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File

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

Form C-122

RECEIVED
MAY 04 '88
O. C. D.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 2/13/88	
Company: Yates Petroleum Corporation		Connection: Transwestern Pipeline Company			
Pool: Springer Basin		Formation: Atoka Morrow			Unit
Completion Date: 11/22/88	Total Depth: 8420.0'		Plug Back TD: 8379.0'	Elevation: 3432.8'	Farm or Lease Name: Long Arroyo MQ Fed
Csg Size: 5.500" / Wt.: 14.000# / d: 5.012" / Set At: 8420.0'			Perforations: From 8211.0' To 8221.0'		Well No.: 2
Tbg Size: 2.875" / Wt.: 6.500# / d: 2.441" / Set At: 8196.0'			Perforations: From 0.0' To 0.0'		Unit: A / Sec: 26 / Twp: 14S / Rge: 27E
Type Well: Single			Packer Set At: 8196.0'		County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 162 @ 8178'	Mean Temp. °F: 62.0	Baro. Press. - Pa: 13.2 psia.		State: New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
8196.0'	8196.0'	.645	1.00	.55	0.00	0.000"	2.000"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Orifice Size X 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	38	2050	0	0	0	0 hrs.
1.	2.067 X 1.375	520	11.2	38	1675	62	0	0	24 hrs.
2.	2.067 X 1.375	490	12.2	38	1630	62	0	0	24 hrs.
3.	2.067 X 1.375	460	16.0	38	1600	62	0	0	24 hrs.
4.	2.067 X 1.375	430	19.0	38	1570	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.	10.204	77.28	533.20	1.022	1.245	1.060	1064
2.	10.204	78.35	503.20	1.022	1.245	1.056	1075
3.	10.204	87.01	473.20	1.022	1.245	1.053	1189
4.	10.204	91.76	443.20	1.022	1.245	1.049	1250
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.79	498	1.35	.890
2.	.75	498	1.35	.896
3.	.70	498	1.35	.902
4.	.66	498	1.35	.909
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio 63.980 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 51.700 Deg.
Specific Gravity Separator Gas .645 xxxxxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .693
Critical Pressure 673.8 PSIA 672.2 PSIA
Critical Temperature 367.6°R 383.3°R

Pc 2063.2 Pc^2 4256.8

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	2850.0	1691.0	2859.3	1397.5
2.	2700.1	1646.1	2709.7	1547.1
3.	2602.4	1616.8	2614.2	1642.6
4.	2506.5	1587.3	2519.6	1737.2
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2}$ = 2.4377 (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$ = 1.9162

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$ = 2395 Mcfd

Absolute Open Flow 2395 Mcfd @ 15.025 | Angle of Slope, θ 36 | Slope, n .730

Remarks:

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