

N. M. O. C. R. COPY

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

Form C-122
Revised 9-1-65

RECEIVED

NOV 7 1972

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-28-72																																					
Company Hanagan Petroleum Corp.			Connection Shut in waiting pipeline connection																																						
Pool Catclaw Draw <i>Morrow</i>			Unit Catclaw Draw																																						
Completion Date 10-28-72		Total Depth 11,000		Plug Back TD 10,879																																					
				Elevation 3514 KB																																					
Csg. Size 5 1/2		Wt. 17#		Set At 11,000																																					
Tbg. Size 2 7/8		Wt. 6.5#		Set At 10,570																																					
Perforations: From 10670 To 10876			Well No. 5																																						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 10570																																						
Producing Thru Tubing		Reservoir Temp. °F 65		Baro. Press. - P _a 13.2																																					
L 10,773		H 10,773		G _g 0.585																																					
				% CO ₂																																					
				% N ₂																																					
				% H ₂ S																																					
				Prover Pos. Ck.																																					
				Meter Run																																					
				Taps																																					
FLOW DATA			TUBING DATA		CASING DATA																																				
NO.	Prover 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	Duration of Flow																														
SI	Positive Choke			2955			2955		Pkr.																																
1.	2"	x	8/64	2914			2914	65	"		60 Min.																														
2.	2"	x	10/64	2867			2867	65	"		60 Min.																														
3.	2"	x	13/64	2724			2724	65	"		60 Min.																														
4.	2"	x	16/64	2551			2551	65	"		60 Min.																														
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, Mcfd																																		
1.	0.2618		2927.2	0.9952	1.307	1.122	1118.4																																		
2.	0.4173		2880.2	0.9952	1.307	1.123	1755.6																																		
3.	0.7208		2737.2	0.9952	1.307	1.126	2889.7																																		
4.	1.1120		2564.2	0.9952	1.307	1.130	4191.0																																		
5.																																									
NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.																																				
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.																																				
2.	Used Simplified				Specific Gravity Separator Gas 0.585 XXXXXXXXXX																																				
3.	Supercompressibility Tables				Specific Gravity Flowing Fluid XXXXXX																																				
4.					Critical Pressure 675.7 P.S.I.A. _____ P.S.I.A.																																				
5.					Critical Temperature 353.4 R _____ R																																				
$P_f = 3817.2$ $P_s = 14571$ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P_t²</th> <th>P_s</th> <th>P_s²</th> <th>P_f² - P_s²</th> </tr> <tr> <td>1</td> <td></td> <td>3751.2</td> <td>14072</td> <td>499</td> </tr> <tr> <td>2</td> <td></td> <td>3695.2</td> <td>13655</td> <td>916</td> </tr> <tr> <td>3</td> <td></td> <td>3534.2</td> <td>12491</td> <td>2080</td> </tr> <tr> <td>4</td> <td></td> <td>3331.2</td> <td>11097</td> <td>3474</td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												NO.	P _t ²	P _s	P _s ²	P _f ² - P _s ²	1		3751.2	14072	499	2		3695.2	13655	916	3		3534.2	12491	2080	4		3331.2	11097	3474	5				
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5																																									
$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \text{_____}$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$																																									
Absolute Open Flow				11,000 Mcfd @ 15.025				Angle of Slope		56° 2'																															
								Slope, n		0.67366																															
Remarks: BHP measured with Amerada RPG-3 gauge.																																									
Approved By Commission:				Conducted By:				Calculated By:																																	
				Teffteller, Inc.				F. Tefteller																																	
Checked By:																																									