

NEW EXICO OIL CONSERVATION COMMISS
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 11-25-81		JAN 6 1982	
Company Mesa Petroleum Co. /				Connection Unconnected				
Pool UNDESIGNATED ABO				Formation ABO		Unit O. C. D. ARTESIA, OFFICE		
Completion Date 11-25-81		Total Depth 4252'		Plug Back TD 4199'		Elevation 3746'		Farm or Lease Name Alkali Federal Com
Csg. Size 4 1/2"	Wt. 10.5#	d	Set At 4252'	Perforations: From 3715' To 3856'		Well No. 2		
Thg. Size 2 3/8"	Wt. 4.7#	d	Set At 3616'	Perforations: From open ended To		Unit Sec. Twp. Rge. E 33 5S 25E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 102 @ 4252		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State New Mexico
L	H	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover 2" Orifice Well Tester		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
SI							975		920		72 hr SI
1.	2" Orifice		1 1/4	13		65	900	78	860		1 hr.
2.	Well		1 1/4	35		68	750	79	735		1 hr.
3.	Tester		1 1/4	40		65	550	79	645		1 hr.
4.			1 1/4	43		62	425	78	580		1 hr.
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	882	2" Orifice Well Tester		.9952	.9608		843
2.	1812			.9924	.9608		1728
3.	1991			.9952	.9608		1904
4.	2093			.9981	.9608		2007
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

F _c 933	P _c ² 870	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9908$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4909$	
NO.	P _w	P _w ²	P _c ² - P _w ²		
1	873	762	108		
2	748	560	310		
3	658	433	437		
4	593	352	518		
5					

Absolute Open Flow 2800 _____ Mcfd @ 15.025		Angle of Slope @ 59.9°		Slope, n .58	
Remarks: _____					
Approved By Commission:		Conducted By: James Craig		Calculated By: <u>ELB</u> E. L. Buttross, Jr.	
Checked By:					