

clsf
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-23-88		REC ID	
Company PLAINS RADIO				Connection AIR		MAR 31 '88	
Pool N. FOUR RANCH PENN				Formation PENN		Unit O. C.	
Completion Date 3-28-88		Total Depth 6520		Perf. Back TD 6478		Elevation 3921' GR	
Casing Size 5 1/2		WT. 17		Set At 6520 D		Perforations: From 6214 To 6281	
Tub. Size 2-3/8		WT. d		Set At 6110		Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 6110		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F P		Mean Annual Temp. °F 60		Buro. Press. - P _a 13.2	
L		H		Gg .71		% CO ₂	
				% N ₂		% H ₂ S	
				Prover 2"		Meter Run	
						Taps	

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							1360		PACKER	
1.	2		1/8		1320	61	1320		"	
2.	2		7/32		598	61	1187		"	
3.	2		3/8		410	63	1027		"	
4.	2		3/8		680	63	680		"	
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor Fg	Super. Comp. Factor, F _{sp}	Rate of Flow Q, Mhd
1	.2648		1333.2	.9981	1.1868	1.1853	495
2	.8393		611.2	.9981	1.1868	1.1678	710
3	2.3780		423.2	.9971	1.1868	1.0503	1251
4	2.3780		693.2	.9971	1.1868	1.0876	2122
5							

NO.	P _g	Temp. °R	T _g	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										
3										
4										
5										

NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²
1		1536.2	2360	118
2		1394.2	1944	534
3		1280.2	1639	839
4		1033.2	1068	1411
5				

(1) $\frac{P_i^2}{P_i^2 - P_w^2} = 1.7562$

AOF = Q $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 3691$

(2) $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 1.7392$

Post ID-2
4-13-88
comp & BK

Absolute Open Flow	3691	Mhd @ 15.025	Angle of Slope	45.5	Slope, n	9827
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Remarks: ALL BOTTOM HOLE PRESSURES DONE WITH AMERADA TYPE GAUGE

Approved By Division	Conducted By:	Calculated By:	Checked By:
	KELTIC SERVICES	MIKE KELLY	