

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501RECEIVED BY
REVISED 10-1-78dsf
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

OCT 2 - 1985

O. C. D.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-18-85	
Company Kerr-McGee Corp.		Connection Marathon	
Pool Indian Basin		Formation Morrow	
Completion Date 4/28/85		Total Depth 9605	
Plug Back TD		Elevation 3735 GL	
Farm or Lease Name Martha Creek Gas Com		Well No. 2	
Csq. Size 7	Wt. 28 II	Set At 8945	Perforations: From 9262 To 9477
Thq. Size 2 3/8	Wt.	Set At 8670	Perforations: From To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple		Packer Set At 8650	
Producing Thru		Reservoir Temp. °F p	
Mean Annual Temp. °F		Baro. Press. - P _g	
L 9370	H 9370	G _g .593	% CO ₂ .78
% N ₂ .36	% H ₂ S	Prover	Meter Run 2.067
Taps Flange			

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2070				
1.	2.067 X 1.125			1048	1.0	74	2006				
2.				1051	4.20	79	1851				
3.				1055	8.41	75	1658				
4.				1055	13.69	68	1515				
5.											

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, Mc/d
1	6.393	32.57	1061	.9868	1.299	1.081	289
2	6.393	66.85	1064	.9822	1.299	1.079	588
3	6.393	94.77	1068	.9859	1.299	1.081	839
4	6.393	120.92	1068	.9924	1.299	1.086	1082
5							

NO.	R _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.58	534	1.51	.856	117	
2	1.58	539	1.52	.859		
3	1.59	535	1.51	.856		
4	1.59	528	1.49	.848		
5						

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1			4078	261		
2			3483	856		
3			2811	1528		
4			2366	1976		
5						

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = ?$$

Absolute Open Flow 1800 Mc/d @ 15.025 Angle of Slope 54.0 Slope, n .727

Remarks:

Approved By Division Conducted By: Calculated By: Checked By: