

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5/16/81		JUN 09 1981	
Company Exxon Company-USA		Correlation El Paso Natural Gas		Unit O. C. D.	
Pool Undesignated		Formation Atoka		ARTESIAN CHARGE	
Completion Date 8/26/81		Total Depth 11000'		Plug Back TD 10225'	
Elevation 3709RKB-19		Farm or Lease Name New Mexico CY State		Well No. 1	
Casing Size 5 1/2"		WT. 17.0		d 4.778	
Set At 10970'		Perforations: From 9956 To 10132		Well No. 1	
Thg. Size 2 7/8"		WT. 6.5		d 2.441	
Set At 9910		Perforations: Open Ended		Unit Sec. Twp. Rge. J 23 17s 28e	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 9897		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 168		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico		Meter Run 4.026	
L 10044		H -		G _g 0.7052	
% CO ₂ 0.225		% N ₂ 1.467		% H ₂ S -	
Prover -		Taps F			

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							1789		PACKER		67.5 hrs.
1.	4.0	7/64	1.00	608	4	81	1525	60			1.0 hr
2.	4.0	8/64	1.00	608	7	82	1310	60			1.0 hr
3.	4.0	10.5/64	1.00	608	14	80	1330	60			1.0 hr
4.	4.0	12.5/64	1.00	615	29	78	1100	60			1.0 hr
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 _{pv}	Rate of Flow Q, Mcfd
1	4.753	49.85	621.2	0.9804	1.191	1.066	294.92
2	4.753	65.94	621.2	0.9795	1.191	1.064	389.02
3	4.753	93.26	621.2	0.9813	1.191	1.066	552.25
4	4.753	134.97	628.2	0.9831	1.191	1.067	801.45
5							

NO.	R _g	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.93	541	1.39	0.880	6.531	
2	0.93	542	1.40	0.883		
3	0.93	540	1.39	0.880		
4	0.94	538	1.39	0.878		
5						

NO.	P _c	P _w *	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	3009.2	2673.2	7146.0	1909.3	4.743	3.720
2		2518.2	6341.3	2714.0		
3		2345.2	5500.0	3555.3		
4		2039.2	4158.3	4897.0		
5						

Absolute Open Flow 1097		Mcf @ 15.025		Angle of Slope @ 49° 51'		Slope, n 0.844	
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Remarks: * BOTTOM HOLE PRESSURE @ (-6335) 10044' USED FOR PRESSURE CALCULATIONS
78.0 BD/Day from 6.5 BD in 2.0 hours

Approved By Division	Conducted By: JARREL SERVICES, INC.	Calculated By: Joe A. Coleman	Checked By: PE #2208 Joe A. Coleman
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