

well file

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

Form C-122
Revised 9-1-65

RECEIVED

JUN 11 1976

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-3-76	
Company Yates Petroleum Corporation		Connection None	
Pool Undesignated		Formation Morrow Gas	
Completion Date 8-24-75		Total Depth 8,595'	Plug Back TD 8,473
		Elevation 3,451 KB	Farm or Lease Name Halderman EN
Csg. Size 4 1/2	Wt. 11.6	d 4.000	Set At 8515
		Perforations: From 8387 KB To 8412	
Tag. Size 2 3/8	Wt. 4.7	d 1.995	Set At 8340
		Perforations: From open ended To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 8,340	Well No. 1
Producing Thru Tubing		Reservoir Temp. °F 145 @ 8300	Mean Annual Temp. °F 60
		Baro. Press. - P _a 13.2	Unit E
L 8,400	H ---	G _g 0.656	% CO ₂ 2.96
		% N ₂ 0.57	% H ₂ S ---
		Prover	Meter Run X
			Taps F
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
			Press. p.s.i.g.
			Diff. h _w
			Temp. °F
			TUBING DATA
			Press. p.s.i.g.
			Temp. °F
			CASING DATA
			Press. p.s.i.g.
			Temp. °F
			Duration of Flow
1.	3 8/64	2.000	320
2.	3 12/64	2.000	320
3.	3 16/64	2.000	320
4.	3 18/64	2.000	320
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.	21.32	36.51	333.2
2.	21.32	57.72	333.2
3.	21.32	83.65	333.2
4.	21.32	122.45	333.2
5.			
NO.	P _r	Temp. °R	T _r
			Z
1.	0.49	568	1.55
2.	0.49	549	1.50
3.	0.49	522	1.42
4.	0.49	518	1.41
5.			
Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons --- Deg.			
Specific Gravity Separator Gas 0.656 XXXXXX			
Specific Gravity Flowing Fluid XXXXX			
Critical Pressure 681 P.S.I.A.			
Critical Temperature 367 P.S.I.A.			
P _c 3625.2 P _w 13142.1			
NO.	P _c ²	P _w ²	P _w ² - P _c ²
1.	3554.2	12632.3	509.8
2.	3488.2	12167.5	974.6
3.	3394.2	11520.6	1621.6
4.	3240.2	10498.9	2643.2
5.			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 25.78$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12.15$			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11432$			
Absolute Open Flow 11432 Mcfd @ 15.025		Angle of Slope 52° 27'	
Slope, n 0.769			
Remarks: * BHP @ (-4949) 8400' Used for Pressure Calculations			
Approved by Commission:		Conducted by: JARREL COMPANY	
Calculated by: JOE A. COLEMAN		Checked by: JOE A. COLEMAN	