

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

clsr
File
Form C-122
Revised 9-1-6

Rec. Oct. 9, 1981

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-23-87	
Company Yates Petroleum Corp.			Connection Phillips Petroleum		
Pool McMillan Upper Penn			Formation Cisco-Canyon		Unit
Completion Date 12-9-83		Total Depth 10016	Plug Back TD 7845	Elevation 3294 KB	Farm or Lease Name Eastern Shores XMA
Csg. Size 7"	Wt. 26#	d 6.276	Set At 7920	Perforations: From 7675 To 7802 KB	Well No. 1
Thg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 7594	Perforations: From 7634 To 7636KB	Unit Sec. Twp. Rye. 0 5 19S 271
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7594 KB	County Eddy
Producing Thru Tubing		Reservoir Temp. °F 137° 7688	Mean Annual Temp. °F 60	Baro. Press. - P _g 132	State New Mexico
L 7726	H 7726	G _g 0.653	% CO ₂ 0.36	% N ₂ 0.80	% H ₂ S 0.60
Prover			Meter Run 2.900	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	
SI							2319	72			
1.	3	x	1.000	800	22	72	2180	78			48 Hrs.
2.	3	x	1.000	780	35	72	2150	77			48 Hrs.
3.	3	x	1.500	810	18	71	1920	76			48 Hrs.
4.	3	x	1.500	810	35	70	1310	75			48 Hrs.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.801	133.75	813.2	.9887	1.237	1.079	847
2	4.801	166.19	793.2	.9887	1.237	1.076	1050
3	11.23	121.73	823.2	.9896	1.237	1.080	1807
4	11.23	169.74	823.2	.9905	1.237	1.081	2525
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	40.585	Mcf/bbl.
1	1.207	532	1.426	.859	A.P.I. Gravity of Liquid Hydrocarbons	62.5	Deg.
2	1.177	532	1.426	.863	Specific Gravity Separator Gas	.653	XXXXXXX
3	1.221	531	1.424	.857	Specific Gravity Flowing Fluid	XXXXX	.721
4	1.221	530	1.421	.856	Critical Pressure	674	P.S.I.A. 672
5					Critical Temperature	373	R 396

P _c 2332.2 P _c ² 5440						
NO	P _i ²	P _w	P _r ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4953$	(2) $\left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 1.2516$
1			4816	624		
2			4688	752		
3			3762	1678		
4			1802	3638		
5						

AOFP = Q $\left[\frac{P_r^2}{P_c^2 - P_w^2} \right]^n = 3160$ MCFGPD

Absolute Open Flow	3160	Mcf/d @ 15.025	Angle of Slope	60.88	Slope, n	0.5579
Remarks:						
Approved By Commission:						
Conducted By:		Calculated By:		Checked By:		
Tracy Richardson		Eddie Mahfood				