

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-3-73		AUG 21 1973	
Company Yates Petroleum Corp.				Connection NONE				O. C. C.	
Pool West Atoka				Formation MORROW				Unit ARTESIA, OFFICE	
Completion Date 8-3-73		Total Depth 8900'		Plug Back TD 8890'		Elevation 3442' KB		Farm or Lease Name Vandiver CN	
Csg. Size 5 1/2	Wt. 17.0	4.892 15.5	Set At 8900'	Perforations: From 8666' To 8735'		Well No. 1			
Tbg. Size 2 7/8"	Wt. 6.5	2.441 2.441	Set At 8665'	Perforations: From 8624' To 8665'		Unit E	Soc. 18	Twp. 18s	Rge. 26e
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8623'		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 139° 8600'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 8701	H -	Gg 0.635	% CO ₂ 0.54	% N ₂ 0.18	% H ₂ S 0.00	Prover X	Meter Run X	Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2181		PACKER		61.5 Hrs
1.	4	27/64	2.500	915	91	72	1956	75			1.0
2.	4	24/64	2.500	900	66	72	2022	77			1.0
3.	4	19/64	2.500	900	29	82	2110	79			1.0
4.	4	16/64	2.500	600	23	82	2143	81			1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	32.64	290.62	928.2	0.9887	1.255	1.081	12724.5
2	32.64	215.51	913.2	0.9887	1.255	1.080	10737.4
3	32.64	162.73	913.2	0.9795	1.255	1.073	7006.0
4	32.64	118.76	613.2	0.9795	1.255	1.054	5022.3
5.							

NO.	P _t	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	1.38	532	1.46	0.856	162.799 Mcf/bbl.	55.6 Deg.	0.635	XXXXXXX	673 P.S.I.A.	364 °R
2	1.36	532	1.46	0.857						
3	1.36	542	1.49	0.868						
4	0.91	542	1.49	0.900						
5.										

NO.	P _t ²	P _w *	P _w ²	P _c ² - P _w ²
1	2735.2	7481.3	371.0	
2	2746.2	7541.6	310.7	
3	2768.2	7662.9	189.4	
4	2778.2	7718.4	133.9	
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 25.273$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 23514.9$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 21.9$$

posted 8-24-73 JW

Absolute Open Flow 23514.9 Mcfd @ 15.025	Angle of Slope 46° 18'	Slope, n 0.955
Remarks: * BHP @ (-5259') 8701' used for pressure calculations		
Approved By Commission:	Conducted By: COLEMAN PET. ENG. CO.	Calculated By: JOE A. COLEMAN
		Checked By: JOE A. COLEMAN