

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator <u>U.M.C. Petroleum</u>		RECEIVED OCD - ARTESIA		Lease or Unit Name <u>Parkway 28</u>	
Type Test ☒ Initial ☐ Annual ☐ Special		Test Date <u>8-27-97</u>		Well No. <u>2</u>	
Completion Date <u>8/13/97</u>		Total Depth <u>11490</u>		Plug Back TD <u>11501</u>	
Csg. Size <u>5 1/2</u>		Wt. <u>17/20</u>		Elevation <u>3315 GL</u>	
d <u>4.892</u>		Set At <u>11501</u>		Unit Lr. - Sec. - TWP - Rge. <u>28-19-S 29-E</u>	
Perforations: <u>11390</u>		To: <u>11426</u>		County <u>Eddy</u>	
Tbg. Size <u>7/8</u>		Wt. <u>6.5</u>		Pool <u>W Parkway Marrow</u>	
d <u>2.441</u>		Set At <u>11100</u>		Formation <u>Marrow</u>	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <u>Single</u>		Packer Set At <u>11100</u>		Connection <u>Air</u>	
Producing Thru Tbg <u>175.37</u>		Reservoir Temp. °F <u>60</u>		Baro. Press - P _a <u>13.2</u>	
Mean Annual Temp. °F <u>60</u>		Prover <u>0</u>		Meter Run <u>3.068</u>	
L <u>11100</u>		H <u>11100</u>		Taps <u>F/G</u>	
G _g <u>.610</u>		% CO ₂ <u>1.05</u>		% N ₂ <u>.24</u>	
% H ₂ S <u>0</u>		Prover <u>0</u>		Meter Run <u>3.068</u>	

FLOW DATA

TUBING DATA

CASING DATA

NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI										
1.	3.068 X 1.250		260	5"	72°	2750	82°	PKR		120 Hr. SI.
2.	3.068 X 1.250		260	20"	72°	2260	78°			60 min
3.	3.068 X 1.250		260	32"	71°	1860	78°			60 min
4.	3.068 X 1.250		260	48"	71°	1210	77°			60 min
5.										60 min

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.577	36.9	273.2	.9887	1.280	1.044	369
2.	7.577	73.9	273.2	.9887	1.280	1.044	739
3.	7.577	93.5	273.2	.9896	1.280	1.044	936
4.	7.577	114.5	273.2	.9896	1.280	1.044	1147
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.78	532	1.48	.918	N/A	N/A	.610	N/A	674	354
2.	.78	532	1.48	.918						
3.	.78	531	1.48	.918						
4.	.78	531	1.48	.918						
5.										

P _c <u>3278.8</u>		P _c ² <u>10750.5</u>		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.61$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^2 = 1.61$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²			
1.	2881.8	8304.7	2445.8				
2.	2599.6	6757.9	3992.6				
3.	2323.5	5398.6	5351.9				
4.	2024.7	4099.4	6651.1				
5.							

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^2 = 1846$$

Absolute Open Flow <u>1846</u>	Mcfd @ 15.025	Angle of Slope θ <u>45</u>	Slope, n <u>1.000</u>
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Remarks: *Calculated From known Bottom hole pressure
*No liquid made during test.

Approved By Division	Conducted By: <u>Pro Well testing</u>	Calculated By: <u>M.B.</u>	Checked By: <u>B.M.</u>
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