

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

3F
122 file

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/18/77		RECEIVED OCT 21 1977	
Company Atlantic Richfield Company				Connection Transwestern Pipe Line			
Pool Undesignated				Formation Morrow		Unit O.C.C. ARTERIA, OFFICE	
Completion Date 05/13/77		Total Depth 11063		Plug Back TD 10,999		Elevation 3544 GL	
Casing Size 5 1/2"		Wt. 17.0		d 4.892		Set At 11,062	
Perforations: From 10,911 To 10,929		Perforations: From Open Ended To		Well No. 1		Unit Sec. Twp. Rge. E 27 17S 29E	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 10,775		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 160 @ 10,920		Mean Annual Temp. °F 60°F		Baro. Press. - P _g 13.2	
L 10,920		H 10,920		Cg .672		% CO ₂ .27	
				% N ₂ .70		% H ₂ S 0.00	
				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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							1388		Packer		96 hrs.
1.	4 x 1.750			622	25	78	669	73			4 hrs.
2.	4 x 1.750			637	18	77	892	77			2-3/4 hrs.
3.	4 x 1.750			622	13	78	1040	77			1 1/2 hrs.
4.	4 x 1.750			617	4	78	1228	75			1 1/2 hrs.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	14.93	126.02	635.2	.9831	1.220	1.064	2401
2	14.93	108.18	650.2	.9840	1.220	1.065	2065
3	14.93	90.87	635.2	.9831	1.220	1.064	1731
4	14.93	50.21	630.2	.9831	1.220	1.064	957
5							

NO.	P _r	Temp. °R	T _r	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	.95	538	1.41	.884	76	60.3	.672	XXXXXXX	669	382
2	.97	537	1.41	.882						
3	.95	538	1.41	.884						
4	.94	538	1.41	.884						
5										

P _r 1983.2 P _c ² 3933.1				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.516$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.292$	
NO	P ₁ ²	P _w ²	P _c ²	P _c ² - P _w ²			
1	1157.2	1339.1	2594.0				
2	1382.2	1910.5	2022.6				
3	1557.2	2424.9	1508.2				
4	1807.2	3266.0	667.1				
5							

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3101$				Absolute Open Flow <u>3101</u> Mcfd @ 15.025 Angle of Slope θ <u>58.4°</u> Slope, n <u>.615</u>	
Remarks: * BHP @ (-7376) 10920 used for pressure calculations					

Approved By Commission:	Conducted By: R. Dailey	Calculated By: J. Cogburn	Checked By: L. C. Hudry
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