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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

OCT 2002
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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MYCO INDUSTRIES, INC.					Lease or Unit Name Helena 25 Fee Com				
Test Type ☒ Initial ☐ Annual ☐ Special					Test Date 09/24/2002		Well No. 1		
Completion Date 09/27/2002		Total Depth 12026		Plug Back TD 11,915' KB		Elevation 3119' GL		Unit Ltr - Sec - TWP - Rge. S25-T21S-R27E	
Csg. Size 5.500	Wt. 17.000	d 4.860	Set At 12026	Perforation: From 11446 To 11482			County Eddy		
Tbg. Size 2.875	Wt. 6.500	d 2.441	Set At 11376	Perforation: From To			Pool Carlsbad Morrow		
Type Well-Single-Bradenhead-G.G. o.G.O. Multiple Initial						Packer Set At 11,376' KB		Formation Morrow	
Producing Thru Tubing		Reservoir Temp.F 195 F		Mean Annual Temp.F 98		Baro. Pressure		Connection MYCO Capitol	
L 11915	H 11915	Gg .804	% CO ₂ .34	% N ₂ 1.06	% H ₂ S	Prover Prover		Meter Run 4"	Taps Pipe

Flow Data					Tubing Data		Casing Data		SIP/Flow Duration (HRS.)
(Prover)	Press. PSIG	Diff. h _w	Temp. F	No. Line Size/Orifice Size	Press. PSIG	Temp. F	Press. PSIG	Temp. F	
Shut-in Pressure					3605	74			144
1. 4.00 x .50	1050.00	6.80	66		3012	74			2
2. 4.00 x .50	987.00	8.80	68		2657	75			2
3. 4.00 x .50	925.00	9.90	67		1956	78			2
4. 4.00 x .50	888.00	11.70	70		1578	77			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.	1.213	84.499	1050.0	.9943	1.1152	1.1935	135.6
2.	1.213	93.197	987.0	.9924	1.1152	1.1750	147.0
3.	1.213	95.695	925.0	.9933	1.1152	1.1626	149.5
4.	1.213	101.929	888.0	.9905	1.1152	1.1499	157.1

No.	P _r	TEMP.	T _r	Z
1.	1.587	526	1.258	.7021
2.	1.491	528	1.263	.7243
3.	1.398	527	1.260	.7399
4.	1.342	530	1.267	.7563

Gas-Liquid Hydrocarbon Ratio				Mcf/bbl
API Gravity of Liquid Hydrocarbons				Deg.
Specific Gravity Separator Gas .804				
Specific Gravity Flowing Fluid				.804
Critical Pressure	661	PSIA	661	PSIA
Critical Temperature	418	R	418	R

$P_C = 3605.0$ $P_C^2 = 12996.0$

No.	P _w	P _w ²	P _C ² - P _w ²
1.	3012.1	9072	3923.354
2.	2657.1	7060	5935.805
3.	1956.1	3826	9169.532
4.	1578.2	2490	*****

(1) $\frac{P_C^2}{P_C^2 - P_W^2} = \frac{1.237}{1.031}$ (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = \frac{1.031}{1.031}$

AOF = Q $\left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = \frac{161}{1.031}$

Absolute Open Flow 161	Mcf/d @ 15.025	Angle of Slope - 81.9	Slope, n .142
Remarks			
Approved By Division:	Conducted By: A N Muncy	Calculated By: BPT System	Checked By: ANM