

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

Form C-123
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-18-74		OCT 2 1974	
Company Cities Service Oil Company				Connection None				O. C. C.	
Pool Burton Heat monitor Winchester				Formation Morrow				Unit ARTESIA, OFFICE	
Completion Date 9-18-74		Total Depth 11485 11450		Plus Back TD 11440 11432		Elevation 3238 ft.		Farm or Lease Name Government Z	
Csg. Size 5 1/2	Wt. 20	d	Set At 11485 11450	Perforations: From 11313 To 11320		Well No. 1		Unit Sec. Twp. Rge. K 23 20S 28E	
Tbg. Size 2 7/8	Wt. 7.9	d	Set At 11235	Perforations: From open To ended		County Eddy		State New Mexico	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual G. G.						Packer Set At 11200		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 177 11200		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L 11235	H 11235	Gg .617 Assumed	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	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	Duration of Flow
SI							3460				24 hr.
1.	4	x	2.50	565	9.0	82	3080				1 hr.
2.	4	x	2.50	570	17.5	82	2821				45 min.
3.	4	x	2.50	570	25.5	76	2550				1 hr.
4.	4	x	2.50	570	34.5	74	2272				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	32.64	72.14	578.2	.9795	1.273	1.048	3077
2	32.64	101.02	583.2	.9795	1.273	1.048	4309
3	32.64	121.95	583.2	.9850	1.273	1.050	5241
4	32.64	141.85	583.2	.9868	1.273	1.051	6113
5.							

NO.	R _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 133.809 Mcf/bbl.
1	.86	542	1.48	.911	A.P.I. Gravity of Liquid Hydrocarbons 53.4 @ 60° Deg.
2	.87	542	1.48	.910	Specific Gravity Separator Gas .617 Assumed
3	.87	536	1.47	.907	Specific Gravity Flowing Fluid XXXXX .640
4	.87	534	1.46	.905	Critical Pressure 671 P.S.I.A. 670 P.S.I.A.
5					Critical Temperature 365 R 372 R

P _e 3473.2 P _w 12063.1				(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.907$		(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.579$	
NO.	P _e	P _w	P _e ² - P _w ²				
1		3117.0	9715.7	2347.4			
2		2873.9	8259.3	3803.8			
3		2643.0	6985.4	5077.7			
4		2395.0	5736.0	6327.1			
5							

Absolute Oper. Flow 9,653 Mcfd @ 15.025		Angle of Slope θ 54.75°		Slope, n .708	
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Remarks: Well made 5.50 Bbls. of distillate during the test.			
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Approved By Commission:	Conducted By: Reston & Pagan	Calculated By: Reston & Pagan	Checked By:
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