

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

Form C-122

RECEIVED

Type Test [y] Initial [] Annual [] Special					Test Date 6/3/88		JUL 22 '88	
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company					
Pool Pecos Slope <i>ABO</i>			Formation Abo			Unit ARTESIA, OFFICE		
Completion Date 3/15/83		Total Depth 4300.0'		Plug Back TD 4260.0'		Elevation 3813.3'		Farm or Lease Name Blythe SV
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4300.0'	Perforations: From 3658.0' To 3820.0'		Well No. 1		
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3627.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge N 9 SS 25E		
Type Well Single				Packer Set At 3627.0'		County Chaves		
Producing Thru Tubing		Resv. Temp. °F 108 @ 3627'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 3627.0'	H 3627.0'	Gg .654	%CO2 .02	%N2 7.11	%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	87	887	0	0	0	0 hrs.
1.	3.068 X 1.000	120	2.0	87	623	62	0	0	24 hrs.
2.	3.068 X 1.000	100	4.3	87	538	62	0	0	24 hrs.
3.	3.068 X 1.000	100	6.1	87	399	62	0	0	24 hrs.
4.	3.068 X 1.000	100	8.0	88	210	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.	4.788	16.32	133.20	.975	1.237	1.009	95
2.	4.788	22.06	113.20	.975	1.237	1.008	128
3.	4.788	26.28	113.20	.975	1.237	1.008	153
4.	4.788	30.09	113.20	.974	1.237	1.008	175
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	Mcf/bbl.
1.	.20	547	1.55	.982	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.17	547	1.55	.985	Specific Gravity Separator Gas	.654 xxxxxxxxxxxxxx
3.	.17	547	1.55	.985	Specific Gravity Flowing Fluid	xxxxxx .654
4.	.17	548	1.55	.985	Critical Pressure	658.3 PSIA 658.3 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	353.9°R 353.9°R

Pc	900.2	Pc2	810.4
NO	Pt2	Pw	Pw2
1.	404.8	636.3	404.9
2.	303.8	551.4	304.0
3.	169.9	412.6	170.2
4.	49.8	224.1	50.2
5.	0.0	0.0	0.0

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 183 \text{ Mcfd}$$

Absolute Open Flow	183 Mcfd @ 15.025	Angle of Slope, θ	37	Slope, n	.761
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Remarks:

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

Adopted 9-1-65

DATE 7/19/88

COMPANY Yates Petroleum Corporation LEASE Blythe SV WELL NO. 1

LOCATION: Unit N Section 9 Township 5S Range 25E

L 3627.0 H 3627.0 L/H 1.000 G .654 %CO₂ .02 %N₂ 7.11 %H₂S 0.00

d 1.995 Fr .017777 GH 2372.1 Pcr 658.3 Tcr 353.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.095	.128	.153	.175	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	568.0	568.0	568.0	568.0	0.0
4 T=(Tw+Ts)/2	545.0	545.0	545.0	545.0	0.0
5 Z(Est.)	.911	.923	.942	.970	0.000
6 TZ	496.7	502.9	513.4	528.4	0.0
7 GH/TZ	4.776	4.717	4.620	4.489	0.000
8 e ^s (Table XIV)	1.196	1.193	1.189	1.183	0.000
9 1-e ^{-s} (Table XIV)	.164	.162	.159	.155	0.000
10 Pt	636.2	551.2	412.2	223.2	0.0
11 Pt ² /1000	404.8	303.8	169.9	49.8	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.829	8.943	9.129	9.394	0.000
14 FcQm	.840	1.148	1.396	1.643	0.000
15 L/H(FcQm) ²	.705	1.318	1.947	2.700	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.116	.214	.310	.418	0.000
17 Pw ² =Pt ² +Fw	404.9	304.0	170.2	50.2	0.0
18 Ps ² =e ^s Pw ²	484.3	362.8	202.4	59.4	0.0
19 Ps	695.9	602.4	449.9	243.8	0.0
20 P=(Pt+Ps)/2	666.1	576.8	431.1	233.5	0.0
21 Pr=(P/Pcr)	1.01	.88	.65	.35	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
23 Z(Table XI)	.911	.923	.942	.970	0.000

Company	Yates Petroleum Corporation
Well	Blythe SV No. 1
Location	N, 9-5S-25E
County	Chaves
Date	7/19/88

