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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-122
Revised 4-1-1991

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JUN 19 2002
Oil Conservation Division

Operator: Yates Petroleum Corp.				Lease or Unit Name: R L Burns "ATL"	
Test Type: ☐ Initial ☒ Annual ☐ Special				Test Date: 5/20/02	Well No.: 1
Completion Date: 4/26/00	Total Depth: 12593		Plug Back TD: 12705	Elevation:	Unit Ltr - Sec - TWP - Rge: P - 11 - 16S - 35E Section 11 Township
Csg. Size: 5.500	Wt.: 17.000	d:	Set At:	Perforation: From 12203 To 12211	County: Lea
Tbg. Size: 2.875	Wt.: 6.500	d: 2.441	Set At:	Perforation: From 12203 To 12211	Pool:
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: New Well - Single			Packer Set At: 12124		Formation: Morrow
Producing Thru: tub	Reservoir Temp.F:	Mean Annual Temp.F: 60	Baro. Pressure: 13.20		Connection: 4.000
L: 12593	H: 12593	Gg: .699	% CO_2: .66	% N_2: .90	% H_2S: Prover: X	Meter Run: 4.026 Taps: Flange

	Flow Data				Tubing Data		Casing Data		SIP/Flow Duration (HRS.)
No.	(Prover) Line Size x Orifice Size	Press. PSIG	Diff. h_w	Temp. F	Press. PSIG	Temp. F	Press. PSIG	Temp. F	
Shut-in Pressure					592	75		75	
1.	4.03 x .75	107.00	59.00	84	477	77		77	1
2.	4.03 x .75	108.00	66.00	88	410	83		75	2
3.	4.03 x .75	108.00	76.00	90	363	90		75	3
4.	4.03 x .75	90.00	102.00	92	314	91		75	4

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.	2.730	84.213	120.2	.9777	1.1961	1.0109	271.8
2.	2.730	89.438	121.2	.9741	1.1961	1.0108	287.5
3.	2.730	95.975	121.2	.9723	1.1961	1.0106	308.0
4.	2.730	102.598	103.2	.9706	1.1961	1.0089	328.1

No.	P_r	TEMP.	T_r	Z
1.	.180	544	1.414	.9785
2.	.181	548	1.424	.9788
3.	.181	550	1.429	.9791
4.	.154	552	1.434	.9824

Gas-Liquid Hydrocarbon Ratio			Mcf/bbl
API Gravity of Liquid Hydrocarbons		53.8	Deg.
Specific Gravity Separator Gas	.699		
Specific Gravity Flowing Fluid		.699	
Critical Pressure	668 PSIA	668	PSIA
Critical Temperature	384 R	384	R

P_C = 605.2 P_C^2 = 366.3

No.	Pw	Pw^2	$Pc^2 - Pw^2$
1.	492.1	242	124.125
2.	425.7	181	185.085
3.	379.4	143	222.335
4.	331.3	109	256.480

(1) $\frac{P_C^2}{P_C^2 - P_W^2} = 1.428$ (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 1.354$

$AOF = Q\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 444$

Absolute Open Flow	444	Mcfd @ 15.025	Angle of Slope -	49.6	Slope, n .850
Remarks					
Approved By Division:	Conducted By: Pacific Process		Calculated By: BPT System/PPS		Checked By: Bill Smith

ORIGINAL SIGNED BY
PAUL F. KAUTZ
PETROLEUM ENG.

AUG 12 2002

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Pacific Process

TEST DATE: 5/20/02