

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

RECEIVED BY C-122
Revised 9-1-85

JUN 05 1985

File

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 5/23/85		O. C. D. ARTESIA, OFFICE			
Company: MONSANTO OIL COMPANY ✓						Connection: None					
Pool: Wildcat						Formation: Wolfcamp					
Completion Date: 5/21/85			Total Depth: 11420'			Plug Back TD: 10875'			Elevation: 3200' KB		
Farm or Lease Name: Avalon Hills						Well No.: 1					
Csg. Size: 5 1/2		Wt.: 17		Set At: 11420		Perforations: From 9818 To 9830			Unit: 1		
Tbg. Size: 2 7/8		Wt.: 6.5		Set At: 9705		Perforations: From To			Unit: N 7 21 27		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At: 9705			County: Eddy		
Producing Thru: Tubing			Reservoir Temp. °F: 148 @ 9824			Mean Annual Temp. °F: 60			Baro. Press. - P _a : 13.2		
State: New Mexico			L: 9824			H: 9824			G _g : 0.6		
% CO ₂ : 0			% N ₂ : 0			% H ₂ S: 0			Prover: X		
Meter Run: flange			Taps: flange								

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	of Flow
SI							1800	70			72 hrs
1.	3	X	0.5	250	8	58	1525	58	0	0	1 hr
2.	3	X	0.5	265	15	60	1460	60	0	0	1 hr
3.	3	X	0.5	315	37	60	1360	60	0	0	1 hr
4.	3	X	0.5	320	56	60	1110	60	0	0	1 hr
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, Mcd
1	1.18	45.89	263.2	1.0019	1.2910	1.0241	72
2	1.18	64.60	278.2	1.0000	1.2910	1.0253	101
3	1.18	110.20	328.2	1.0000	1.2910	1.0301	173
4	1.18	136.60	333.3	1.0000	1.2910	1.0305	215
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	0.39	518	1.44	0.953	23600	50	0.6	0.718	673	359
2	0.41	520	1.45	0.951						
3	0.49	520	1.45	0.942						
4	0.50	520	1.45	0.942						
5										

NO.	P _r	P _w	P _w ²	P _c ² - P _w ²
1	1798.9	3236		
1		1542	2379	857
2		1473	2171	1065
3		1372	1883	1353
4		1122	1259	1976
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6373$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 352$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6373$

Post ID-2
6-14-85
P & H Mon.
Comp. Wolfcamp

Absolute Open Flow: 352		Mcd @ 15.025		Angle of Slope: 45		Slope, n: 1	
Remarks:							
Approved By Commission:		Conducted By: Cecil Patterson		Calculated By: Hal Crabb, III		Checked By: [Signature]	