

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

OIL CONSERVATION DIVISION
RECEIVED

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

RECEIVED
DEC 3 1992

O.C.D.
OFFICE

c/sf
file

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Mewbourne					Lease or Unit Name Chalk Bluff				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-5-92		Well No. 2		
Completion Date		Total Depth		Plug Back TD 9935		Elevation		Unit Ltr. - Sec. - TWP - Rge. 1 - 18 - 27	
Csg. Size 5 1/2	Wt. d	Set At 9935	Perforations: From: 9850 To: 9876			County Eddy			
Tbg. Size 2 7/8	Wt. 6.5	Set At 9731	Perforations: From: To: 			Pool N Illinois Camp Mor			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single					Packer Set At 9731		Formation Morrow		
Producing Thru tbg. 171 @ 9731		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Phillips	
L 9731	H 9731	Gg .641	% CO ₂ .59	% N ₂ .40	% H ₂ S	Prover	Meter Run 3.068	Taps flg.	
FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI						2203		PRK	
1.	3 X 1.500		530	3.00	78	2145		"	
2.	3 X 1.500		530	6.00	84	2120		"	
3.	3 X 1.500		540	15.00	78	2055		"	
4.	3 X 1.500		540	36.00	70	1900		"	
5.	3 X 1.500		545	78.00	66	1805		"	
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, F _{pv} .	Rate of Flow Q, Mcfd		
1.	11.13	40.37	543.2	.9831	1.249	1.055	582		
2.	11.13	57.09	543.2	.9777	1.249	1.049	832		
3.	11.13	91.09	553.2	.9831	1.249	1.056	1315		
4.	11.13	141.12	553.2	.9905	1.249	1.056	2052		
5.	11.13	208.66	558.2	.9943	1.249	1.057	3049		
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.				
1.	.81	538	1.44	.898	A.P. I. Gravity of Liquid Hydrocarbons .641 Deg.				
2.	.81	544	1.46	.909	Specific Gravity Separator Gas XXXXXXXXXX				
3.	.82	538	1.44	.897	Specific Gravity Flowing Fluid XXXXXX				
4.	.82	530	1.42	.897	Critical Pressure 670 P.S.I.A. XXXXXX P.S.I.A.				
5.	.83	526	1.41	.895	Critical Temperature 372 R XXXXXX R				
P _c 2216.2 P _c ² 4911.5									
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.242$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.951$				
1.		2159.0	4661.1	250.4					
2.		2134.8	4557.3	354.3					
3.		2073.3	4294.3	617.3					
4.		1923.9	3701.3	1210.2					
5.		1843.0	3396.6	1514.9					
Absolute Open Flow 8,998 Mcfd @ 15.025					Angle of Slope θ 47.4		Slope, n .920		
Remarks: No Fluid Produced during Test									
Approved By Division		Conducted By: PRO WELL TESTERS			Calculated By: BM		Checked By: BM		