

***REVISED 3/15/85

Oil CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED
MAR 18 1985
OIL CON.
DIST. 3 DIV.

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-13-84	
Company Southland Royalty Company		Connection *** EL Paso Natural Gas Company	
Pool Basin		Formation Dakota	
Completion Date 6-05-84		Total Depth 5860'	Plug Back TD 5815'
		Elevation 5376' GL	Farm or Lease Name McWhorter-Duncan
Csg. Size 4.500	Wt. 10.5#	d 4.052	Set At 5860'
Perforations: From To		Well No. 1	
Tbg. Size 2.375	Wt. 4.7#	d 1.995	Set At 5648'
Perforations: From 5534' To 5714'		Unit Sec. Twp. Rge. K 10 29N 14W	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At ---	
Producing Thru Tubing		County San Juan	
Reservoir Temp. °F #		State New Mexico	
L	H	Gg .700	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Taps

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.	
SI							1830		1831	
1.	2"	X	3/4"				256		911	1 hr
2.							202		761	2 hrs
3.							153		611	3 hrs
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	12.365		165.2	1.0000	.9258	1.0000	1891
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 1843.2 P _r ² 3397386.2		(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.129$		(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.095$	
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	
1	623.2	388378.2	3009008.0		
2					
3					
4					
5					

AOF = Q $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 2071$

Absolute Open Flow	2071	Mcfd @ 15.025	Angle of Slope θ	Slope, n
Remarks: Light mist of water throughout test				
Approved by Division	Conducted By: Don Thompson	Calculated By: James W. Smith	Checked By: C. Terry Hobbs	