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 4-1-19

30-025-36645

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator				Lease or Unit Name	
Jumbo American Petroleum Corp.				Maderra 19 Federal	
Test Type ☒ Initial ☐ Annual ☐ Special				Test Date	Well No.
				02/11/2005	Fed 1
Completion Date	Total Depth	Plug Back TD		Elevation	Unit Ltr - Sec - TWP - Rge.
					L - 19-26s-35e
Csg. Size / Wt. / d / Set At		Perforation: From To			County
7.000 / 29.000 / 5.900 /					Lea
Tbg. Size / Wt. / d / Set At		Perforation: From To			Pool
2.875 / 6.500 / 2.441 / 14450		From 14626 To 15228			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple			Packer Set At		Formation
new			14450		Atoka
Producing Thru	Reservoir Temp.F	Mean Annual Temp.F	Baro. Pressure		Connection
tubing	220	50	13.00		

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
14926	14926	.703	.23	.64				flange

	Flow Data				Tubing Data		Casing Data		
No.	(Prover) Line Size x Orifice Size	Press. PSIG	Diff. h_w	Temp. F	Press. PSIG	Temp. F	Press. PSIG	Temp. F	SIP/Flow Duration (HRS.)
Shut-in Pressure					7100	65			24
1.	4.03 x .17	825.00	20.00	80	6390	71			4
2.	4.03 x .20	825.00	28.00	76	5975	76			1
3.	4.03 x .23	825.00	50.00	70	5400	73			3
4.	4.03 x .27	825.00	66.00	66	4750	78			2

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.	26.236	129.460	838.0	.9813	1.1927	1.0891	4329.5
2.	26.236	153.180	838.0	.9850	1.1927	1.0920	5155.5
3.	26.236	204.695	838.0	.9905	1.1927	1.0966	6957.4
4.	26.236	235.177	838.0	.9943	1.1927	1.0999	8047.6

No.	P_r	TEMP.	T_r	Z
1.	1.256	540	1.395	.8430
2.	1.256	536	1.385	.8386
3.	1.256	530	1.369	.8315
4.	1.256	526	1.359	.8266

Gas-Liquid Hydrocarbon Ratio	50.5	Mcf/bbl	
API Gravity of Liquid Hydrocarbons	51.7	Deg.	
Specific Gravity Separator Gas	.703		
Specific Gravity Flowing Fluid		.762	
Critical Pressure	667 PSIA	664	PSIA
Critical Temperature	387 R	406	R

P_C = 7113.0 P_C^2 = 50594.8

No.	Pw	Pw^2	$Pc^2 - Pw^2$
1.	6452.3	41632	8962.418
2.	6058.8	36709	********
3.	5544.3	30739	********
4.	4947.2	24475	********

(1) $\frac{P_C^2}{P_C^2 - P_W^2}$ = 1.937 (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n$ = 1.501

AOF = Q $\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n$ = 12078

Absolute Open Flow	12078	Mcfd @ 15.025	Angle of Slope - 58.4	Slope, n .614
Remarks				

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	Well Testing	BPT System	

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Well Testing

TEST DATE: 02/11/2005