

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

Form C-122
 Revised 9-1-65

Type Test ☒ One Point ☐ Annual ☐ Special Test Date 6-23-82					
Company Union Oil Company of California Connection					
Pool Gem Morrow Gas Formation Morrow Unit					
Completion Date 4-10-82		Total Depth 13,650'		Plug back TO 13,565'	
Elevation 3,644' KB		Perm. or Lease Name Smith			
Csg. Size 5-1/2" OD	Wt. 17#	d 4.892	Set At 13,650'	Perforations: From 13,482' To 13,494'	
Trq. Size 2-3/8" OD	Wt. 4.70#	d 1.995	Set At 13,432'	Perforations: From - To -	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple Single				Packor Set At 13,432'	
Producing Thru Tubing		Reservoir Temp. °F 172 @ 13,482'		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13,20		State New Mexico			
L 13,482'	H 13,482'	Gg .696	% CO ₂ .59	% N ₂ .48	% H ₂ S 0
Provor 0		Meter Run 4.0		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow hrs	
NO.	Provor Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
5.							2500	60			2.0
1.	4.03		1.750	540	2.0	82	850	87	0	0	9.5
2.											
3.											
4.											
5.											

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, Mhd
1.	14.93	33.26	553.2	.9795	1.1987	1.0559	615
2.							
3.							
4.							
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.	83	542	1.40	.897	48.449	48.5	.696	.753	669	386
2.										
3.										
4.										
5.										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1.	2513.2	855	731	5585
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1309$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 683$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1103$

Absolute Open Flow 683 Mhd @ 15.025	Angle of Slope α 49.6	Slope, n .85
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Remarks: **Calculations completed using Garrett Computing System's AOF program**

Approved By Commission:	Conducted By: C. A. Bagley	Calculated By: M. M. Standifer	Checked By: J.C. Merritt
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JUL 21 1982

A.C.D.
AC 325 OFFICE