

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form 0-1-63
Revised 9-1-63

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qsf
File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-12-82		NOV 16 1982	
Company STEVEN'S OPERATING ✓				Connection AIR NEW WELL		O.C.D.	
Pool PECOS SLOPE U.D. <i>ABO</i>				Formation ABO		ARTESIA, OFFICE <i>BE</i>	
Completion Date 11-8-82		Total Depth 4620 4627		Plug Hole 4600 4620		Elevation 3699	
Well Size 4.500		Wt. 11.6		Set At 4627 4600		Perforations: From 3929 To 4197	
Tub. Size 2.375		Wt. 4.7		Set At 4050		Perforations: From OPEN To ENDED	
Type Well - Single - (Freedom - O.O. or G.O. Multiple) SINGLE				Packer Set At NONE		County CHAVES	
Producing thru TUBING		Reservoir Temp. °F 110 @ 4063		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
L 4063		H 4063		G _g 0.651		Prover 2.0	
				% CO ₂ 0.20		% H ₂ 5.95	
				% H ₂ S 0		Meter Run 0	
						Tape	

FLOW DATA							TUBING DATA		B.H.P. 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.	CHOKE	
SI							909	68	0		144.0
1.	2.00	X	0.375	140	0	38	874	61	0	11.5/64	1 HR
2	2.00	X	0.375	270	0	44	825	65	0	13/64	1 HR
3	2.00	X	0.375	405	0	56	675	69	0	15/64	1 HR
4	2.00	X	0.375	420	0	62	627	73	0	18/64	1 HR
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 _{sp}	Rate of Flow Q, Mcfd
1	2.37	0	153.2	1.0218	1.2390	1.0156	467
2	2.37	0	283.2	1.0157	1.2390	1.0283	870
3	2.37	0	418.2	1.0039	1.2390	1.0393	1283
4	2.37	0	433.2	0.9981	1.2390	1.0390	1321
5							

NO.	P ₁	Temp. °R	Q	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	0.23	498	1.39	0.969	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.43	504	1.41	0.946	Specific Gravity Separator Gas 0.651
3	0.63	516	1.44	0.926	Specific Gravity Flowing Fluid XXXXXX
4	0.66	522	1.46	0.926	Critical Pressure 661 P.S.I.A.
5					Critical Temperature 358 °R

NO.	P ₁ ²	P _w ²	R ₁ ²	P ₁ ² - R ₁ ²
1	787	889	790	58
2	703	844	712	137
3	474	704	495	353
4	410	658	433	416
5				

(1) $\frac{P_0^2}{R_0^2 - R_w^2} = 2.0413$

AOF = Q $\left[\frac{R_0^2}{R_0^2 - R_w^2} \right]^n = 1923.$

(2) $\left[\frac{R_0^2}{R_0^2 - R_w^2} \right]^n = 1.4558$

Post ID-2
11-26-82
Comp & BK

Absolute Open Flow	1923.	Mcfd @ 15.025	Angle of Slope	62.2	Slope, n	0.526
Remarks:						
Approved By Commission:						
Conducted By:		Calculated By:		Checked By:		
DON BENNETT		BENNETT-CATHEY				