

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

5F
File
122 file

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-13-77		RECEIVED DEC 15 1977	
Company Atlantic Richfield Company				Connection None				
Pool Undesignated <i>Wildcat Atoka</i>				Formation Atoka		Unit O. C. C. ARTESIA, OFFICE		
Completion Date 12-7-77		Total Depth 11,315'		Plug Back TD 11,225' 11/15		Elevation 3382 SGL		Farm or Lease Name Hondo 22 State
Case Size 5.5	Wt. 15.5	d 4.950	Set At 11,312	Perforations: From 10,477 To 10,483			Well No. 1	
Tbg. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 10,374	Perforations: From OPEN To ENDED			Unit Sec. Twp. Rge. H 22 19S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 10,357		County Eddy	
Producing Thru Tbg		Reservoir Temp. °F 170 @ 10,480		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2		State NM
L 10,374	H 10,374	G _g 0.633	% CO ₂ 0.45	% N ₂ 1.82	% H ₂ S None	Prover	Meter Run 4"	Taps 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							2924		Pkr		136 hr
1.	4 x	0.875		220	7	77	2684	65			1 hr
2.	4 x	0.875		225	20	90	2529	67			1 hr
3.	4 x	0.875		225	48	92	2351	69			1 hr
4.	4 x	0.875		230	84	84	2005	69			1 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	3.630	40.32	232.2	0.9840	1.257	1.022	185
2	3.630	69.02	238.2	0.9723	1.257	1.021	313
3	3.630	106.92	238.2	0.9706	1.257	1.020	483
4	3.630	142.93	243.2	0.9777	1.257	1.021	651
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NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.35	537	1.44	0.958	67	57.1	0.633	XXXXXX	670	373
2	0.36	550	1.47	0.960				XXXXXX		
3	0.36	552	1.48	0.961						
4	0.36	544	1.46	0.959						
5										

P _t 4544.2 P _c 20649.8				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.8239$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7913$	
NO.	P _t ²	P _w *	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1166$		
1	4122.2	16992.5	3657.3				
2	3908.2	15274.0	5375.8				
3	3515.2	12356.6	8293.2				
4	3054.2	9328.1	11321.7				
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Absolute Open Flow		1166	Mcf/d @ 15.025	Angle of Slope @	45.87°	Slope, n	0.970
Remarks: * BHP @ 10,480 used for pressure calculations							
Approved by Commission:		Conducted By: C. Johnson		Calculated By: J. Cogburn		Checked By: L. C. Hudry	