

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12/27/90	
Company RAY WESTALL				Connection FLARE (AIR)			
Pool E. BURTON FLAT				Formation STRAWN		Unit	
Completion Date 10/28/90		Total Depth 11645		Plug Back TD 10629		Elevation	
Farm or Lease Name CANTER FED							
Coq. Size 5.500	Wt. 15.5	d 4.950	Set At 11645	Perforations: From 10462 To 10629		Well No. 1	
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 10400	Perforations: From To		Unit 10-28-29	
Type Well - Single - Blindhead - G.G. or G.O. Multiple SINGLE (GAS)				Packer Set At 10400		County EDDY	
Producing Thru TBG GAS		Reservoir Temp. °F 165 @ 10545		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 10545	H 10545	G _g	% CO ₂ .721	% N ₂ .29	% H ₂ S 1.33	Prover O.C.E.D.	Meter Run 4.0
						Taps FLANGE	

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							2500	60			72.0
1.	4.00 X .750			50	5.0	63	2390	60			1.0
2.	4.00 X .750			50	13.0	63	2205	60			1.0
3.	4.00 X .750			50	24.0	63	2085	60			1.0
4.	4.00 X .750			50	51.0	63	1885	60			1.0
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. Comp. Factor, F _{spv}	Rate of Flow Q, Mcfd
1	2.66	17.78	63.2	.9971	1.1777	1.0076	56
2	2.66	28.66	63.2	.9971	1.1777	1.0076	90
3	2.66	38.95	63.2	.9971	1.1777	1.0076	123
4	2.66	56.77	63.2	.9971	1.1777	1.0076	179
5.							

NO.	P _t	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	0	Mcft/bbl.
1	.09	523	1.33	.985	A.P.I. Gravity of Liquid Hydrocarbons	0	Deg.
2.	.09	523	1.33	.985	Specific Gravity Separator Gas	.721	XXXXXX
3.	.09	523	1.33	.985	Specific Gravity Flowing Fluid	XXXXX	.721
4.	.09	523	1.33	.985	Critical Pressure	665.	P.S.I.A.
5.					Critical Temperature	392.	R

P _c 2513.2 P _c ² 6316					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.3361$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8332$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	$AOI = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 328.$			
1	5775	2406	5787	530				
2	4920	2221	4934	1383				
3	4402	2101	4413	1903				
4	3603	1901	3612	2704				
5								

Absolute Open Flow 328		Mcfd @ 15.025		Angle of Slope @ 54.5		Slope, n 714	
Remarks: CHOKE SIZES 1ST RATE 5/64 2ND RATE 7/64 3RD RATE 9/64 4TH RATE 10 1/2/64							

Approved By Division	Conducted By: BENNETT-CATHEY	Calculated By: JIM SMITH P.E.	Checked By: MONTY RANDOLPH
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