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Type Test [x] Initial [] Annual [] Special					Test Date 5/6/88			
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company		APR 10 '89	
Pool <u>Floor Ranch</u>					Formation Floor Ranch		Unit C 25 9S 26E	
Completion Date 2/16/88		Total Depth 6150.0'		Plug Back TD 6138.0'		Elevation 3805.7'		Farm or Lease Name Ibis XU State Com
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set Rt 6150.0'	Perforations: From 5151.0' To 5246.0'		Well No. 2		
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set Rt 5792.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge C 25 9S 26E		
Type Well Single					Packer Set Rt 5792.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 164 @ 5243'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 5792.0'	H 5792.0'	Gg .645	%CO2 .32	%N2 3.69	%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	90	1030	0	0	0	0 hrs.
1.	2.067 X 1.000	247	26.5	89	929	62	0	0	24 hrs.
2.	2.067 X 1.000	247	51.0	92	873	62	0	0	24 hrs.
3.	2.067 X 1.000	280	73.0	90	819	62	0	0	24 hrs.
4.	2.067 X 1.000	280	80.0	83	780	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 P _m	Flow Temp Factor F _t	Gravity Factor F _g	Super Compress. Fact. F _{pv}	Rate of Flow Q, Mcfd
1.	4.947	83.04	260.20	.973	1.245	1.018	507
2.	4.947	115.20	260.20	.971	1.245	1.018	701
3.	4.947	146.30	293.20	.972	1.245	1.020	894
4.	4.947	153.15	293.20	.979	1.245	1.021	943
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.	.39	549	1.53	.965	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.39	552	1.53	.966	Specific Gravity Separator Gas .645 xxxxxxxxxxxxxxx
3.	.44	550	1.53	.960	Specific Gravity Flowing Fluid xxxxx .645
4.	.44	543	1.51	.959	Critical Pressure 665.6 PSIA 665.6 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 360.0°R 360.0°R

Pc 1043.2 Pc² 1088.3

NO	Pt ²	Pw	Pw ²	Pc ² -Pw ² (1)	$\frac{Pc^2}{Pc^2-Pw^2} = \frac{2.4189}{Pc^2-Pw^2}$	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{1.9464}{Pc^2-Pw^2}$
1.	887.7	943.1	889.5	198.8		
2.	785.4	888.1	788.7	299.5		
3.	692.6	835.5	698.1	390.2		
4.	629.2	797.1	635.4	452.9		
5.	0.0	0.0	0.0	0.0		

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1835 \text{ Mcfd}$$

Absolute Open Flow 1835 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .754
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 4/6/89

COMPANY Yates Petroleum Corporation LEASE Ibis XU State Com WELL NO. 2

LOCATION: Unit C Section 25 Township 9S Range 26E

L 5792.0 H 5792.0 L/H 1.000 G .645 %CO₂ .32 %N₂ 3.69 %H₂S 0.00

d 2.441 Fr .010495 GH 3735.8 Pcr 665.6 Tcr 360.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.507	.701	.894	.943	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	624.0	624.0	624.0	624.0	0.0
4 T=(Tw+Ts)/2	573.0	573.0	573.0	573.0	0.0
5 Z(Est.)	.886	.892	.898	.902	0.000
6 TZ	507.9	511.2	514.5	517.0	0.0
7 GH/TZ	7.355	7.307	7.261	7.226	0.000
8 e ^s (Table XIV)	1.318	1.315	1.313	1.311	0.000
9 1-e ^{-s} (Table XIV)	.241	.240	.238	.237	0.000
10 Pt	942.2	886.2	832.2	793.2	0.0
11 Pt ² /1000	887.7	785.4	692.6	629.2	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	5.330	5.365	5.400	5.426	0.000
14 FcQm	2.702	3.761	4.829	5.116	0.000
15 L/H(FcQm) ²	7.298	14.143	23.316	26.177	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	1.759	3.390	5.557	6.214	0.000
17 Pw ² =Pt ² +Fw	889.5	788.7	698.1	635.4	0.0
18 Ps ² =e ^s Pw ²	1172.0	1037.4	916.6	833.1	0.0
19 Ps	1082.6	1018.5	957.4	912.8	0.0
20 P=(Pt+Ps)/2	1012.4	952.4	894.8	853.0	0.0
21 Pr=(P/Pcr)	1.52	1.43	1.34	1.28	0.00
22 Tr=(T/Tcr)	1.59	1.59	1.59	1.59	0.00
23 Z(Table XI)	.886	.892	.898	.902	0.000

County
Date

Chaves
4/6/89

$P_c^2 - P_w^2$, THOUSANDS

