

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Will File

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date <u>9/29/70</u>		OCT 2 1970	
Company <u>Read & Stevens</u>						Connection		D. C. C.	
Pool <u>Buffalo Valley</u>						Formation <u>Penn.</u>		ARTESIA OFFICE	
Completion Date <u>9-10-70</u>		Total Depth <u>8670</u>		Plug Back TD <u>8450</u>		Elevation <u>3524 GW</u>		Farm or Lease Name <u>Midwest</u>	
Csg. Size <u>5 1/2"</u>		Wt. <u>14-17</u>		Set At <u>5</u>		Perforations: From <u>8392</u> To <u>8420</u>		Well No. <u>1</u>	
Tbg. Size <u>2 3/8</u>		Wt. <u>4.7</u>		Set At <u>1.995</u>		Perforations: From <u>—</u> To <u>—</u>		Unit <u>P 11</u> Sec. <u>6</u> Twp. <u>15</u> Rye. <u>28</u>	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <u>Single</u>						Packer Set At <u>8180</u>		County <u>Chaves</u>	
Producing Thru <u>Tubing</u>		Reservoir Temp. °F <u>128</u>		Mean Annual Temp. °F <u>8500</u>		Baro. Press. - P _a <u>60</u>		State <u>N. Mexico</u>	
L <u>8392</u>		H <u>8392</u>		G _g <u>0.670</u>		% CO ₂ <u>—</u>		% N ₂ <u>—</u>	
						% H ₂ S <u>—</u>		Prover <u>—</u>	
								Meter Run <u>3.068</u>	
								Taps <u>Flange</u>	

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	of Flow
SI	—	—	—	—	—	—	2490	—	—	—	72 hr
1.	3.068	—	1.50	540	10	78	2304	60	PKR	—	60 M
2.	"	"	"	545	24	77	2185	60	"	—	60 M
3.	"	"	"	555	55	71	2030	60	"	—	60 M
4.	"	"	"	565	86	68	1876	60	"	—	60 M
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, Mc/d
1	11.13	74.37	553.2	.9831	1.222	1.056	859.3 / 1000
2	11.13	115.71	558.2	.9840	1.222	1.056	1635.3
3	11.13	176.65	568.2	.9896	1.222	1.056	2520.3
4	11.13	222.95	578.2	.9924	1.222	1.056	3198.8
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>17.550</u> Mcf/bbl.
1.	0.83	538	1.41	0.897	A.P.I. Gravity of Liquid Hydrocarbons <u>63</u> Deg.
2.	0.83	537	1.41	0.897	Specific Gravity Separator Gas <u>0.670</u> XXXXXXXXXX
3.	0.85	531	1.39	0.890	Specific Gravity Flowing Fluid <u>XXXXXX</u>
4.	0.86	528	1.38	0.885	Critical Pressure <u>669</u> P.S.I.A. P.S.I.A.
5.					Critical Temperature <u>382</u> R R

P _c <u>3484.2</u> P _c ² <u>12139.6</u>					(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
NO.	P _i ²	P _w *	P _w ²	P _c ² - P _w ²		
1	—	3275.2	10726.9	1412.7		
2	—	3139.2	9854.6	2285.0		
3	—	2942.2	8658.5	3483.1		
4	—	2759.2	7613.2	4526.4		
5						

Absolute Open Flow <u>8,100</u> Mc/d @ 15.025			Angle of Slope θ <u>938</u>
Remarks: <u>* From BHP Bomb set @ 8300'</u>			

Approved By Commission: <u>10-6-70 PLS</u>	Conducted By: <u>Gene A. Drown</u>	Calculated By: <u>S.A.D.</u>	Checked By:
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