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 4-1-1991

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Maynard Oil Company							Lease or Unit Name: WILSON Deep Unit		
Test Type: ☑ Initial ☐ Annual ☐ Special							Test Date: 9-19-01	Well No.: DEEP #2 Y	
Completion Date: 9-12-01		Total Depth: 12945		Plug Back TD: 12483			Elevation: 3681	Unit Ltr - Sec - TWP - Rge.: S13T21SR34EUNITD	
Csg. Size: 5.500	Wt.: 17.000	d: 4.995	Set At: 12945	Perforation: From 12090	To 12100			County: LEA	
Tbg. Size: 2.875	Wt.: 6.500	d: 2.441	Set At: 11971	Perforation: From	To			Pool: Wildcat Atoka (Gas)	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE						Packer Set At: 11971		Formation: ATOKA	
Producing Thru: TUBING	Reservoir Temp.F: 155		Mean Annual Temp.F: 76			Baro. Pressure: 13.20		Connection: DUKE	
L: 12483	H: 12483	Gg: .650	% CO_2: .19	% N_2: 1.09	% H_2S:	Prover: METER		Meter Run: 4.026	Taps: 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					5761	76		76	86
1.	4.03 x 1.75	400.00	2.10	96	5415	76		76	1
2.	4.03 x 1.75	400.00	6.10	95	5069	78		76	1
3.	4.03 x 1.75	400.00	11.80	93	4608	74		74	1
4.	4.03 x 1.75	400.00	25.30	91	4120	70		72	1

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.	18.460	29.457	413.2	.9671	1.2403	1.0312	672.6
2.	18.460	50.205	413.2	.9680	1.2403	1.0314	1147.7
3.	18.460	69.827	413.2	.9697	1.2403	1.0318	1599.7
4.	18.460	102.245	413.2	.9715	1.2403	1.0323	2347.6

No.	P_r	TEMP.	T_r	Z
1.	.618	556	1.506	.9404
2.	.618	555	1.503	.9400
3.	.618	553	1.498	.9392
4.	.618	551	1.493	.9385

Gas-Liquid Hydrocarbon Ratio	46.3		Mcf/bbl
API Gravity of Liquid Hydrocarbons	52.0		Deg.
Specific Gravity Separator Gas	.650		
Specific Gravity Flowing Fluid		.715	
Critical Pressure	668 PSIA	665	PSIA
Critical Temperature	369 R	389	R

P_C = 5774.2 P_C^2 = 33341.4

No.	Pw	Pw^2	$Pc^2 - Pw^2$
1.	5429.4	29477	3863.472
2.	5085.4	25861	7480.132
3.	4627.4	21412	********
4.	4146.6	17193	********

(1) $\frac{P_C^2}{P_C^2 - P_W^2} = 2.065$ (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 1.859$

$AOF = Q\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 4363$

Absolute Open Flow	4363	Mcfd @ 15.025	Angle of Slope -	49.5	Slope, n .855
Remarks					
Approved By Division:	Conducted By: LR		Calculated By: BPT System		Checked By: Larry Lasher

WELL TESTER: LR

GAS WELL BACK PRESSURE CURVE

TEST DATE: 9-19-01