

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/24/76	
Company Atlantic Richfield Company			Connection El Paso Natural Gas Company		
Pool Eumont Queen Gas			Formation Eumont Queen		Unit
Completion Date 12/11/75		Total Depth 3750	Plug Back TD 3520		Elevation 3456 GL
Farm or Lease Name State #157 D					
Casing Size 7"	Wt. 24#	d 6.336	Set At 3572	Perforations: From 3262 To 3495	
Well No. #4					
Thg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 3294	Perforations: From Open To Ended	
Unit Sec. Twp. Rge. I 12 22S 36E					
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 3052	
County Lea					
Producing Thru Tbg		Reservoir Temp. °F 108 # 3379	Mean Annual Temp. °F 60	Baro. Press. - P ₂ 13.2	
State New Mexico					
L 3379	H 3379	Gg .701	% CO ₂ ---	% N ₂ ---	% H ₂ S ---
Prover ---		Meter Run 4"		Taps Flwg.	

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											
1.	4 x 1.750			84	3.24	57	430	74	Pkr		48 hrs.
2.	4 x 1.750			87	7.29	62	304	74			1 Hr.
3.	4 x 1.750			89	19.80	60	272	74			1 Hr.
4.	4 x 1.750			91	32.49	61	241	74			45 min.
5.											30 min.

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	17.75	97.2	1.003	1.194	nil	317
2	14.93	27.03	100.2	.9981	1.194	nil	481
3	14.93	44.98	102.2	1.000	1.194	nil	802
4	14.93	58.18	104.2	.9990	1.194	nil	1036
5							

NO.	R ₁	Temp. °R	T ₁	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	.15	517	1.32	nil	dry		.701	X X X X X X X X	668	392
2	.15	522	1.33	nil						
3	.15	520	1.33	nil						
4	.16	521	1.33	nil						
5										

P₁ 874.2 P_c² 764.2

NO	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²
1		44.7	197.8	566.4
2		322.3	103.9	660.3
3		300.7	90.4	673.8
4		282.5	79.8	684.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.117$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.117$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,157$

Absolute Open Flow	1,157	Mcfd @ 15.025	Angle of Slope @	45°	Slope, n	1.000
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Remarks: AOF calculated by computer

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
<i>[Signature]</i>	Reggie Reston & Rick Pagan	Rick Pagan	<i>[Signature]</i>