

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

45K
File
Form C-122
Revised 9-1-

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-21-87	
Company Yates Petroleum Corporation				Connection Phillips Petroleum Corp.	
Pool McMillan Upper Penn				Formation Cisco-Canyon	
Completion Date 7-12-83		Total Depth 10020 KB		Plug Back TD 7755 KB	
Elevation 3294 KB		Farm or Lease Name Eastern Shores TL Fe			
Csq. Size 4.5	Wt. 11.6	d 4.000	Set At 10020	Perforations: From 7708 To 7741 KB	
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 7641	Perforations: From 7668 To 7671 KB	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7665 KB	
Producing Thru Tubing		Reservoir Temp. °F 137 • 7725		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 7711	H 7711	G _g 0.655	% CO ₂ 0.37	% N ₂ 0.70	% H ₂ S 0.37
Prover 3.826		Meter Run Flange		Taps	

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	
1.	4	x	1.500	780	31	70	2320	72			24 Hrs.
2.	4	x	1.500	795	62	69	2200	76			24 Hrs.
3.	4	x	1.750	795	68	68	2140	74			24 Hrs.
4.	4	x	1.750	800	82	67	1970	72			24 Hrs.
5.	4	x	2.250	840	82	65	1900	70			24 Hrs.
					63	65	1165	67			24 HRS.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.88	156.81	793.2	.9905	1.236	1.079	2,254
2	10.88	223.85	808.2	.9915	1.236	1.081	3,226
3	15.01	234.43	808.2	.9924	1.236	1.082	4,670
4	15.01	258.23	813.2	.9933	1.236	1.083	5,154
5	25.99	231.84	853.2	.9952	1.236	1.088	8,064

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	1.178	530	1.417	.859	35.837	62.5	0.655	XXXXXX	673.5	374
2	1.200	529	1.414	.855				XXXXXX		
3	1.200	528	1.412	.854				XXXXXX		
4	1.207	527	1.409	.853						
5	1.267	525	1.404	.844						

F _c 2333.2 P _c ² 5444				$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 2.110$		$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.6158$	
NO	P _r ²	P _w	R _w ²	P _c ² - R _w ²	$AOF = Q \left[\frac{P_r^2}{P_c^2 - R_w^2} \right]^n = 13.03 \text{ MMCFPD}$		
1			5015	429			
2			4874	570			
3			4343	110			
4			4260	1184			
5			2864	2580			

Absolute Open Flow		13030	Mcfd @ 15.025	Angle of Slope	57.2	Slope, n	0.6426
Remarks:							
Approved By Commission:							
Conducted By:		Calculated By:		Checked By:			