

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

RECEIVED

clsp
File

JAN 23 '90

Type Test [x] Initial [] Annual [] Special		Test Date 1/4/89	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Company	
Pool West Pecos Slope		Formation Abo	
Completion Date 9/17/83		Total Depth 3308.0'	
Csg Size 4.500" 9.500#		Plug Back TD 3196.0'	
Tbg Size 1.375" 4.700#		Elevation 3965.1'	
Set At 3308.0'		Perforations: From 2822.0' To 3115.0'	
Set At 2794.0'		Perforations: From 0.0' To 0.0'	
Packer Set At 2794.0'		Farm or Lease Name Blazer XN State	
Unit O. C. D. ARTESIA, OFFICE		Well No. 2	
County Chaves		Unit Sec Twp Rge M 16 7S 23E	
State New Mexico		Taps Flange	
Producing Thru Tubing		Resv. Temp. °F 90 @ 2988'	
Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 2794.0'		H 2794.0'	
Gg .603		%CO2 .01	
%N2 7.62		%H2S 0.00	
Prover 0.000"		Meter Run 2.000"	
Casing Data		Duration of Flow	

NO	FLOW DATA			TUBING DATA		CASING DATA		Duration of Flow
	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	
SI	0.000 X 0.000	0	0.0	61	1000	0	0	0 hrs.
1.	2.067 X .750	230	35.4	63	737	62	0	24 hrs.
2.	2.067 X .750	240	39.8	62	647	62	0	24 hrs.
3.	2.067 X .750	270	48.9	61	612	62	0	24 hrs.
4.	2.067 X .750	270	58.0	65	550	62	0	24 hrs.
5.	0.000 X 0.000	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.	2.709	92.79	243.20	.997	1.288	1.016	328
2.	2.709	100.39	253.20	.998	1.288	1.016	355
3.	2.709	117.68	283.20	.999	1.288	1.019	418
4.	2.709	128.16	283.20	.995	1.288	1.018	453
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

Gas Liquid Hydrocarbon Ratio _____ Dry Mcf/bbl.
 A.P.I. Gravity of Liquid Hydrocarbons _____ 0.000 Deg.
 Specific Gravity Separator Gas .603 xxxxxxxxxxxxxxxx
 Specific Gravity Flowing Fluid xxxxxx .603
 Critical Pressure _____ 659.2 PSIA
 Critical Temperature _____ 335.6°R

Pc 1013.2	Pc2 1026.6	Pw2 563.8	Pc2-Pw2 462.8	(1) $\frac{Pc2}{Pc2-Pw2} = 1.4533$	(2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 1.3308$
NO	Pt2	Pw	Pw2	Pc2-Pw2	
1.	562.8	750.9	563.8	462.8	
2.	435.9	661.1	437.0	589.5	
3.	390.9	626.5	392.5	634.1	
4.	317.2	564.9	319.1	707.5	
5.	0.0	0.0	0.0	0.0	

$$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 603 \text{ Mcfd}$$

Absolute Open Flow 603 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .764
 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 1/22/90

COMPANY Yates Petroleum Corporation LEASE Blazer XN State WELL NO. 2

LOCATION: Unit M Section 16 Township 7S Range 23E

L 2794.0 H 2794.0 L/H 1.000 G .603 %CO₂ .01 %N₂ 7.62 %H₂S 0.00

d 1.995 Fr .017777 GH 1684.8 Pcr 659.2 Tcr 335.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.328	.355	.418	.453	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	550.0	550.0	550.0	550.0	0.0
4 T=(Tw+Ts)/2	536.0	536.0	536.0	536.0	0.0
5 Z(Est.)	.911	.921	.924	.932	0.000
6 TZ	488.1	493.4	495.5	499.3	0.0
7 GH/TZ	3.452	3.415	3.400	3.374	0.000
8 e ^S (Table XIV)	1.138	1.137	1.136	1.135	0.000
9 1-e ^{-S} (Table XIV)	.121	.120	.120	.119	0.000
10 Pt	750.2	660.2	625.2	563.2	0.0
11 Pt ² /1000	562.8	435.9	390.9	317.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.679	8.773	8.809	8.878	0.000
14 FcQm	2.845	3.117	3.681	4.023	0.000
15 L/H(FcQm) ²	8.094	9.717	13.549	16.183	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-S})	.983	1.168	1.622	1.923	0.000
17 Pw ² =Pt ² +Fw	563.8	437.0	392.5	319.1	0.0
18 Ps ² =e ^S Pw ²	641.7	496.7	445.9	362.2	0.0
19 Ps	801.0	704.8	667.7	601.8	0.0
20 P=(Pt+Ps)/2	775.6	682.5	646.5	582.5	0.0
21 Pr=(P/Pcr)	1.18	1.04	.98	.88	0.00
22 Tr=(T/Tcr)	1.60	1.60	1.60	1.60	0.00
23 Z(Table XI)	.911	.921	.924	.932	0.000

Company
Well
Location
County
Date

Blazer XN State No. 2
M, 16-7S-23E
Chaves
1/22/90

$P_c^2 - P_w^2$, THOUSANDS

