

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

Form C-122
Revised 9-1-65

RECEIVED

FEB 22 1979

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1/31/79		O.C.C. ARTESIA, OFFICE	
Company Maddox Energy Corporation		Connection El Paso Natural Gas			
Locality Culebra Bluff Undesignated		Formation Lower Atoka		Unit	
Completion Date 1/6/79		Total Depth 13117'		Plug Back TD 11885'	
Elevation 3051' KB		Form or Lease Name Pardue Farms 26		Well No. 1	
Choke Size 7"	Wt. 26.0	d 6.276	Perforations: From 11758 To 11782		Unit Sec. Twp. Rge. E 26 23s 28e
4 1/2"	13.0	d 3.920	Perforations: Open Ended		
2 7/8"	6.50	d 2.441			
2 3/8"	4.70	d 1.995	11651'		
Type Well - Single - G.C. or G.O. Multiple					
Producing Thru Tubing		Reservoir Temp. °F 60°		Packer Set At 11640'	
L H		Gg % CO ₂ % N ₂ % H ₂ S		Prover Meter Run	
11770' -		0.5773 0.643 0.562 -		6" Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	6		2.500	534	3.61	73	4671		Packer		24.0 Days
2.	6		2.500	534	13.69	70	4365				1.0 hrs
3.	6		2.500	542	34.81	68	4070				1.0 hrs
4.	6		2.500	549	60.84	59	3665				1.0 hrs
5.							3295				1.0 hrs

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mscf/d
1	30.31	44.14	547.2	0.9877	1.316	1.037	1803.34
2	30.31	86.54	547.2	0.9905	1.316	1.038	3549.04
3	30.31	139.00	555.2	0.9924	1.316	1.039	5716.88
4	30.31	184.94	562.2	1.001	1.316	1.041	7687.01
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas
1	0.81	533	1.56	0.930	A.P.I. Gravity of Liquid Hydrocarbons	Mcf/Std. Cu. Ft.
2	0.81	530	1.55	0.928	Specific Gravity Separator Gas	0.5773
3	0.82	528	1.54	0.926	Specific Gravity Flowing Fluid	XXXXXX
4	0.83	519	1.52	0.922	Critical Pressure	675 P.S.I.A.
5					Critical Temperature	342 °R

P _r 5735.2 P _w 32915.5			
NO.	P _w *	P _w ²	P _r ² - P _w ²
1	5507.2	30329.3	2586.2
2	5265.2	27722.3	5193.2
3	4896.2	23972.8	8942.7
4	4643.2	20180.3	12735.2
5			

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.585$$

$$AQF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 17342$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.256$$

Actual Flow	17342	Mscf/d	15.025	Angle of Slope	49° 27'	Slope, n	0.856
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Remarks: * BOTTOM HOLE PRESSURE @ (-8719) 11770' Used for Pressure Calculations

Approved by Commission:	Conducted By: JARREL SERVICES, INC.	Calculated By: JOE A. COLEMAN	Checked By: JOE A. COLEMAN
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