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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

RECEIVED

JUL 14 1997

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Mewbourne Oil Company					Lease or Unit Name Burton 111				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7/9/97				
Completion Date 4/21/97		Total Depth 11,200		Plug Back TD 11,077		Elevation 3316' GL		Well No. 2	
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 11,197	Perforations: From: 10,979 To: 10,999				Unit Ltr. - Sec. - TWP - Rge. B 7 20s 28e	
Tbg. Size 2 7/8	Wt. 6.5#	d 2.441	Set At 10,879	Perforations: From: OPEN To: ENDED				County Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,867				Formation L. Morrow	
Producing Thru Tbg		Reservoir Temp. °F 182.8@10,879		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Highland	
L 10,879	H 10,879	Gg 0.599	% CO ₂ 0.78	% N ₂ 0.54	% 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.	Temp. °F	
SI						2849		PACKER		48 Hrs
1.	3.068 x 1.000		175	3.0	84	2673		PACKER		1 Hr
2.	3.068 x 1.000		300	7.5	90	2455		PACKER		1 Hr
3.	3.068 x 1.000		485	10.0	90	2192		PACKER		1 Hr
4.	3.068 x 1.000		540	17.0	96	1858		PACKER		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 Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	4.789	23.76	188.2	.9727	1.292	1.014	146
2.	4.789	48.47	313.2	.9723	1.292	1.022	298
3.	4.789	70.58	498.2	.9723	1.292	1.036	440
4.	4.789	96.98	553.2	.9671	1.292	1.040	604
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.28	544	1.53	.972	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.46	550	1.55	.957	Specific Gravity Separator Gas	.599	XXXXXXXXXX
3.	.74	550	1.55	.931	Specific Gravity Flowing Fluid	XXXXXX	
4.	.82	556	1.57	.925	Critical Pressure	672	P.S.I.A.
5.					Critical Temperature	354	R

P_c		2862.2	P_c^2		8182.2
NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$	
1.		2686.2	7215.9	976.3	
2.		2468.4	6093.0	2099.2	
3.		2205.7	4865.0	3327.2	
4.		1872.3	3505.4	4686.8	
5.					

1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.748}{}$
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.655}{}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1,000}{}$

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.748 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.655$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,000$$

Absolute Open Flow 1,000 Mcfd @ 15.025 Angle of Slope θ 47.96 Slope, n .9016

Remarks: NO FLUID PRODUCED

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