

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/23/85		AUG 23 '88	
Company EXXON CO. U.S.A.				Correction NONE		O. C. D.	
Pool RED TANK DRAW PERMO-PENN				Formation CISCO		Unit ARTESIA, OFFICE	
Completion Date 10/1/85		Total Depth 8555		Plug Back TD 7581		Elevation 3818	
Casing Size 5 1/2		Wt. 15.5		Set At 4.950		8552	
Thg. Size 2 7/8		Wt. 6.5		Set At 2.441		6008	
Perforations: From 6144 To 6390				Well No. 1			
Perforations: From Open To End				Unit Sec. Twp. Rye. 0 7 19S 24E			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 6008		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 134 @ 6008		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 6008		H 6008		C _g .631		% CO ₂ .394	
				% N ₂ .904		% H ₂ S	
				Prover		Meter Run 3.826	
						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.	
SI							1270			
1.	3.826 X 750			300	12	77	1225	74		
2.	3.826 X 750			310	35	80	1175	74		
3.	3.826 X 750			310	69	82	1107	74		
4.	3.826 X 1.00			320	38	82	1005	74		
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, Mcfd
1	2.662	61.31	313.2	.9840	1.259	1.028	208
2	2.662	106.36	323.2	.9813	1.259	1.028	360
3	2.662	149.33	323.2	.9795	1.259	1.028	504
4	4.758	112.52	333.2	.9795	1.259	1.029	679
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcl/bbl.
1.	.47	537	1.46	.947	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.48	540	1.47	.947	Specific Gravity Separator Gas .631 XXXXXXXXXX
3.	.48	542	1.47	.947	Specific Gravity Flowing Fluid XXXXX
4.	.50	542	1.47	.945	Critical Pressure 670 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 368 R _____ R

P _c 1283.2	P _c ² 1646.7	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.714$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9994$
NO.	P _i ²	P _w ²	P _c ² - P _w ²
1		1238.3	1533.4
2		1188.6	1412.7
3		1121.0	1256.6
4		1019.8	1039.9
5			

Absolute Open Flow 1,358 Mcfd @ 15.025		Angle of Slope 55.25	Slope, n .694
Remarks: Well made no fluid during test.			
Approved By Division	Conducted By: Duke Services, Inc.	Calculated By: R. Reston	Checked By: