

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

MAR 23 1979 Form C-122
Revised 6-1-65

O. C. C.

ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3/8/79	
Company Boyd Operating Company		Connection None	
Well East-McMillan		Formation Morrow	
Completion Date 3/2/79		Total Depth 11100'	
Plug Back TD 11028'		Elevation 3316 G.L.	
Well No. 1		Farm or Lease Name Murphy Federal	
4 1/2"	11.6	4.000	11100'
2 3/8"	4.7	1.995	10840'
Type Well - Single - Broderhead - G.G. or G.O. Multiple Single		Packer Set At 10820'	
Producing Interval TBG		Reservoir Temp. °F 182 @ 10900'	
Mean Annual Temp. °F 60		Perforations: From 10879' To 10887'	
L 10900		H -	
Gg 0.6169		% CO ₂ 0.808	
% N ₂ 0.385		Prover 3"	
FLOW DATA		TUBING DATA	
NO.	Prover Line Size	X	Orifice Size
SI			
1.	3	8/64	1.500
2.	3	10/64	1.500
3.	3	11/64	1.500
4.	3	13/64	1.500
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	11.13	42.49	603.2
2	11.13	66.67	633.2
3	11.13	91.55	643.2
4	11.13	114.25	653.2
5			
NO.	Temp. °F	T _f	Z
1	532	1.49	0.909
2	531	1.48	0.905
3	532	1.49	0.904
4	532	1.49	0.902
5			
Gas Liquid-Hydrocarbon Ratio _____ Dry Gas _____ Mol/Lbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____ 0.6169 _____ XXXXXXXXX			
Specific Gravity Flowing Fluid _____ XXXXXX _____			
Critical Pressure _____ 674 _____ P.S.I.A. _____ P.S.I.A.			
Critical Temperature _____ 358 _____ °F _____ °F			
P _w 4513.2 P _w ² 20369.0			
NO.	P _w	P _w ²	P _w ² - P _w ²
1	4183.2	17499.2	2869.8
2	3982.2	15857.9	4511.0
3	3699.2	13684.1	6684.9
4	3425.2	11732.0	8637.0
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.047$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.774$			
ABF = C $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3743$			
Absolute Gas Flow _____ Mscf @ 15.025			
Angle of Slope _____ 47° 31'			
Slope, n _____ 0.916			
Remarks: * Bottom Hole Pressure @ (-7584) 10900' Used for Pressure Calculations			
Approved by Commission:		Conducted by:	
JANREL SERVICES, INC.		Joe A. Coleman	
Calculated by:		Checked by:	