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FileNEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GASForm C-122
Revised 9-1-65C. C. D.
ARTESIA OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/30/90	
Company Mewbourne Oil Company			Connection Vented		
Pool Red Lake Atoka Morrow			Formation Morrow		Unit A
Completion Date 10/17/90		Total Depth 9874'	Plug Hole L. 9713'	Elevation 3401 KB	Farm or Lease Name Federal "S"
Cas. Size 5 1/2	Wt. 20#	d	Set At 9874'	Perforations: From 9607' To 9626'	
Thq. Size 2 7/8	Wt. 6.5	d	Set At 9432'	Perforations: From Open To End	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9432'	County Eddy
Producing Thru Tbg.		Reservoir Temp. °F 151 BH	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State N.M.
L 9617	H 9617	Gg 0.592	% CO ₂ 0.02	% N ₂ 0.61	% H ₂ S ----
Prover		Meter Run 2.067	Taps Flg		

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							1510				72 Hrs
1.	2.067	x	1.375	195	5.06	94	1260	74	PKR		1 Hr.
2.	2.067	x	1.375	198	20.25	90	975	74	PKR		1 Hr.
3.	2.067	x	1.375	211	39.69	82	700	74	PRK		1 Hr.
4.	2.067	x	1.375	225	54.76	85	440	74	PRK		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	10.40	32.47	208.2	0.969	1.2997	1.0138	431
2	10.40	65.40	211.2	0.972	1.2997	1.0143	872
3	10.40	94.33	224.2	0.979	1.2997	1.0153	1267
4	10.40	114.21	238.2	0.977	1.2997	1.0169	1534
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	0.310	554	1.578	0.973	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.315	550	1.567	0.972	Specific Gravity Separator Gas 0.592
3	0.334	542	1.544	0.970	Specific Gravity Flowing Fluid XXXXX
4	0.355	545	1.553	0.967	Critical Pressure * 671 P.S.I.A.
5					Critical Temperature * 351 R

P _c 1511.6 P _c ² 2284.9				(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.287$		(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.359$	
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.722$		
1		1253.5	1571.2	713.7			
2		979.3	959.0	1325.9			
3		713.6	509.2	1775.7			
4		481.0	231.4	2053.5			
5							

Absolute Open Flow 1.722 Mcfd @ 15.025 Angle of Slope 39.5° Slope, n 1.217

Remarks: * Corrected to 0.61% N₂
Well made 0 bbls. fluid during test

Approved By Commission:

Conducted By:

Calculated By:

Checked By: