

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12/15/76			
Company Atlantic Richfield Company				Connection Northern Natural Gas Company					
Pool Eumont				Formation Yates - 7 Rivers				Unit	
Completion Date 10/19/76		Total Depth 3918		Plug Back TD 3625		Elevation 3635 DF		Farm or Lease Name State F DE	
Csq. Size 5.5	Wt. 17	d 4.892	Set At 3761	Perforations: From 3380 To 3544			Well No. 1		
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 3504	Perforations: From Open To Ended			Unit E	Sec. 19	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None			County Lea		
Producing Thru Tbg		Reservoir Temp. °F 84 @		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 3504	H 3504	G _g 0.680	% CO ₂ 2.10	% N ₂ 1.67	% H ₂ S 0.06	Prover	Meter Run 4"	Taps Pipe	

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							374		365		24 hr.
1.	4 x 1.000			137	1.0	51	307	58	357		1 hr.
2.	4 x 1.000			135	2.2	54	296	60	345		0.75hr
3.	4 x 1.000			137	3.9	57	279	61	333		0.75hr
4.	4 x 1.000			137	7.1	58	254	63	315		0.75hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	4.939	12.26	150.2	1.002	1.213	1.016	75
2	4.939	18.06	148.2	1.000	1.213	1.016	110
3	4.939	24.20	150.2	0.9990	1.213	1.015	147
4	4.939	32.66	150.2	0.9971	1.213	1.015	198
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio ----- Mcf/bbl.
1.	0.22	511	1.36	0.969	A.P.I. Gravity of Liquid Hydrocarbons ----- Deg.
2.	0.22	514	1.37	0.969	Specific Gravity Separator Gas 0.680 XXXXXXXXXX
3.	0.22	517	1.38	0.970	Specific Gravity Flowing Fluid XXXXXX 0.680
4.	0.22	518	1.38	0.970	Critical Pressure 674 P.S.I.A. 674 P.S.I.A.
5.					Critical Temperature 376 °R 376 °R

P _c 378.2	P _c ² 143.0	
NO.	P _t ²	P _w
1	370.2	137.0
2	358.2	128.3
3	346.2	119.9
4	328.2	107.7
5		

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{4.051}$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{513}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{2.5891}$

Absolute Open Flow 513 Mcfd @ 15.025	Angle of Slope @ 55° 47'	Slope, n 0.680
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Remarks: _____

Approved By Commission: 	Conducted By: M. Hanson-NNGCO	Calculated By: J. Cogburn	Checked By: L. C. Hudry
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DEC 17 1976
OIL CONSERVATION COMM.
HOBBS, N. M.