

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

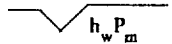
OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL COMPANY					Lease or Unit Name AVALON 31" State				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8/16/99				
Completion Date 7/16/99		Total Depth 11155		Plug Back TD 10391		Elevation 3308		Well No. 1	
Csg. Size 4 1/2"	Wt. 11.6#	d 4.000"	Set At 10,515	Perforations: From: 10,150' To: 10,283'				County EDDY	
Tbg. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 9471	Perforations: From: 9528' To: 9554'				Pool AVALON	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 9471'				Formation ATOKA	
Producing Thru TUBING 168		Reservoir Temp. °F 70		Mean Annual Temp. °F 70		Baro. Press - P _a 13.2		Connection SALES	
L 9452	H 9452	Gg 0.610	% CO ₂	% N ₂	% H ₂ S 0	Prover 0	Meter Run 3.068"	Taps FLG	

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.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	3.068" X 1.000"	430	23	56	89	79			24 hrs
2.									
3.									
4.									
5.									

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	measured w/	Total Flow Meter					551
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					275,500	
2.					56	Deg.
3.					0.610	XXXXXXXXXX
4.					XXXXX	0.623
5.					673	P.S.I.A.
					360	R

P_c **1315.6** P_c² **1730.8**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		516.5	266.7	1464.1
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.18$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.18$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 651$

Absolute Open Flow 650 Mcfd @ 15.025	Angle of Slope θ 45	Slope, n 1.000
---	----------------------------	-----------------------

Remarks: ***CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES**

Approved By Division	Conducted By: MEWBOURNE OIL COMPANY	Calculated By: JE	Checked By: JE
----------------------	---	-----------------------------	--------------------------