

OIL CONSERVATION DIVISION

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P.O. Box 2088

Santa Fe, New Mexico 87504-2088

NOV - 7 2003

30-015-32705

MULTIPOINT AND ONE POINT BACK PRESSURE TEST OF OIL WELL

OCDA-ARTESIA

Operator MYCO Industries Inc				Lease or Unit Name Juneau 31 Fee Com			
Test Type ☒ Initial ☐ Annual ☐ Special				Test Date 11-03-03		Well No. 1	
Completion Date 11-05-2003		Total Depth 12231		Plug Back TD 12168		Elevation 3116' GL	
Unit Ltr - Sec - TWP - Rge. (L)S31-T21S-R28E		County Eddy		Pool Carlsbad Morrow, East		Formation Morrow "B"	
Csg. Size 5.500	Wt. 17.000	d 4.892	Set At 11760	Perforation: From 11858 To 11868		Baro. Pressure 15.03	
Tbg. Size 2.875	Wt. 6.500	d 2.441	Set At 11760	Perforation: From 11858 To 11868		Connection MYCO Capital-Duke	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple Single				Packer Set At 11760		Meter Run 4.00	
Producing Thru Tubing		Reservoir Temp.F 182		Mean Annual Temp.F 86		Prover Prover	
L 12168	H 12168	Gg .602	% CO ₂ .54	% N ₂	% H ₂ S	Taps Pipe	

Flow Data					Tubing Data		Casing Data		SIP/Flow Duration (HRS.)
(Prover) No. Line Size	Orifice Size	Press. PSIG	Diff. h _w	Temp. F	Press. PSIG	Temp. F	Press. PSIG	Temp. F	
Shut-In Pressure					3610	66			40
1.	4.00 x 1.75	2885.00	4.20	86	3555	61			1
2.	4.00 x 1.75	2610.00	6.10	85	3478	61			1
3.	4.00 x 1.75	2589.00	8.60	85	3310	60			1
4.	4.00 x 1.75	2501.00	10.80	84	3214	60			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.	15.630	110.364	2900.0	.9759	1.2888	1.1183	2426.2
2.	15.630	126.541	2625.0	.9768	1.2888	1.1248	2800.7
3.	15.630	149.648	2604.0	.9768	1.2888	1.1251	3313.0
4.	15.630	164.843	2516.0	.9777	1.2888	1.1271	3659.1

No.	P _r	TEMP.	T _r	Z
1.	4.299	546	1.533	.7997
2.	3.891	545	1.531	.7904
3.	3.860	545	1.531	.7900
4.	3.729	544	1.528	.7872

Gas-Liquid Hydrocarbon Ratio		Mcf/bbl	
API Gravity of Liquid Hydrocarbons		Deg.	
Specific Gravity Separator Gas	.602		
Specific Gravity Flowing Fluid		.602	
Critical Pressure	674 PSIA	674 PSIA	
Critical Temperature	356 R	356 R	

P_C = 3625.0 P_C² = 13140.8

No.	P _w	P _w ²	P _C ² - P _w ²
1.	3583.7	12842	298.288
2.	3511.3	12328	811.876
3.	3351.1	11230	1910.741
4.	3261.4	10636	2504.198

(1) $\frac{P_C^2}{P_C^2 - P_W^2} = 5.248$ (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = 1.374$

AOF = Q $\left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = 5026$

Absolute Open Flow	5026	Mcf/d @ 15.025	Angle of Slope -	79.2	Slope, n	.191
Remarks						
Approved By Division:		Conducted By:		Calculated By:		Checked By:
RD		BPT System		ANM		

GAS WELL BACK PRESSURE CURVE

WELL TESTER: RD
TEST DATE: 11-03-03

Juneau 31 Fee Com 1
(L)S31-T21S-R28E
Eddy
Exponent n: 0.1916 ,NM.

