

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

EP 1004

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator EXXON CORP.						Lease or Unit Name NEW MEXICO "G" STATE					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-7-94		Well No. 10			
Completion Date 6-29-94		Total Depth 3900'		Plug Back TD 3650'		Elevation 3546'		Unit 26-21S-36E TWP - Rge.			
Csg. Size	Wt.	d	Set At	Perforations:				County			
4 1/2	11.6	4.000	3900	From: 3337 To: 3545				LEA			
Tbg. Size	Wt.	d	Set At	Perforations:				Pool			
2 3/8	4.7	1.995	3288	From: To:							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At 3288'		Formation (SEVEN RIVERS) QUEEN			
Producing Thru TBG		Reservoir Temp. °F 93		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection SID RICHARDSON			
L 3288	II 3288	Gg .677	% CO ₂ 1.03	% N ₂ 3.98	% H ₂ S	Prover		Meter Run 4.026		Tap 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						909		pk.		48hr.
1.	4.026	X 1.500	19.3	2.00	76	885		"		1 HR
2.	4.026	X 1.500	20.4	8.41	81	853		"		"
3.	4.026	X 1.500	22.8	22.45	90	811		"		"
4.	4.026	1.500	25.2	37.85	98	700		"		"
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	10.84	8.06	32.5	.9850	1.215	1.004	105
2.	10.84	16.81	33.6	.9804	1.215	1.002	218
3.	10.84	28.43	36.0	.9723	1.215	1.002	365
4.	10.84	38.12	38.4	.9653	1.215	1.002	486
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.04	536	1.44	.992	DRY GAS	
2.	.05	541	1.46	.997	DRY	
3.	.05	550	1.48	.997	Specific Gravity Separator Gas	.677
4.	.05	558	1.50	.997	Specific Gravity Flowing Fluid	XXXXXX
5.					Critical Pressure *666	P.S.I.A.
					Critical Temperature *370	R

P _c 922.2		P _c ² 850.5	
NO.	P _t ²	P _w	P _w ²
1.		898.3	806.9
2.		866.5	750.9
3.		824.9	680.4
4.		715.2	511.5
5.			

1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{5.000}$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{4.576}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1,670}$

1,670

Absolute Open Flow 1,670	Mcf/d @ 15.025	Angle of Slope θ 46.6	Slope, n .945
---------------------------------	----------------	-------------------------------------	----------------------

Remarks: ***=CORRECTED TO 1.03% CO₂ & 3.98 % N₂**

Approved By Division EXTON	Conducted By: PROWELL TESTERS	Calculated By: BM	Checked By: BM
-----------------------------------	--------------------------------------	--------------------------	-----------------------