

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

Form C-122
Revised 9-1-63

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-11-81		JUL 1 1981	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Co.				S. C. E. ARTIFICIAL LIFT	
Pool R-6722 Und: Morrow				Formation Morrow				Unit	
Completion Date 3-5-81		Total Depth 9050 KB		Plug Back TD 8989 KB		Elevation 3760 KB		Farm or Lease Name Arnold OR State Com.	
Cas. Size 5 1/2	Wt. 17.0#	d 4.892"	Set At 9017 KB	Perforations: From 8557 To 8579		Well No. 1			
Tub. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 6527 KB	Perforations: From To		Unit Sec. Twp. Rje. 0 34 18S 24E			
Type Well - Single - Drdhead - G.C. or G.O. Multiple Single						Packer Set At 8518 KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 142 @ 8562		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 8562	H 8562	Cg 0.5962	% CO ₂ 0.89	% N ₂ 0.69	% H ₂ S Nil	Prover ----	Meter Run 2"	Tape Flanged	

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							2598				Weeks
1.	2.067 X 1.250			610	6	68	2296				21 hrs.
2.	2.067 X 1.250			610	10	70	2117				24 hrs.
3.	2.067 X 1.250			605	18	73	1766				24 hrs.
4.	2.067 X 1.250			600	31	70	961				24 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, Mcd
1	8.120	61.15	623.2	.9924	1.295	1.048	669
2	8.120	78.94	623.2	.9905	1.295	1.048	862
3	8.120	105.49	618.2	.9877	1.295	1.048	1148
4	8.120	137.87	613.2	.9905	1.295	1.048	1505
5							

NO.	R _f	Temp. °R	T _f	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	0.919	528	1.492'	.9110	1528	61	0.594	XXXXXX	678	354
2	0.919	530	1.497	.9098				XXXXXX		
3	0.912	533	1.505	.9108				XXXXXX		
4	0.904	530	1.497	.9100						
5										

P _c 3232.2 P _c ² 10447		(1) $\frac{P_c^2}{R^2 - R_w^2} = 1.1626$		(2) $\left[\frac{R^2}{R^2 - R_w^2} \right]^n = 1.0945$	
NO	P _f ²	P _w	R _f ²	P _c ² - R _f ²	
1			8139	2308	
2			6919	3528	
3			4884	5563	
4			1461	8986	
5					

Absolute Open Flow 1647 Mcd @ 15.025			Angle of Slope @ 59 deg.		Slope, n 0.5996	
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Remarks: Static Pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C122D attached.			
Approved By Commission:		Conducted By: Danny Matthews	
Calculated By: Eddie Mahfood		Checked By:	