

N. MEXICO OIL CONSERVATION COMM. JN
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-123
Revised 9-1-77

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-4-83	
Company Aminoil USA, Inc.				Connection El Paso Natural Gas Company	
Pool Gem (Morrow)				Unit K	
Completion Date 10-5-82		Total Depth 13800'		Plug Back TD 13753'	
Elevation 3589.2 GL		Farm or Lease Name Federal			
Csg. Size 5½	Wt. 20.0	d 4.778	Set At 13800	Perforations: From 13372 To 13440	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 13100	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 13100	
Producing Thru Tubing		Reservoir Temp. °F 187 @ 13000		Mean Annual Temp. °F 70	
Baro. Press. - P _a 13.2		State New Mexico			
L 13406	H 13406	G _g .677	% CO ₂ .65	% N ₂ .54	% H ₂ S Nil
Prover		Meter Run X		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. L-10 ¹⁻² cht	Diff. L-10 ¹⁻² wcht	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	52½ hours						2495		Pkr.		
1.	4.029 x 1.250			5.1	1.4	67	1998	70			60 min.
2.	4.029 x 1.250			5.125	1.9	73	1639	70			60 min.
3.	4.029 x 1.259			5.125	2.1	74	1198	70			60 min.
4.	4.029 x 1.250			5.125	1.1	72	320	70			60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$h_w \sqrt{\frac{h_w P_m}{X P_m}}$	Pressure L-10 factor	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	7.14	2.739	.9933	1.2154	1.020	179.867
2	7.469	9.7375	2.739	.9877	1.2154	1.020	243.919
3	7.469	10.7625	2.739	.9868	1.2154	1.020	269.349
4	7.469	5.6375	2.739	.9887	1.2154	1.020	141.359
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl
1.	USED SIMPLIFIED				A.P.I. Gravity of Liquid Hydrocarbons		
2.	SUPERCOMPRESSIBILITY TABLES				Specific Gravity Separator Gas 0.677		
3.					Specific Gravity Flowing Fluid XXXXX		
4.					Critical Pressure 669 P.S.I.A.		
5.					Critical Temperature 382 °R		

P _f 5943.2 P _s 35322			
NO.	P _r ²	P _s ²	P _r ² - P _s ²
1	5436.2	29552	5770
2	5181.2	26845	8477
3	4870.2	23719	11603
4	4298.2	18475	16847
5			

$$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 3.04421$$

$$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 469.951$$

$$(2) \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.74477$$

Absolute Open Flow 469.951	Mcf/d @ 15.025	Angle of Slope @ 63.43°	Slope, n 0.5000
Remarks:			

Approved By Commission:	Conducted By: Teffeller, Inc.	Calculated By: D. A. Warren, Jr.	Checked By:
-------------------------	----------------------------------	-------------------------------------	-------------

RECEIVED

MAR 31 1983

RECEIVED