

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-6-74			
Company Atlantic Richfield Company				Connection None					
Pool Jalmat				Formation Yates				Unit 660 - N & W	
Completion Date 10-21-74		Total Depth 3610		Plug Back TD 3586		Elevation 3466 KB		Farm or Lease Name McDonald State	
Csq. Size 4 1/2	Wt. 9.5	d 4.090	Set At 3609	Perforations: From 3029 To 3461		Well No. 26			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 3503	Perforations: From Open end To		Unit D	Sec. 24	Twp. 22	Rge. 36
Type Well - Single - Braddenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Lea			
Producing Thru Tbg.		Reservoir Temp. °F 86 @ 3400		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 3503	H 3503	G _g .657 (Assumed)	% CO ₂	% N ₂	% H ₂ S	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							429		520		24 hr.
1.	4	x	1.500	109	19.4	60	160		247		1 hr.
2.	4	x	1.500	104	12.5	58	240		265		1 hr.
3.	4	x	1.500	101	9.0	55	290		328		1 hr.
4.	4	x	1.500	97	3.2	52	382		410		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	10.84	48.69	122.2	1.000	1.234	Nil	651
2.	10.84	38.28	117.2	1.002	1.234	Nil	513
3.	10.84	32.06	114.2	1.005	1.234	Nil	431
4.	10.84	18.78	110.2	1.008	1.234	Nil	253
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.	.18	520	1.39	Nil	9.167	37.3 @ 60	.657 (Assumed)	X X X X X X X X	670	375
2.	.17	518	1.38	Nil				X X X X X		
3.	.17	515	1.37	Nil						
4.	.16	512	1.36	Nil						
5.										

NO.	P _i ²	P _w	P _w ²	P _e ² - P _w ²
1		260.2	67.7	284.2
2		278.2	77.4	274.5
3		341.2	116.4	235.5
4		423.2	179.1	172.8
5				

$$(1) \frac{P_e^2}{P_e^2 - P_w^2} = 1.238$$

$$ACF = Q \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 806$$

$$(2) \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.238$$

Absolute Open Flow	806	Mcfd @ 15.025	Angle of Slope @	45	Slope, n	1.000
--------------------	-----	---------------	------------------	----	----------	-------

Remarks: Point alignment too flat - a 45° slope was drawn through highest rate. Well made 8.4 bbl. of oil. Test was conducted in a decreasing dequence due to well making large amounts of oil.

Approved By Commission: <i>John W. Runyan</i>	Conducted By: Reggie Reston	Calculated By: Reggie Reston	Checked By: L.C. HUDRY
--	--------------------------------	---------------------------------	---------------------------