

RECEIVED CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

APR 8 1977

54
 File
 Form C-122
 Revised 9-1-65
 122 file
 Epi.

Type Test ☒ Initial ☐ Special		Test Date 3-6-77	
Company Yates Petroleum Corp.		Transwestern Pipeline Co.	
Pool Eagle Creek Strawn Richard Knob (Lower Penn)		Formation Atoka-Strawn	
Completion Date 12-18-73		Total Depth 8330' KB	Plug Back TD 8180' KB
		Elevation 3620' KB	Farm or Lease Name State "CY"
Csg. Size 4 1/2"	Wt. 11.6#	d 4.000	Set At 8216
Perforations: From 7782 To 8070' KB		Well No. 1	
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 7725
Perforations: From X-Over Tool 6330' KB		Unit Sec. Twp. Rye. K 32-17S-25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - G. G.		Packer Set At 7723' & 6330'	County Eddy
Producing Thru Csg. Annulus	Reservoir Temp. °F a 134	Mean Annual Temp. °F 62	Baro. Press. - P _a 13.2
State New Mexico			
L 8000	H 8000	G _g	% CO ₂ 1.61
		% N ₂ 0.49	% H ₂ S Nil
Prover		Meter Run 2"	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									1911	48	Months
1.	2.067	X	1.000	300	14	66			1866	55	1 hr.
2.				303	28	67			1854	57	1 hr.
3.				305	55	68			1775	58	1 hr.
4.				310	86	68			1702	59	1 hr.
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	4.946	66.22	313.2	.9943	1.250	1.0290	419
2		94.09	316.2	.9933	1.250	1.0290	595
3		132.29	318.2	.9924	1.250	1.0290	835
4		166.72	323.2	.9924	1.250	1.0295	1053
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.	.463	526	1.429	.9445	219.4	56	0.640	XXXXXXX	677	368
2.	.467	527	1.432	.9445				XXXXX		
3.	.470	528	1.435	.9445						
4.	.477	528	1.435	.9435						
5.										

$P_c = 2432.2$ $P_c^2 = 5916$				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 4.7328$	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.4828$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1			5609	307		
2			5535	381		
3			5073	843		
4			4666	1250		
5						

$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2615$		Absolute Open Flow <u>2615</u> Mcfd @ 15.025		Angle of Slope @ <u>59° 40'</u>		Slope, n <u>0.585</u>	
---	--	--	--	---------------------------------	--	-----------------------	--

Remarks: <u>Static Pressures by Bennett Wireline. Flowing pressures by DWT. Calculations worksheet C-122D attached.</u>	
Approved By Commission:	Conducted By: Don Weaver
Calculated By: Eddie Mahfood	Checked By: