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Type Test [x] Initial [] Annual [] Special				Test Date 4/10/84		JUN 08 1984 O. C. D. ARTESIA, OFFICE	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Pecos Slope Abo				Formation Abo		Unit	
Completion Date 5/21/83		Total Depth 4200.0'		Plug Back TD 4167.0'		Elevation 3655.9'	
Farm or Lease Name Sorenson "IB" Fed				Well No. 3			
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4200.0'	Perforations: From 3660.0' To 3799.0'		Unit Sec Twp Rge K 6 7S 26E	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3626.0'	Perforations: From 0.0' To 0.0'		County Chaves	
Type Well Single				Packer Set At 3626.0'		State New Mexico	
Producing Thru Tubing		Resv. Temp. °F 104 @ 3620'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 3626.0'	H 3626.0'	Gg .639	%CO2 .01	%N2 4.77	%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	0	986	0	0	0	0 hrs.
1.	2.067 X 1.000	155	21.1	68	919	62	0	0	24 hrs.
2.	2.067 X 1.000	145	33.0	68	869	62	0	0	24 hrs.
3.	2.067 X 1.000	140	78.3	68	827	62	0	0	24 hrs.
4.	2.067 X 1.000	140	99.0	69	795	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.	4.947	59.57	168.20	.992	1.251	1.012	370
2.	4.947	72.25	158.20	.992	1.251	1.011	449
3.	4.947	109.52	153.20	.992	1.251	1.011	680
4.	4.947	123.15	153.20	.991	1.251	1.011	764
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.	.25	528	1.49	.976	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.24	528	1.49	.978	Specific Gravity Separator Gas	.639
3.	.23	528	1.49	.979	Specific Gravity Flowing Fluid	.639
4.	.23	529	1.49	.979	Critical Pressure	662.7 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	355.5°R

Pc 999.2 Pc2 998.4		Pw 998.4		Pw2 998.4		Pc2-Pw2 (1)		Pc2-Pw2 (2)	
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2	Pw2	Pc2-Pw2 (2)	Pc2	Pw2
1.	869.0	933.1	870.6	127.8	2.9639	870.6	127.8	2.2495	870.6
2.	778.3	883.6	780.7	217.7		780.7	217.7		780.7
3.	705.9	843.5	711.5	286.9		711.5	286.9		711.5
4.	653.2	812.6	660.2	338.2		660.2	338.2		660.2
5.	0.0	0.0	0.0	0.0		0.0	0.0		0.0

$$ROF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1718 \text{ Mcfd}$$

Absolute Open Flow 1718 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .746
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andie Carpenter	Checked By:
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Adopted 9-1-65

DATE 6/7/84

COMPANY Yates Petroleum Corporation LEASE Sorenson "IB" Fed WELL NO. 3LOCATION: Unit K Section 6 Township 7S Range 26EL 3626.0 H 3626.0 L/H 1.000 G .639 %CO₂ .01 %N₂ 4.77 %H₂S 0.00d 1.995 Fr .017777 GH 2317.0 Pcr 662.7 Tcr 355.5

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.370	.449	.680	.764	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	564.0	564.0	564.0	564.0	0.0
4 T=(Tw+Ts)/2	543.0	543.0	543.0	543.0	0.0
5 Z(Est.)	.871	.877	.882	.886	0.000
6 TZ	472.7	476.1	478.9	481.1	0.0
7 GH/TZ	4.901	4.867	4.838	4.816	0.000
8 e ^s (Table XIV)	1.202	1.200	1.199	1.198	0.000
9 1-e ^{-s} (Table XIV)	.168	.167	.166	.165	0.000
10 Pt	932.2	882.2	840.2	808.2	0.0
11 Pt ² /1000	869.0	778.3	705.9	653.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.410	8.470	8.514	8.553	0.000
14 FcQm	3.115	3.801	5.789	6.533	0.000
15 L/H(FcQm) ²	9.702	14.448	33.515	42.677	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	1.628	2.409	5.561	7.051	0.000
17 Pw ² =Pt ² +Fw	870.6	780.7	711.5	660.2	0.0
18 Ps ² =e ^s Pw ²	1046.1	936.9	853.0	790.9	0.0
19 Ps	1022.8	967.9	923.6	889.3	0.0
20 P=(Pt+Ps)/2	977.5	925.1	881.9	848.8	0.0
21 Pr=(P/Pcr)	1.48	1.40	1.33	1.28	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.871	.877	.882	.886	0.000

Company	Yates Petroleum Corporation
Well	Sorenson "IB" Fed No. 3
Location	K, 6-7S-26E
County	Chaves
Date	6/7/84

