

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-4-80			
Company ARCO Oil & Gas Company				Connection El Paso Natural Gas Company					
Pool Jalmat				Formation Yates 7 Rivers				Unit	
Completion Date 5-6-80		Total Depth 3704		Plug Back TD 3648		Elevation 3513.6 GL		Farm or Lease Name Rodman Jones	
Crq. Size 5 1/2	Wt. 15.5	d 4.950	Set At 3700	Perforations: From 3172 To 3596		Well No. 6			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 3590	Perforations: From Open To Ended		Unit E		Sec. 35	Twp. 22S
Type Well - Single - Bradenhead - G.C. or C.O. Multiple Single				Packer Set At None		County Lea		State New Mexico	
Producing Thru Tbg.		Reservoir Temp. °F 87.5° 3384'		Mean Annual Temp. °F 60°		Baro. Press. - P ₀ 13.2			
L 3590	H 3590	G ₀ .730	% CO ₂ .55	% N ₂ 1.69	% H ₂ S .91	Prover 4 x 1.5	Meter Run 4"	Temp. 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							108	48	108		46 Hrs.
1.	4 x 1.5			44	1	52	105	62	105		1 Hr.
2.	4 x 1.5			45	4	55	101	65	101		1 Hr.
3.	4 x 1.5			46	9	58	92	66	98		1 Hr.
4.	4 x 1.5			48	22.09	62	67	68	92		1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mscfd
1	10.84	7.56	57.2	1.008	1.170	Nil	97
2	10.84	15.26	58.2	1.005	1.170	Nil	194
3	10.84	23.08	59.2	1.002	1.170	Nil	293
4	10.84	36.77	61.2	.9981	1.170	Nil	465
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Rel./bbl.
1	.09	512	1.30	Nil	Dry	
2	.09	515	1.30	Nil		
3	.09	518	1.31	Nil		
4	.09	522	1.32	Nil		
5						

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	121.2	118.2	14.7	14.0	.7
2		114.2		13.0	1.7
3		111.2		12.3	2.4
4		105.2		11.0	3.7
5					

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.97$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1745$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.75$

Absolute Open Flow	1745	Mscfd @ 15.025	Angle of Slope @ 46° 13'	Slope, n 95860
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Remarks:

Orig. Signed By	Conducted By:	Calculated By:	Checked By:
Approved: <i>Jerry S. ...</i>	Don Cellars	Don Cellars	James Cogburn
Dist 1, Supp.			