

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

State of New Mexico Energy, Minerals and Natural Resources Department

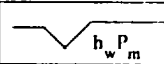
Form C-122 Revised 4-1-91

OIL CONSERVATION DIVISION

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

27 '94

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator SANTA FE ENERGY					Lease or Unit Name LAGUNA SALADO SOUTH					
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 9-9-94		Well No. 1			
Completion Date 7-7-94		Total Depth 13545		Plug Back TD 13046		Elevation		Unit Ltr. Sec. TWP - Rge. 22-23S-29E		
Csg. Size 4 1/2	Wt. 13.5	d 3.920	Set At 13629	Perforations: From: 12248 To: 12268			County EDDV			
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 12007	Perforations: From: To:			Pool			
Type Well - Single - Bradenhead - G.G. or H.O. Multiple <i>single</i>				Packer Set At 12007'			Formation ATOKA			
Producing Thru Tbg.		Reservoir Temp. °F 190	Mean Annual Temp. °F 60°	Baro. Press - P _a 13.2			Connection PIPELINE			
L 12007	H 12007	Gg .575	% CO ₂ .49	% N ₂ .61	% H ₂ S	Prover	Meter Run 4.026	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	
SI						5648		PKR.		
1.	4.026 X	.875	420	8	91	5500		"		1 hr.
2.	4.026 X	.875	430	24	93	5200		"		1 hr.
3.	4.026 X	.875	430	51	90	4830		"		1 hr.
4.	4.026 X	.875	440	83	87	4420		"		1 hr.
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.	3.630	58.87	433.2	.9715	1.319	1.026	281			
2.	3.630	103.14	443.2	.9697	1.319	1.027	492			
3.	3.630	150.34	443.2	.9723	1.319	1.027	719			
4.	3.630	193.95	453.2	.9750	1.319	1.028	931			
5.										
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>DRY GAS</u> Mcf/bbl.			A.P. I. Gravity of Liquid Hydrocarbons <u>DRY</u> Deg.		
1.	.64	551	1.59	.950	Specific Gravity Separator Gas <u>.575</u>			XXXXXXXXXX		
2.	.66	553	1.60	.948	Specific Gravity Flowing Fluid <u>DRY</u> XXXXX					
3.	.66	550	1.59	.948	Critical Pressure <u>672</u> P.S.I.A.			P.S.I.A.		
4.	.67	547	1.58	.947	Critical Temperature <u>346</u> R			R		
5.										
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.59381}{}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.99385}{}$			
1.		5513.8	30401.99	1647.21	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1,856}{}$					
2.		5214.5	27191.01	4858.19						
3.		4845.9	23482.75	8566.45						
4.		4437.7	19693.18	12356.02						
5.										
Absolute Open Flow <u>1,856</u> Mcfd @ 15.025					Angle of Slope θ <u>54°</u>			Slope, n <u>.724</u>		
Remarks: <u>NO FLUID MADE DURING TEST.</u>										
Approved By Division			Conducted By: PRO WELL TESTER			Calculated By: K. S.			Checked By: B. M.	