NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File

JUL 22 1983

O. C. D.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 5/28/83
Company: Yates Petroleum Corporation			Connection: Transwestern Pipeline Company	
Pool: 4/1/96 Abo pool - 82730 Pecos Slope Abo			Formation: Abo	Unit
Completion Date: 4/8/82	Total Depth: 4550.0'		Plug Back TD: 4469.0'	Elevation: 3515.0'
Farm or Lease Name: McCrea "SF" Com				
Csg Size: 4.500" / Wt.: 9.500# / d: 4.090" / Set At: 4550.0'			Perforations: From 3850.0' To 4252.0'	Well No.: 1
Tbg Size: 2.875" / Wt.: 6.500# / d: 2.441" / Set At: 3804.0'			Perforations: From 0.0' To 0.0'	Unit: C / Sec: 14 / Twp: 9S / Rge: 25E
Type Well: Single			Packer Set At: 3804.0'	County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 91 @ 3804'	Mean Temp. °F: 62.0	Baro. Press. - Pa: 13.2 psia.	State: New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
3804.0'	3804.0'	.681	1.99	9.23	0.00	0.000"	2.000"	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
NO	Prover Size	Orifice Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	Duration of Flow
SI	0.000	x 0.000	0	0.0	0	1010	0	0	0	0 hrs.
1.	2.067	x .625	120	16.0	70	850	62	0	0	24 hrs.
2.	2.067	x .625	130	26.0	70	690	62	0	0	2, hrs.
3.	2.067	x .625	130	33.0	70	460	62	0	0	24 hrs.
4.	2.067	x .625	130	34.0	70	405	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)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	1.366	46.16	133.20	.991	1.212	1.010	104
2.	1.366	61.02	143.20	.991	1.212	1.011	138
3.	1.366	68.74	143.20	.991	1.212	1.011	156
4.	1.366	69.78	143.20	.991	1.212	1.011	158
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.20	530	1.50	.980
2.	.22	530	1.50	.979
3.	.22	530	1.50	.979
4.	.22	530	1.50	.979
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0.000 Deg.
Specific Gravity Separator Gas: .681 xxxxxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx .681
Critical Pressure: 662.3 PSIA 662.3 PSIA
Critical Temperature: 353.6°R 353.6°R

Pc 1023.2 Pc^2 1046.9

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	745.1	863.2	745.2	301.8
2.	494.5	703.3	494.6	552.4
3.	223.9	473.3	224.0	822.9
4.	174.9	418.3	175.0	871.9
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2} = 3.4693$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 1.8626$

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n =$ 195 Mcfd

Absolute Open Flow: 195 Mcfd @ 15.025 | Angle of Slope, θ: 27 | Slope, n: .500

Remarks:

Approved By:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andie Carpenter	