By:	
				Checked By:	