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

State of New Mexico
Energy, Minerals and Natural Resources Department

NGPA Permits

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

JUL 10 1996

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: EXXON CO. U.S.A.						Lease or Unit Name: BOWER'S 'A' FED		
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 7-1-96	Well No.: 28	
Completion Date		Total Depth: 6000'		Plug Back TD: 5285		Elevation	Unit Ltr. - Sec. - TWP - Rge.	
Csg. Size: 5½	Wt.: 15.5	d: 4.950	Set At: 6000'	Perforations: From: 2628	To: 3734		County: LEA	
Tbg. Size: 2-3/8	Wt.: 4.7	d: 1.995	Set At: 2909	Perforations: From:	To:		Pool	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single				Packer Set At			Formation: BYERS QUEEN & YATES	
Producing Thru: TBG	Reservoir Temp. °F: 89	Mean Annual Temp. °F: 60		Baro. Press. - P_a: 13.2			Connection: SALES	
L: 2909	H: 2909	Gg: .749	% CO_2: .15	% N_2: 19.6	% H_2S: -0-	Prover: -0-	Meter Run	Taps: FLG.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI					650				
1.	3.068 X 2.000	60	2"	105	640		PKR.		72 hr.
2.	3.068 X 2.000	200	3"	102	620		"		1 hr.
3.	3.068 X 2.000	220	6"	93	600		"		1 hr.
4.	4.026 X 2.250	40	56"	86	545		"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor F_t	Gravity Factor F_g	Super Compress. Factor, F_{pv}	Rate of Flow Q, Mcfd
1.	21.32	12.09	73.2	.9594	1.155	1.004	286
2.	21.32	25.29	213.2	.9619	1.155	1.013	606
3.	21.32	37.40	233.2	.9697	1.155	1.017	908
4.	25.64	46.13	53.2	.9759	1.155	1.001	1334
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.114	565	1.59	.993
2.	.333	562	1.58	.974
3.	.364	553	1.55	.967
4.	.083	546	1.53	.999
5.				

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: DRY Deg.
Specific Gravity Separator Gas: .749 XXXXXXXXX
Specific Gravity Flowing Fluid: DRY XXXXX
Critical Pressure: 639 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 355 R ____ R

P_c 663.2 P_c^2 439.8

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	426.7	653.9	427.6	12.2
2.	400.9	636.7	405.3	34.5
3.	376.0	621.2	385.9	54.0
4.	311.6	577.1	333.1	106.8
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.120$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.755$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.672$

Absolute Open Flow: 3.672 Mcfd @ 15.025 | Angle of Slope θ: 54 | Slope, n: .715

Remarks: NO FLUID MADE DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTER	MB	MB