

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

Form C-122

clst
File

RECEIVED

Type Test [x] Initial [] Annual [] Special					Test Date 1/04/89		APR - 9 1991	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company				O. C. O.
Pool Abo				Formation West Pecos Slope				Unit ARTESIA, OFFICE
Completion Date 4/15/83		Total Depth 3325.0'		Plug Back TD 3253.0'		Elevation 3902.2'		Farm or Lease Name Bajillo Draw WD St
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 3309.0'	Perforations: From 2825.0' To 2969.0'			Well No. 2	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 2795.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge J 28 7S 23E	
Type Well Single					Packer Set At 2795.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 98 @ 2794'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 2795.0'	H 2795.0'	Gg .612	%CO2 .02	%N2 7.27	%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	52	1010	0	0	0	0 hrs.
1.	2.067 X	.625	280	35.0	38	750	62	0	0	24 hrs.
2.	2.067 X	.625	280	45.6	42	695	62	0	0	24 hrs.
3.	2.067 X	.625	280	59.9	46	549	62	0	0	24 hrs.
4.	2.067 X	.625	290	70.4	52	535	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)	$\sqrt{hwP_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	1.866	101.30	293.20	1.022	1.278	1.024	253
2.	1.866	115.63	293.20	1.018	1.278	1.023	287
3.	1.866	132.52	293.20	1.014	1.278	1.023	328
4.	1.866	146.10	303.20	1.008	1.278	1.022	359
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.	.44	498	1.47	.954	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.44	502	1.48	.955	Specific Gravity Separator Gas	.612	xxxxxxxxxxxxxx
3.	.44	506	1.49	.956	Specific Gravity Flowing Fluid	xxxxxx	.612
4.	.46	512	1.51	.957	Critical Pressure	659.5 PSIA	659.5 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	339.6°R	339.6°R

Pc	1023.2	Pc ²	1046.9	
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²
1.	582.5	763.6	583.1	463.9
2.	501.5	708.7	502.3	544.6
3.	316.1	563.1	317.1	729.8
4.	300.5	549.3	301.8	745.2
5.	0.0	0.0	0.0	0.0

$$ROF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 462 \text{ Mcfd}$$

Absolute Open Flow 462 Mcfd @ 15.025 Angle of Slope, θ 36 Slope, n .736

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 4/5/91

COMPANY Yates Petroleum Corporation LEASE Bajillo Draw WQ St WELL NO. 2

LOCATION: Unit J Section 28 Township 7S Range 23E

L 2795.0 H 2795.0 L/H 1.000 G .612 %CO₂ .02 %N₂ 7.27 %H₂S 0.00

d 1.995 Fr .017777 GH 1710.5 Pcr 659.5 Tcr 339.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.253	.287	.328	.359	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	558.0	558.0	558.0	558.0	0.0
4 T=(Tw+Ts)/2	540.0	540.0	540.0	540.0	0.0
5 Z(Est.)	.908	.914	.931	.932	0.000
6 TZ	490.2	493.5	502.6	503.5	0.0
7 GH/TZ	3.489	3.466	3.403	3.397	0.000
8 e ^s (Table XIV)	1.140	1.139	1.136	1.136	0.000
9 1-e ^{-s} (Table XIV)	.123	.122	.120	.120	0.000
10 Pt	763.2	708.2	562.2	548.2	0.0
11 Pt ² /1000	582.5	501.5	316.1	300.5	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.717	8.775	8.936	8.951	0.000
14 FcQm	2.204	2.521	2.928	3.214	0.000
15 L/H(FcQm) ²	4.857	6.354	8.575	10.330	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.596	.774	1.027	1.236	0.000
17 Pw ² =Pt ² +Fw	583.1	502.3	317.1	301.8	0.0
18 Ps ² =e ^s Pw ²	664.6	572.0	360.3	342.8	0.0
19 Ps	815.2	756.3	600.2	585.5	0.0
20 P=(Pt+Ps)/2	789.2	732.3	581.2	566.8	0.0
21 Pr=(P/Pcr)	1.20	1.11	.88	.86	0.00
22 Tr=(T/Tcr)	1.59	1.59	1.59	1.59	0.00
23 Z(Table XI)	.908	.914	.931	.932	0.000

Company	Yates Petroleum Corporation
Well	Bajillo Draw WQ St No. 2
Location	J, 28-7S-23E
County	Chaves
Date	4/5/91

