

NEW 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 3/29/77	
Company Atlantic Richfield Company				Connection El Paso Natural Gas Company			
Pool Jalmat				Formation Yates			
Completion Date 12-12-76		Total Depth 3571		Plug Back TD 3548		Elevation 3334 GL	
Form or Lease Name J. P. Combest, WN							
Csg. Size 5 1/2		Wt. 15.5		Set At 4,892		Perforations: From 2950 To 3418	
Tbg. Size 2 3/8		Wt. 4.7		Set At 1,995		Perforations: From open To end	
Type Well - Single - Production - G.G. or G.O. Multiple Single				Packoff Set At None		Well No. 3	
Producing Thru Tbg.		Reservoir Temp. °F 107 @ 3368		Mean Annual Temp. °F		Baro. Press. - P _g 13.2	
L 3368		H 3368		G _g .682		County Lea	
				% CO ₂		State New Mexico	
				% N ₂		Prover	
				% H ₂ S		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 _v	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							190		190	24 hr.	shut-in
1.	4	x	1.500	16	9.6	52	174		175		30 Min.
2.	4	x	1.500	17	16	52	165		169		30 Min.
3.	4	x	1.500	18	27	55	154		162		30 Min.
4.	4	x	1.500	19	41	56	142		152		30 Min.
5.	4	x	1.500	20	73.6	58	107		135		30 Min.

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, Mscf/d
1	10.84	16.74	29.2	1.008	1.211	Nil	222
2	10.84	21.98	30.2	1.008	1.211	Nil	291
3	10.84	29.02	31.2	1.005	1.211	Nil	383
4	10.84	36.33	32.2	1.004	1.211	Nil	479
5	10.84	49.43	33.2	1.002	1.211	Nil	650

NO.	P _t	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.							.682		669	385
2.										
3.										
4.										
5.										

NO.	P _t	P _w	F _w	P _c ² - P _w ²
1		188.2	35.4	5.9
2		182.2	33.2	8.1
3		175.2	30.7	10.6
4		165.2	27.3	14.0
5		148.2	22.0	19.3

P_c 203.2 P_c² 41.3

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.140$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.336$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.055$

Absolute Open Flow	1.338	Mscf @ 15.0 psia	Angle of Slope	46.5	Slope, n	.947
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Remarks: No fluid made during test, all of the above rates stabilized in 30 Min.

Orig. Signed by			
Approved By Commission	Conducted By:	Calculated By:	Checked By:
Jerry Sexton			