

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-16-81		SEP 25 1981	
Company W.A. Moncrief, Jr./		Connection EL PASO NATURAL GAS COMPANY		O. C. D. ARTESIA, OFFICE	
Pool Baldridge Canyon		Formation Morrow			
Completion Date 9-1-81		Total Depth 10,810		Plug Back TD 10,762	
Elevation 1542		Form or Lease Name Baldridge Fed. Comm.		Well No. 2	
Coq. Size 4 1/2	Wt. d	Set At 10,810	Perforations: From 10,403 To 10,742		Unit B
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,364	Perforations: From To	Unit Soc. Twp. Hgt. B 14 24 24
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,364	
County Eddy		State New Mexico			
Producer Thru Tbg.		Reservoir Temp. *F 178 @ 10364 (est.)		Mean Annual Temp. *F 60°	
Baro. Press. - P _a 13.2		L 10,364		H 10,364	G _g .577
% CO ₂ .91	% N ₂ .19	% H ₂ S .03 Grs.	Prover	Meter Run 4	Taps Flg.

FLOW DATA						TUBING DATA		CASING DATA		Duration	
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	of Flow
SI							2690		PKR		24 hrs.
1.	4 X 1.750			619	2.4	91	2587		"		1 hr.
2.	4 X 1.750			630	5.3	71	2540		"		1 hr.
3.	4 X 1.750			655	15.2	69	2359		"		45 min.
4.	4 X 1.750			655	23.04	70	2262		"		45 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow O. Mcd
1	14.93	38.95	632.2	.9715	1.316	1.038	772
2	14.93	58.39	643.2	.9896	1.316	1.051	1,193
3	14.93	100.78	668.2	.9915	1.316	1.053	2,067
4	14.93	124.08	668.2	.9905	1.316	1.053	2,543
5							

NO.	P _r	Temp. *F	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ lbf/bbl.	
1	.94	551	1.59	.928	A.P.I. Gravity of Liquid Hydrocarbons _____ Dry Gas _____ Deg.	
2	.96	531	1.53	.905	Specific Gravity Separator Gas _____ .577 _____ X X X X X X X X	
3	.99	529	1.53	.902	Specific Gravity Flowing Fluid _____ X X X X X	
4	.99	530	1.53	.902	Critical Pressure _____ 672 _____ P.S.I.A. _____ P.S.I.A.	
5					Critical Temperature _____ 346 _____ R _____ R	

P _c 2703.2 P _w 7307.3			
NO.	P _w	P _w ²	P _c ² - P _w ²
1	2604.3	6782.4	524.9
2	2562.1	6564.4	742.9
3	2399.3	5756.6	1550.7
4	2316.9	5368.0	1939.3
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.768$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.527$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.353$

Absolute Open Flow 8,527	Mcd @ 15.025	Angle of Slope 47.5	Slope, n .912
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Remarks: No fluid made during test.

Approved By Division	Conducted By: EL PASO EXPLORATION CO. Reggie Reston	Calculated By: Joe B. Murray	Checked By:
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