

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

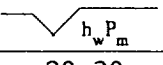
OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ☒ Mewbourne Oil Company					Lease or Unit Name Chalk Bluff 36 State				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10/27/99		Well No. 1		
Completion Date 10/16/99		Total Depth 10060		Plug Back TD 9780		Elevation 3563' GL		Unit Ltr. - Sec. - TWP - Rge. M 36 17s 27e	
Csg. Size 4 1/2	Wt. 11.35	d 4.000	Set At 10060	Perforations: From: 9466 To: 9484		County Eddy			
Tbg. Size 2 3/8	Wt. 4.6	d 1.995	Set At 9385	Perforations: From: Open To: Ended		Pool SE Logan Draw			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9385		Formation Atoka			
Producing Thru Tbg		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Elk Horn	
L 9385	H 9385	Gg 0.696	% CO ₂ 4.586	% N ₂ 0.788	% H ₂ S	Prover	Meter Run 3.068	Taps FLG	

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							1385		PACKER		24 hrs
1.	3.068	x	0.875	28	10.00	60	1319		"		1 hr
2.	3.068	x	0.875	27	32.00	70	1249		"		1 hr
3.	3.068	x	0.875	27	60.00	77	1165		"		1 hr
4.	3.068	x	0.875	29	95.00	68	1055		"		1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	3.650	20.30	41.2	1.000	1.199	1.004	89
2.	3.650	35.87	40.2	.9905	1.199	1.004	156
3.	3.650	49.11	40.2	.9840	1.199	1.004	212
4.	3.650	63.32	42.2	.9924	1.199	1.004	276
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry Gas _____ Mcf/bbl.		
1.	.06	520	1.36	.993	A.P. I. Gravity of Liquid Hydrocarbons _____ Dry _____ Deg.		
2.	.06	530	1.39	.993	Specific Gravity Separator Gas .696 XXXXXXXXXX		
3.	.06	537	1.40	.993	Specific Gravity Flowing Fluid XXXXXX		
4.	.06	528	1.38	.993	Critical Pressure * 652 P.S.I.A. _____ P.S.I.A. _____		
5.					Critical Temperature * 381 R _____ R _____		

P _c 1398.2		P _c ² 1955.00		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.409$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.928$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .532$		
1.		1332.3	1775.0	180.0			
2.		1262.5	1593.9	361.1			
3.		1178.8	1389.5	565.5			
4.		1069.3	1143.4	811.6			
5.							

Absolute Open Flow	532	Mcf @ 15.025	Angle of Slope θ	53.25	Slope, n	.7467
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Remarks: Well produced no fluid
* Corrected to 4.586% CO₂

Approved By Division	Conducted By: Jarrel Services, Inc.	Calculated By: Bob Murray	Checked By: Bob Murray
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