

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-25-81		OCT 27 1981	
Company Yates Petroleum Corporation ✓				Connection Transwestern Pipeline Co.				O. C. D.	
Pool Wildcat (Morrow)				Formation Morrow				Unit ARTESIA, OFFICE NM 13073	
Completion Date 4-10-81		Total Depth 10250 KB		Plug Back To 10191 KB		Elevation 3364 KB		Farm or Lease Name Eastern Shore OV Fed.	
Casing Size 5 1/2"	Wt. 17#	d 4.892	Set At 10216 KB	Perforations: From 9908 To 9924		Well No. 1			
Tubg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 9907 KB	Perforations: From 9879 To 9881		Unit B		Sec. 17	Twp. 19s
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9872 KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 155 @ 9908		Mean Annual Temp. °F 62		Baro. Press. - P _g 13.2		State New Mexico	
L 9908	H 9908	G _g 0.630	% CO ₂ 1.33	% N ₂ 0.70	% H ₂ S N.7	Prover ---	Meter Run 4"	Taps 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							3136	80			Weeks
1.	4.026	X	2.250	440	10	70	2845	83			16 hrs.
2.	4.026	X	2.250	470	21	65	2599	85			24 hrs.
3.	4.026	X	2.250	600	33	68	2250	86			24 hrs.
4.	4.026	X	2.250	610	64	60	1619	87			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, Mcfd
1	25.64	67.32	453.2	0.9905	1.268	1.039	2252
2	25.64	100.73	483.2	0.9952	1.268	1.043	3399
3	25.64	142.25	613.2	0.9924	1.268	1.054	4837
4	25.64	199.71	623.2	1.0000	1.268	1.058	6869
5							

NO.	R _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	367.2	Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons	57.0	Deg.
1	0.668	530	1.460	.9256	Specific Gravity Separator Gas	0.622	XXXXXXXXXX
2	0.712	525	1.446	.9196	Specific Gravity Flowing Fluid	XXXXXX	0.630
3	0.904	528	1.455	.8998	Critical Pressure	678.5	P.S.I.A. 700.5
4	0.918	520	1.433	.8932	Critical Temperature	363	R 373.5
5							

P _c 4019	P _c ² 16152	(1) $\frac{P_c^2}{R_c^2 - R_w^2} = 1.4538$	(2) $\left[\frac{R_c^2}{R_c^2 - R_w^2} \right]^n = 1.3630$
NO	P _c ²	P _w	R _w ²
1			13499
2			11435
3			8830
4			5042
5			

Absolute Open Flow		9363	Mcf/d @ 15.025	Angle of Slope	50.4 deg	Slope, n	0.8277
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT.
Calculations worksheet C122D attached.

Approved By Commission:	Conducted By: Bill Trembley Jr.	Calculated By: Eddie Mahfood	Checked By:
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