

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

Form C-122
Revised 9-1-65

RECEIVED

OCT 18 1974

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-11-74				
Company Yates Petroleum Corp.				Connection Yates Petroleum Corp.				O.C.C. ARTESIA, OFFICE	
Pool <i>Hog Tank - morrow</i> P. 5015 5-28-73				Formation Morrow				Unit NM 14118	
Completion Date 2-4-74		Total Depth 8900 COTD		Plug Back TD 8887		Elevation 3677 KB		Farm or Lease Name Allison CQ Federal	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 8900	Perforations: From 8795 To 8801		Well No. 1			
Thq. Size 2-3/8	Wt. 4.7	d 1.995	Set At 8767	Perforations: From To		Unit Sec. Twp. Rge. P 22 19 24			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8767		County Eddy			
Producing Thru Tubing		Reservoir Temp. *F 161		Mean Annual Temp. *F		Baro. Press. - P _a 13.2		State New Mexico	
L	H	Gg 0.597	% CO ₂ 0.81	% N ₂ 0.33	% H ₂ S Nil	Prover	Meter Run X	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							988				
1.	2		1.250	47	2.2	45	947				1 hr.
2.	2		1.250	49	8	52	862				1 hr.
3.	2		1.250	52	20	57	767				1 hr.
4.	2		1.250	55	37	60	607				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	8319	9.950	60	1.015	1.294	1.006	109
2	8319	19.799	62	1.008	1.294	1.006	216
3	8319	33.764	65	1.003	1.294	1.005	366
4	8319	47.117	68	1.000	1.294	1.005	510
5.							

NO.	P _t	Temp. *R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.09	505	1.42	0.988	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.09	512	1.44	0.989	Specific Gravity Separator Gas 0.597
3.	.10	517	1.45	0.990	Specific Gravity Flowing Fluid _____
4.	.10	520	1.46	0.991	Critical Pressure .676 P.S.I.A.
5.					Critical Temperature 356 R

P _c 1205	P _c ² 1.4520	(1) $\frac{P_c^2}{P_e^2 - P_w^2} = \frac{1.4520}{0.9278}$	(2) $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1.40$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		1154	1.3317	.1203
2		1074	1.1535	.2985
3		921	0.8482	.6038
4		724	0.5242	.9278
5				

AOF = Q $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 714$ mcfpd

Absolute Open Flow 714 Mcfd @ 15.025	Angle of Slope θ _____	Slope, n 0.752
Remarks: _____		
Approved By Commission: _____		
Conducted By: Don Weaver	Calculated By: Eddie Mahfood	Checked By: _____