

451 F.10

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

Form C-122

AUG 11 1983

Type Test [x] Initial [] Annual [] Special					Test Date 5/30/83		O. C. D. ARTESIA, OFFICE		
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company					
Pool Nimenim Ridge <i>h. 11400</i>				Formation Morrow			Unit		
Completion Date 2/22/83		Total Depth 12055.0'		Plug Back TD 11976.0'		Elevation 3484.7'		Farm or Lease Name Benson Deep Unit	
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 12055.0'	Perforations: From 11843.0' To 11853.0'			Well No. 3		
Tbg Size 2.875"	Wt. 5.500#	d 2.441"	Set At 11807.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge B 33 18S 30E		
Type Well Single					Packer Set At 11807.0'		County Eddy		
Producing thru Tubing		Resv. Temp. °F 178 @ 11790'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico	
L 11807.0'	H 11807.0'	Gg .666	%CO2 .60	%H2 .58	%H2S 0.00	Prover 0.000"	Meter Run 2.000"	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice 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	72	3050	0	0	0	0 hrs.
1.	2.067	x 1.000	400	35.0	72	2350	62	0	0	24 hrs.
2.	2.067	x 1.000	410	44.9	72	2155	62	0	0	24 hrs.
3.	2.067	x 1.000	420	54.7	72	1783	62	0	0	24 hrs.
4.	2.067	x 1.000	440	75.1	72	1588	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)	1/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.347	120.26	413.20	.989	1.225	1.038	748
2.	4.347	137.85	423.20	.989	1.225	1.039	859
3.	4.347	153.94	433.20	.989	1.225	1.040	960
4.	4.347	184.49	453.20	.989	1.225	1.042	1153
5.	0.300	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	27.000 Mcf/bbl.
1.	.62	532	1.42	.927	A.P.I. Gravity of Liquid Hydrocarbons	58.200 Deg.
2.	.63	532	1.42	.926	Specific Gravity Separator Gas	.666 xxxxxxxxxxxxxx
3.	.65	532	1.42	.924	Specific Gravity Flowing Fluid	.770 xxxxxx
4.	.68	532	1.42	.920	Critical Pressure	671.3 PSIA 667.7 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	375.2°R 343.3°R

Pc 3063.2	Pc2 9383.2		
NO	Pt2	Pw	Pw2
1.	5584.7	2364.8	5592.4
2.	4701.1	2170.5	4711.1
3.	3226.3	1799.7	3238.8
4.	2563.8	1606.9	2582.0
5.	0.0	0.0	0.0

$$P_{c2} - P_{w2}^{(1)} = \frac{P_{c2}}{P_{c2} - P_{w2}} = 1.3724 \quad (2) \left[\frac{P_{c2}}{P_{c2} - P_{w2}} \right]^n = 1.2656$$

$$AOF = Q \left[\frac{P_{c2}}{P_{c2} - P_{w2}} \right]^n = 1459 \text{ Mcfd}$$

Absolute Open Flow 1459 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .744

Remarks: _____

Approved By:	Conducted By: Ed Perry	Calculated By: Andie Carpenter	Checked By:
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