

appropriate district office
see Rule 401 & Rule 1122

Energy, Minerals and Natural Resources Department

Revised 4-1-199

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator				Lease or Unit Name state nm7-24			
Test Type ☐ Initial ☐ Annual ☐ Special				Test Date 8-7-00		Well No. 24	
Completion Date 8-5-00		Total Depth 11		Flag Back TD 11,250		Elevation	
Csg. Size 5.500		Wt. 17.000		d 4.990		Sct At 11	
Tbg. Size 2.375		Wt. 4.700		d 1.995		Sct At 9510	
Perforation: From 9537 To 9565				County eddy			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple single				Packer Set At			
Producing thru tubing		Reservoir Temp.F		Mean Annual Temp.F 100		Baro. Pressure 13.30	
L 11250		H 11250		Gg .728		% CO ₂ .26	
				% N ₂ .80		% H ₂ S	
				Prover meter		Meter Run 3.068	
						Taps flange	

Flow Data				Tubing Data		Casing Data		SIP/Flow Duration (HRS.)
No.	(Prover) Line Size/Office Size	Press. PSIG	Diff. h _w	Temp. F	Press. PSIG	Temp. F	Press. PSIG	
Shut-in Pressure				1375	81			24
1.	3.07 x 1.50	300.00	9.00	68	1315	68		1
2.	3.07 x 1.50	300.00	18.00	68	1272	68		1
3.	3.07 x 1.50	300.00	34.00	66	1212	66		1
4.	3.07 x 1.50	300.00	66.00	64	1081	64		1

RATE OF FLOW CALCULATIONS

No.	Coefficient (24 Hour)	$\sqrt{\frac{k_w r_m}{P_m}}$	Pressure P _m	Flow Temp. FACTOR F _t	Gravity FACTOR F _g	Super Compress. FACTOR F _{pv}	Rate of Flow (Q) MCFD
1.	14.730	53.101	313.3	.9924	1.1720	1.0358	942.3
2.	14.730	75.096	313.3	.9924	1.1720	1.0358	1332.7
3.	14.730	103.209	313.3	.9943	1.1720	1.0363	1835.9
4.	14.730	143.798	313.3	.9962	1.1720	1.0368	2564.0

No.	P _z	TEMP.	T _z	Z
1.	.471	528	1.338	.9320
2.	.471	528	1.338	.9320
3.	.471	526	1.333	.9312
4.	.471	524	1.328	.9303

Gas-Liquid Hydrocarbon Ratio	13.4	Mcf/bbl
API Gravity of Liquid Hydrocarbons	61.0	Deg.
Specific Gravity Separator Gas	.728	
Specific Gravity Flowing Fluid	.925	
Critical Pressure	665	PSIA
Critical Temperature	394	K
	656	PSIA
	457	K

$$P_C = 1388.3 \quad P_C^2 = 1927.4$$

No.	P _w	P _w ²	P _C ² - P _w ²
1.	1341.3	1798	128.396
2.	1311.8	1720	206.549
3.	1277.7	1632	294.860
4.	1215.3	1476	450.411

$$(1) \frac{P_C^2}{P_C^2 - P_W^2} = \frac{4.279}{\dots} \quad (2) \left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = \frac{3.227}{\dots}$$

$$AOE - Q \left[\frac{P_C^2}{P_C^2 - P_W^2} \right]^n = \frac{8274}{\dots}$$

Absolute Open Flow	8274	Mcf/d @ 15.025	Angle of Slope -	51.1	Slope, n	.806
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Remarks	
Approved By Division:	Conducted By: lane
Calculated By: BPT System/Guardian	Checked By: larry