

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

Form C-122 *dist. File*

RECEIVED

NOV 14 1991

Type Test [x] Initial [] Annual [] Special				Test Date 10/20/90		O. C. D. ARTESIA OFFICE	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Fusselman				Formation Diablo		Unit	
Completion Date 10/22/90		Total Depth 6410.0'		Plug Back TD 6395.0'		Elevation 3822.0'	
Farm or Lease Name Pathfinder AFT St.							
Csg Size 7.625"	Wt. 26.400#	d 6.969"	Set At 6410.0'	Perforations: From 6295.0' To 6378.0'		Well No. 9	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 6254.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge N 21 10S 27E	
Type Well Single				Packer Set At 6342.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 126 @ 6250'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 6254.0'	H 6254.0'	Gg .665	%CO2 1.28	%N2 5.14	%H2S 0.00	Prover 0.000"	Meter Run 2.000"
						Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000 X 0.000	0	0.0	64	1900	0	0	0	0 hrs.
1.	4.026 X 1.625	410	13.2	71	1735	62	0	0	24 hrs.
2.	4.026 X 1.625	420	22.5	67	1631	62	0	0	24 hrs.
3.	4.026 X 1.625	430	34.8	64	1547	62	0	0	24 hrs.
4.	4.026 X 1.625	440	41.0	67	1500	62	0	0	24 hrs.
5.	0.000 X 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	√hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	12.786	74.74	423.20	.990	1.226	1.035	1200
2.	12.786	98.73	433.20	.993	1.226	1.037	1594
3.	12.786	124.19	443.20	.996	1.226	1.038	2014
4.	12.786	136.31	453.20	.993	1.226	1.038	2204
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	84.820 Mcf/bbl.
1.	.63	531	1.47	.934	A.P.I. Gravity of Liquid Hydrocarbons	42.000 Deg.
2.	.65	527	1.46	.931	Specific Gravity Separator Gas	.665
3.	.66	524	1.45	.928	Specific Gravity Flowing Fluid	xxxxxx
4.	.68	527	1.46	.927	Critical Pressure	666.7 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	360.9°R

Pc	1913.2	Pc²	3660.3	
NO	Pt²	Pw	Pw²	Pc²-Pw²
1.	3056.2	1750.8	3065.4	594.9
2.	2703.4	1649.2	2719.8	940.5
3.	2434.2	1568.7	2460.7	1199.7
4.	2289.8	1523.7	2321.6	1338.7
5.	0.0	0.0	0.0	0.0

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.7197}{2.1089} \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.1089$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4649 \text{ Mcfd}$$

Absolute Open Flow 4649 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .746
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
--------------	-------------------------------	------------------------------------	-------------