

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

JUL 16 1997

clsf

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Mewbourne Oil Company				Lease or Unit Name Burton Flat 5 Federal			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7/11/97		Well No. 3	
Completion Date 3/23/97		Total Depth 11,250		Plug Back TD 11,028		Elevation 3312' GL	
Csg. Size 5 1/2		Wt. 17#		d 4.892		Set At 11,250	
Perforations: From: 10,822 To: 10,892				County Eddy			
Tbg. Size 2 3/8		Wt. 4.7#		d 1.995		Set At 10,737	
Perforations: From: OPEN To: ENDED				Pool Burton Flat			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,722		Formation Morrow MD	
Producing Thru Tbg		Reservoir Temp. °F 181.4@10737		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2	
Connection Highland		Meter Run 3.068		Taps FLG			
L 10,737	H 10,737	Gg 0.615	% CO ₂ 0.95	% N ₂ 0.26	% H ₂ S	Prover	

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						1597		PACKER		96 Hrs.
1.	3.068	x 0.750	520	9.5	70	1547		PACKER		1 Hr.
2.	3.068	x 0.750	520	38	73	1473		PACKER		1 Hr.
3.	3.068	x 0.750	530	70	69	1380		PACKER		1 Hr.
4.	3.068	x 1.000	530	31.5	70	1294		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.	2.672	71.17	533.2	.9905	1,275	1.047	251
2.	2.672	146.34	533.2	.9877	1,275	1.047	502
3.	2.672	195.00	543.2	.9915	1,275	1.048	690
4.	4.789	130.81	543.2	.9905	1,275	1.048	829
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.79	530	1.46	.912	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.79	533	1.47	.913	Specific Gravity Separator Gas	.615	XXXXXXXXXX
3.	.80	529	1.46	.911	Specific Gravity Flowing Fluid	XXXXX	
4.	.80	530	1.46	.911	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	362	R

P _c 1610.2	P _c ² 2592.7						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.007$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.155$	
1.		1560.8	2436.2	156.6			
2.		1488.9	2216.7	376.1			
3.		1398.6	1956.0	636.7			
4.		1315.5	1730.7	862.1			
5.							

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,787$$

Absolute Open Flow 1,787	Mcf @ 15.025	Angle of Slope θ 55.1	Slope, n .697
--------------------------	--------------	-----------------------	---------------

Remarks: NO FLUID PRODUCED

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