

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

Form C-122 *File*

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 08/20/94			
Company Yates Petroleum Corp				Connection Gas Company of New Mexico					
Pool Strawn				Formation Burton Flat				Unit	
Completion Date 06/11/1994		Total Depth 11301		Plug Back TD 10275		Elevation 3184		Farm or Lease Name Lake Shore XH Federal	
Csg. Size 5.500	Wt. 20.000	d 4.778	Set At 11300	Perforations: From 9785 To 9831		Well No. 1			
Tbg. Size 2.875	Wt. 6.500	d 2.441	Set At 9693	Perforations: From 9785 To 9831		Unit F	Sec. 11	Twp. 21S	Rge. 263
Type Well Single				Packer Set At 9702		County Eddy			
Producing Thru Tubing		Resv. Temp. °F 188 @ 10980		Mean Temp. °F 62		Baro. Press. - Pa 13.2		State New Mexico	
L 9693	H 9693	Gg 0.602	%CO ₂ 0.724	%N ₂ 1.321	%H ₂ S 0.000	Prover 0.000	Meter Run 2.000	Taps Flange	

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	0.000	x	0.000	0	0.0	0	2750	0			0
1	2.067	x	1.500	1590	6.0	105	2300	62			24
2	2.067	x	1.500	1590	10.0	103	2063	62			24
3	2.067	x	1.500	1427	12.6	101	1827	62			24
4	2.067	x	1.500	1590	18.0	102	1590	62			24
5		x									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.760	98.1	1603.2	0.9593	1.289	1.087	1682
2	12.760	126.6	1603.2	0.9610	1.289	1.088	2178
3	12.760	134.5	1440.0	0.9627	1.289	1.083	2307
4	12.760	169.9	1603.2	0.9619	1.289	1.089	2927
5							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	0	Mcf/bbl.
					A P I Gravity of Liquid Hydrocarbons	0.000	Deg
1.	2.38	565	1.61	0.846	Specific Gravity Separator Gas	0.602	XXXXXXXXXX
2	2.38	563	1.60	0.844	Specific Gravity Flowing Fluid	XXXXXXXXXX	0.602
3	2.14	561	1.59	0.852	Critical Pressure	673	P.S.I.A. 673
4	2.38	562	1.60	0.843	Critical Temperature	352	°R 352
5							

P _c	2763.2	P _c	7635.3
NO.	P ₁	P _w	P _w
1.	5350.9	2319.1	5378.2
2	4310.6	2087.2	4356.3
3	3386.3	1854.2	3437.9
4	2570.3	1629.2	2654.1
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.329$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3936$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.807$

Absolute Open Flow	3936	Mcf/d @ 15.025	Angle of Slope	0 35	Slope, n	0.700
Remarks:						

Approved By Commission:	Conducted By: Ed Perry	Calculated By: Andrea Carpenter	Checked By:
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