

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

File
Form C-122
Revised 9-1-65

RECEIVED

C/SF
C-122

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/10/82		MAR 17 1982	
Company AMOCO PRODUCTION COMPANY ✓				Connection CABOT CORPORATION		O. C. D.	
Pool UNDESIGNATED <i>Morrow</i>				Formation MORROW		Unit ARTESIA, OFFICE	
Completion Date 9/28/81		Total Depth 13623.		Plug Back TD 13577.		Elevation 3026.	
Farm or Lease Name STATE MA <i>Com</i>				Well No. 1			
Csg. Size 4.500	Wt. 15.1	d 3.826	Set At 13622.	Perforations: From 13166. To 13175.		Unit Sec. Twp. Rye. H 3 25S 28E	
Tbg. Size 3.375	Wt. 4.6	d 1.995	Set At 13090.	Perforations: From 0. To 0.		County EDDY	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At 11588.		State NEW MEXICO	
Producing Thru TUBING		Reservoir Temp. °F 182.0 13170.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
L 13170.	H 13170.	G _g 0.578	% CO ₂ 1.61	% N ₂ 0.28	% H ₂ S 0.	Prover 0.	Meter Run 3.0 FLANGE
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
1.	3.00 X 1.500			490.	4.0	53.	45.0
2.	3.00 X 1.500			490.	16.0	63.	0.7
3.	3.00 X 1.500			490.	32.5	63.	0.7
4.	3.00 X 1.500			490.	49.0	58.0	0.7
5.							0.7
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.	12.94	44.86	503.2	1.0068	1.3159	1.0420	801.
2.	12.94	89.73	503.2	0.9971	1.3159	1.0387	1582.
3.	12.94	127.86	503.2	0.9971	1.3159	1.0387	2255.
4.	12.94	157.02	503.2	1.0019	1.3159	1.0403	2787.
5.							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 0. Mcf/bbl.		
1.	0.74	513.	1.47	0.921	A.P.I. Gravity of Liquid Hydrocarbons _____ 0. Deg.		
2.	0.74	523.	1.50	0.927	Specific Gravity Separator Gas _____ 0.578 X X X X X X X X		
3.	0.74	523.	1.50	0.927	Specific Gravity Flowing Fluid _____ X X X X X 0.578		
4.	0.74	518.	1.49	0.924	Critical Pressure _____ 680. P.S.I.A. 680. P.S.I.A.		
5.					Critical Temperature _____ 348. R 348. R		
P _c 2002.2 P _c ² 4009.							
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4493$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3852$		
1	3405.	1842.	3392.	617.	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3860$		
2	3522.	1604.	2571.	1438.			
3	1733.	1372.	1883.	2126.			
4	986.	1115.	1243.	2766.			
5							
Absolute Open Flow _____ 3860 Mcfd @ 15.025					Angle of Slope Θ _____ 48.7		Slope, n _____ 0.878
Remarks: _____							
Approved By Commission: _____ Conducted By: John West Calculated By: B. A. Hemmeline Checked By: L. W. Sheppard							