

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-16-84	
Company Southland Royalty Company		Connection Southern Union Gathering	
Pool Basin		Formation Dakota	
Completion Date 4-24-84		Total Depth 7620'	Plug Back TD 7571'
Elevation 6374' GL		Farm or Lease Name Moore	
Csg. Size 4.500	Wt. 10.5#	d 4.052	Set At 5099'
Perforations: From To		Well No. 1E	
Csg. Size 2.375	Wt. 4.7#	d 1.995	Set At 7512'
Perforations: From To		Unit Sec. Twp. Rge. J 35 32N 12W	
Type Well - Single - Dradennad - G.C. or G.O. Multiple Single		Packer Set At ---	
Producing Thru Tubing		Baro. Press. - P _a 12.2	
Reservoir Temp. °F #		State New Mexico	
L	H	Gq .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.		Temp. °F
1.	2"	X	3/4"				1004		1114		
2.							114		440		1 Hr
3.							69		291		2 Hrs
4.							48		232		3 Hrs
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 _{pv}	Rate of Flow Q, Mcfd
1	12.365		60.2	1.0000	.9258	1.0000	689
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

$P_c = 1126.2$ $P_c^2 = 1268326.4$ $P_w^2 = 244.2$ $P_w^2 = 59633.6$ $P_c^2 - P_w^2 = 1208692.8$

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0493$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0368$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 715$

Absolute Open Flow _____ 715 _____ Mcfd @ 15.025	Angle of Slope θ _____	Slope, n _____ .75
Remarks: _____		
Approved By Division _____	Conducted By: _____ Steve McCament	Calculated By: _____ James W. Smith
		Checked By: _____ R. E. Fielder