

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-23-91	
Company ANADARKO.		Connection FLARE	
Pool CHAVES QUEEN GAS AREA		Formation QUEEN (GAS)	
Completion Date 1-18-91		Total Depth 2700	Plug Back TD 2677
Elevation 4068GL		Form or Lease Name OXY FED COM	
Coq. Size 4.500	Wt. 11.6	Set At 4.000	Set At 2700
Perforations: From 2604 To 2616		Well No. 1	
Thp. Size 2.375	Wt. 4.7	Set At 1.995	Set At 2557
Perforations: From 0 To 0		Unit Sec. Twp. Rge. 29 13s 31e	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple SINGLE (GAS)		Packer Set At 2557	County CHAVES
Producing Thru TBG. (GAS)	Reservoir Temp. °F 85 @ 2610	Mean Annual Temp. °F 60.0	Baro. Press. - P _a 13.2
State N.M.			
L 2610	H 2610	Q _g 0.936	% CO ₂ 0.00
% N ₂ 69.62	% H ₂ S 0.00	Prover 0	Meter Run 3.0
Taps FLG.			

FLOW DATA						TUBING DATA		BHP 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								450	85	72.0
1.	3.00 x 1.000		80	15.0	38	0	0	427	85	1.0
2.	3.00 x 1.000		75	42.0	44	0	0	408	85	1.0
3.	3.00 x 1.000		80	81.0	48	0	0	388	85	1.0
4.	3.00 x 1.000		82	44.0	52	0	0	366	85	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 Compress. Factor, F _{sp}	Rate of Flow Q, Mscf
1	4.79	37.39	93.2	1.0218	1.0336	1.0044	190
2.	4.79	60.86	88.2	1.0157	1.0336	1.0040	308
3.	4.79	86.89	93.2	1.0117	1.0336	1.0041	437
4.	7.59	64.72	95.2	1.0078	1.0336	1.0040	514
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	0.17	498	1.82	0.991	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.16	504	1.84	0.992	Specific Gravity Separator Gas _____
3.	0.17	508	1.85	0.992	Specific Gravity Flowing Fluid _____
4.	0.18	512	1.87	0.992	Critical Pressure _____ P.S.I.A.
5.					Critical Temperature _____ °R

P _c 423.6 P _c ² 179					(1) $\frac{r_c^2}{r_s^2 - r_w^2} = 3.0423$		(2) $\left[\frac{r_c^2}{r_s^2 - r_w^2} \right]^n = 2.4182$	
NO.	P _i ²	r _w	r _s ²	r _s ² - r _w ²				
1	194	403	162	17				
2	178	386	149	31				
3	161	367	135	45				
4	144	347	120	59				
5								

Absolute Open Flow _____ 1243			Mscf @ 13.025		Angle of Slope @ _____ 51.6		Slope, n _____ 0.794		
Remarks: _____									
CHOKE SIZES 7/64 11/64 13/64 16/64									
Approved By Division			Conducted By: BENNETT-CATHEY			Calculated By: JIM SMITH		Checked By:	

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