

N. MEXICO OIL CONSERVATION COMMS N
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3-23-78		APR 14 1978	
Company Southland Royalty Co.				Connection None				
Pool Undesignated Sams Ranch				Formation Grayburg				Unit O.C.C. ARTIFICIAL OFFICE
Completion Date 1-3-78		Total Depth 1746'		Plug Back TD 1746'		Elevation 3569		Farm or Lease Name Sams-State Comm.
Csg. Size 5-1/2	Wt. 14	d 5.01	Set At 1690	Perforations: From 1712 To 1720		Well No. 1		
Tbg. Size 2-3/8	Wt. 4.7	d 2.04	Set At 1590'	Perforations: From - To -		Unit Sec. Twp. Rge. A 16 14 28		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At None		County Chaves	
Producing Thru Tbg		Reservoir Temp. °F 80 @ 1716		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NM
L 1716	H 1716	Gg 0.745	% CO ₂ 0.01	% N ₂ 28.70	% H ₂ S 0	Prover 0	Meter Run 2.1	Taps Flange

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
SI								70			72.0
1.	2.07	x	.375	250	1	65	250	68	0	0	48
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1							
2.	0.67	16.22	263.2	0.9952	1.1586	1.0171	13
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.43	525	1.61	0.967	Specific Gravity Separator Gas 0.745 x x x x x x x x
3.					Specific Gravity Flowing Fluid x x x x x 0.745
4.					Critical Pressure 616 P.S.I.A. 616 P.S.I.A.
5.					Critical Temperature 326 R 326 R

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0516$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0437$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 13$
1					
2	69	263	69	1340	
3					
4					

Absolute Open Flow	13	Mcfd @ 15.025	Angle of Slope °	49.6	Slope, n	0.850
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Remarks:	Due to the low volumes and pressure on this well, only a 1-point test was run.					
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Approved By Commission:	Conducted By: D. Davis	Calculated By: Don Craig	Checked By: Don Craig
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