

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

APR 22 '88

CLSF
File

Type Test [x] Initial [] Annual [] Special					Test Date 3/2/88		O. C. D.	
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company		ARTESIA OFFICE	
Pool Pecos Slope ACO					Formation Abo		Unit	
Completion Date 4/7/84		Total Depth 4350.0'		Plug Back TD 4299.0'		Elevation 4020.1'		Farm or Lease Name Monaghan OY Fed
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4350.0'	Perforations: From 3680.5' To 3816.0'		Well No. 11		
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3660.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge C 34 5S 24E		
Type Well Single					Packer Set At 3660.0'		County Chaves	
Producing Thru Tubing		Resu. Temp. °F 89 @ 749'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 3660.0'	H 3660.0'	Gg .650	%CO2 .02	%N2 5.47	%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	40	749	0	0	0	0 hrs.
1.	2.067 X 1.375	155	12.5	40	696	62	0	0	24 hrs.
2.	2.067 X 1.375	155	20.4	40	675	62	0	0	24 hrs.
3.	2.067 X 1.375	145	36.1	40	648	62	0	0	24 hrs.
4.	2.067 X 1.375	140	42.0	40	630	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. Fpu	Rate of Flow Q, Mcfd
1.	10.204	45.85	168.20	1.020	1.240	1.016	601
2.	10.204	58.58	168.20	1.020	1.240	1.016	768
3.	10.204	75.57	158.20	1.020	1.240	1.015	990
4.	10.204	80.21	153.20	1.020	1.240	1.014	1050
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio Dry	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.25	500	1.40	.969	0.000 Mcf/bbl.	0.000 Deg.	.650	.650	661.2 PSIA	357.2°R
2.	.25	500	1.40	.969						
3.	.24	500	1.40	.971						
4.	.23	500	1.40	.972						
5.	0.00	0	0.00	0.000						

Pc	762.2	Pc2	580.9
NO	Pt2	Pw	Pw2
1.	503.0	712.3	507.4
2.	473.6	693.5	480.9
3.	437.2	670.3	449.3
4.	413.7	653.8	427.4
5.	0.0	0.0	0.0

$ROF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2881 \text{ Mcfd}$	
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Absolute Open Flow	2881 Mcfd @ 15.025	Angle of Slope, 0	37	Slope, n	.756
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Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 4/22/88

COMPANY Yates Petroleum Corporation LEASE Monaghan QY Fed WELL NO. 11

LOCATION: Unit C Section 34 Township 5S Range 24E

L 3660.0 H 3660.0 L/H 1.000 G .650 %CO₂ .02 %N₂ 5.47 %H₂S 0.00

d 1.995 Fr .017777 GH 2379.0 Pcr 661.2 Tcr 357.2

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.601	.768	.990	1.050	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	549.0	549.0	549.0	549.0	0.0
4 T=(Tw+Ts)/2	535.5	535.5	535.5	535.5	0.0
5 Z(Est.)	.892	.895	.898	.901	0.000
6 TZ	477.5	479.0	481.0	482.3	0.0
7 GH/TZ	4.983	4.966	4.946	4.932	0.000
8 e ^s (Table XIV)	1.205	1.205	1.204	1.203	0.000
9 1-e ^{-s} (Table XIV)	.170	.170	.169	.169	0.000
10 Pt	709.2	688.2	661.2	643.2	0.0
11 Pt ² /1000	503.0	473.6	437.2	413.7	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.493	8.520	8.550	8.578	0.000
14 FcQm	5.105	6.543	8.463	9.007	0.000
15 L/H(FcQm) ²	26.062	42.805	71.614	81.125	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	4.439	7.270	12.124	13.694	0.000
17 Pw ² =Pt ² +Fw	507.4	480.9	449.3	427.4	0.0
18 Ps ² =e ^s Pw ²	611.6	579.3	540.9	514.2	0.0
19 Ps	782.0	761.1	735.4	717.1	0.0
20 P=(Pt+Ps)/2	745.6	724.7	698.3	680.1	0.0
21 Pr=(P/Pcr)	1.13	1.10	1.06	1.03	0.00
22 Tr=(T/Tcr)	1.50	1.50	1.50	1.50	0.00
23 Z(Table XI)	.892	.895	.898	.901	0.000

Company	Yates Petroleum Corporation
Well	Monaghan QY Fed No. 11
Location	C, 34-5S-24E
County	Chaves
Date	4/22/88

