

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

Form C-122

2157
F.16

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 09/14/1992			
Company Yates Petroleum Corp				Connection Yates Petroleum Corp				JAN 06 '95	
Pool Morrow				Formation Atoka West				Unit O. O. O.	
Completion Date 08/15/1992		Total Depth 9050		Plug Back TD 8998		Elevation 3404		Farm or Lease Name Vandiver AIM	
Csg. Size 5.500	Wt 17.000	d 4.892	Set At 9050	Perforations From 8813 To 8950		Well No. 1			
Tbg. Size 2.875	Wt 6.500	d 2.441	Set At 8773	Perforations From 8813 To 8950		Unit E	Sec. 17	Twp. 18S	Rge. 26E
Type Well Single						Packer Set At 8774		County Eddy	
Producing Thru Tubing		Resv. Temp. °F 151 @ 8725		Mean Temp. °F 62		Baro. Press. - Pa 13.2		State New Mexico	
L 8773	H 8773	Gg 0.624	%CO ₂ 0.378	%N ₂ 0.304	%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	2025	0			0
1.	2.067	x	1.250	1540	4.0	78	1910	62			24
2.	2.067	x	1.250	1300	10.1	75	1787	62			24
3.	2.067	x	1.250	1540	21.0	72	1663	62			24
4.	2.067	x	1.250	1540	30.0	70	1540	62			24
5.		x									

RATE OF FLOW CALCULATIONS							
NO	Coefficient (24 Hour)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	8.120	78.8	1553.2	0.9831	1.266	1.123	894
2.	8.120	115.3	1312.7	0.9859	1.266	1.110	1297
3.	8.120	180.6	1553.2	0.9887	1.266	1.130	2073
4.	8.120	215.9	1553.2	0.9905	1.266	1.132	2488
5.							

NO	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio 110	Mcf/bbl.
1	2.31	538	1.48	0.793	A.P.I. Gravity of Liquid Hydrocarbons 57.700	Deg
2	1.95	535	1.48	0.812	Specific Gravity Separator Gas 0.624	XXXXXXXXXX
3	2.31	532	1.47	0.784	Specific Gravity Flowing Fluid XXXXXXXXXX	0.651
4	2.31	530	1.46	0.781	Critical Pressure 672	PSIA
5.					Critical Temperature 362	°R

Pc	2038.2	Pc ²	4154.3
NO	Pt ²	Pw	Pw ²
1.	3698.7	1924.9	3705.3
2.	3240.7	1804.1	3254.8
3.	2809.6	1687.0	2845.8
4.	2412.4	1570.1	2465.1
5.			

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 3.175$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 5081$

(2) $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2.451$

Absolute Open Flow 5081	Mcf/d @ 15.025	Angle of Slope 0 38	Slope, n 0.776
----------------------------	----------------	------------------------	-------------------

Remarks:

Approved By Commission:	Conducted By: Dyke Dodson	Calculated By: Andrea Carpenter	Checked By:
-------------------------	------------------------------	------------------------------------	-------------