

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 10-15-81	
Company Southland Royalty Company			Connection Southern Union Gathering Company		
Pool Undesignated			Formation Fruitland		Unit
Completion Date 10-06-81		Total Depth 2920'	Plug Back TD 2899'	Elevation 6178' GR	Farm or Lease Name Harper
Csg. Size 2.875	Wt. 6.4	d 2.441	Set At 2637'	Perforations: From 2483' To 2550'	Well No. 3
Trq. Size ----	Wt. ---	d ----	Set At ----	Perforations: From ---- To ----	Unit Sec. Twp. Rge. P 14 31N 12W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At -----	County San Juan
Producing Thru Casing		Reservoir Temp. *F θ	Mean Annual Temp. *F	Baro. Press. - P _g 12.2	State New Mexico
L	H	G _g .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. hw	Temp. *F	Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.	Temp. *F	
SI									810		
1.	2"	X	1/2"						395		1 hr
2.									310		2 hrs
3.									250		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 _{pv}	Rate of Flow Q, Mcfd
1	5.4315		262.2	1.0000	.9258	1.0000	1318
2.							
3.							
4.							
5.							

NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.	A.P.I. Gravity of Gas _____ Deg.	Specific Gravity Separator Gas _____	Specific Gravity Separator Liquid _____	Critical Pressure _____ P.S.I.A.	Critical Temperature _____ R
1.										
2.										
3.										
4.										
5.										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1		262.2	68748.8	607264.0	1.1132	1.0954
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1444$			
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Absolute Open Flow _____ 1444 _____ Mcfd @ 15.025	Angle of Slope θ _____	Slope, n .85
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Remarks: _____			
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Approved By Division	Conducted By: Steve McCament	Calculated By: James Smith	Checked By: L. O. Van Ryan
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