

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

RECEIVED BY	
Form C-122	
JAN 3 1985	
O. C. D.	
ARTESIA OFFICE	

Type Test [x] Initial [] Annual [] Special					Test Date 9/19/84	
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company			
Pool Pecos Slope			Formation Abo			
Completion Date 4/3/83		Total Depth 4350.0'		Plug Back TD 4271.0'		
Elevation 3632.1'		Farm or Lease Name Ingram "WY" Federal				
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4350.0'	Perforations: From 3708.0' To 3882.0'		
Well No. 1						
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3666.0'	Perforations: From 0.0' To 0.0'		
Unit Sec Twp Rge A 18 7S 26E						
Type Well Single				Packer Set At 3670.0'		
Producing Thru Tubing		Resv. Temp. °F 105 @ 3665'		Baro. Press. - Pa 13.2 psia.		
State New Mexico						
L 3666.0'	H 3666.0'	Gg .642	%CO2 .01	%N2 5.24	%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	70	999	0	0	0	0 hrs.
1.	2.067 X .875	125	24.3	70	946	62	0	0	24 hrs.
2.	2.067 X .875	125	28.6	70	931	62	0	0	24 hrs.
3.	2.067 X .875	130	109.7	70	841	62	0	0	24 hrs.
4.	2.067 X .875	140	121.0	70	820	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.	3.729	57.95	138.20	.991	1.248	1.011	270
2.	3.729	62.87	138.20	.991	1.248	1.011	293
3.	3.729	125.34	143.20	.991	1.248	1.011	584
4.	3.729	136.15	153.20	.991	1.248	1.012	635
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.	.21	530	1.49	.979	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.21	530	1.49	.979	Specific Gravity Separator Gas	.642	xxxxxxx
3.	.22	530	1.49	.978	Specific Gravity Flowing Fluid	xxxxxx	.642
4.	.23	530	1.49	.977	Critical Pressure	661.8 PSIA	661.8 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	355.2°R	355.2°R

Pc 1012.2 Pc2 1024.5

NO	Pt2	Pw	Pw2	Pc2-Pw2	(1)	Pc2	(2)	Pc2	n
1.	920.1	959.7	920.9	103.6		3.1501		2.3582	
2.	891.5	944.7	892.5	132.0					
3.	729.7	856.6	733.8	290.7					
4.	694.2	836.2	699.2	325.4					
5.	0.0	0.0	0.0	0.0					

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1498 \text{ Mcfd}$$

Absolute Open Flow 1498 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .748
Remarks:

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

Adopted 9-1-65

DATE 12/28/84

COMPANY Yates Petroleum Corporation LEASE Ingram "WY" Federal WELL NO. 1

LOCATION: Unit A Section 18 Township 7S Range 26E

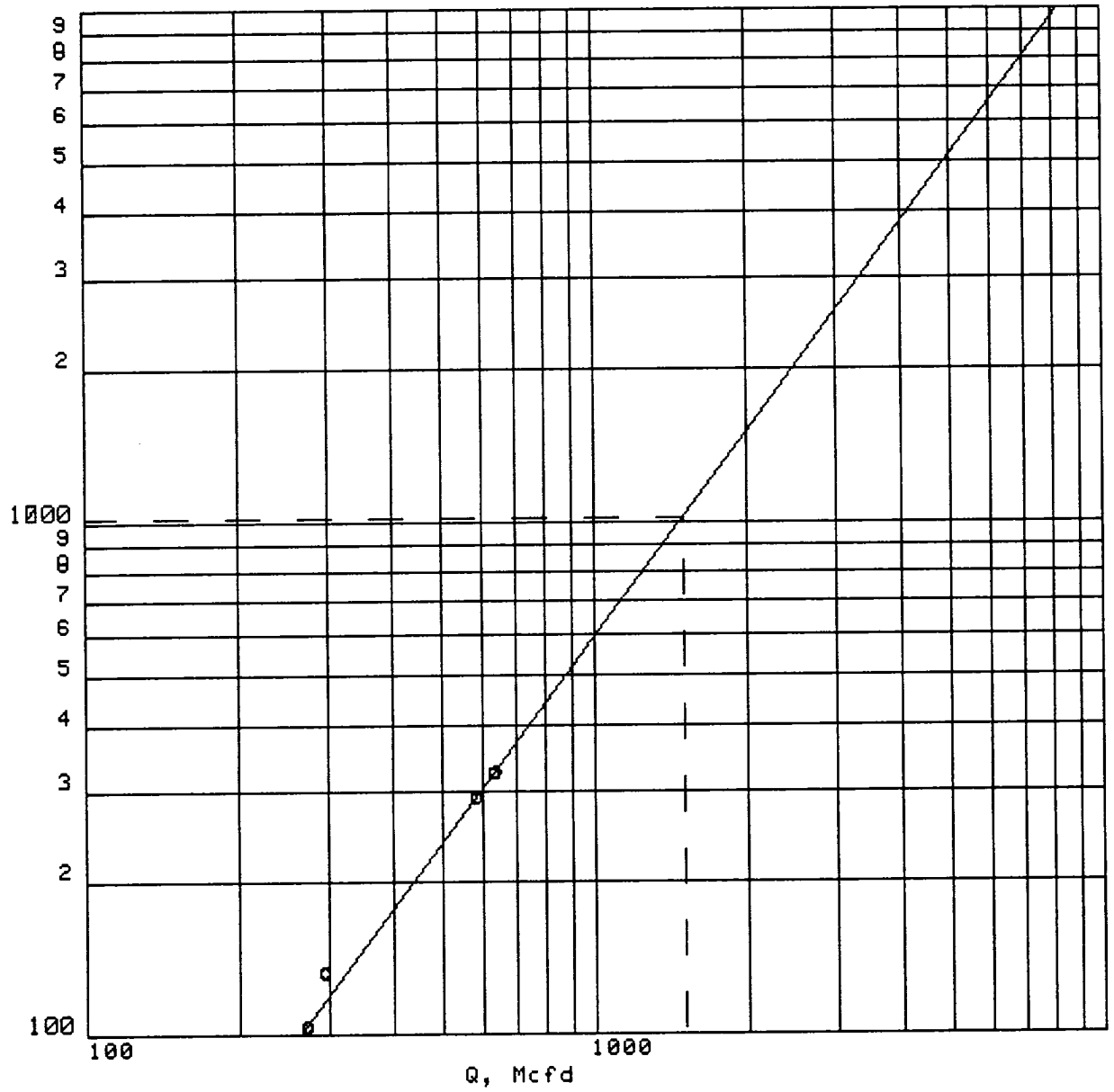
L 3666.0 H 3666.0 L/H 1.000 G .642 %CO₂ .01 %N₂ 5.24 %H₂S 0.00

d 1.995 Fr .017777 GH 2353.6 Pcr 661.8 Tcr 355.2

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Gm	.270	.293	.584	.635	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	565.0	565.0	565.0	565.0	0.0
4 T=(Tw+Ts)/2	543.5	543.5	543.5	543.5	0.0
5 Z(Est.)	.868	.870	.881	.884	0.000
6 TZ	471.8	472.8	478.8	480.2	0.0
7 GH/TZ	4.989	4.978	4.916	4.901	0.000
8 e ^s (Table XIV)	1.206	1.205	1.202	1.202	0.000
9 1-e ^s (Table XIV)	.171	.170	.168	.168	0.000
10 Pt	959.2	944.2	854.2	833.2	0.0
11 Pt ² /1000	920.1	891.5	729.7	694.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.387	8.404	8.516	8.542	0.000
14 FcQm	2.264	2.462	4.975	5.425	0.000
15 L/H(FcQm) ²	5.128	6.060	24.754	29.428	0.000
16 Fw=L/H(FcQm) ² (1-e ^s)	.875	1.032	4.165	4.938	0.000
17 Pw ² =Pt ² +Fw	920.9	892.5	733.8	699.2	0.0
18 Ps ² =e ^s Pw ²	1110.4	1075.7	882.3	840.1	0.0
19 Ps	1053.8	1037.2	939.3	916.6	0.0
20 P=(Pt+Ps)/2	1006.5	990.7	896.7	874.9	0.0
21 Pr=(P/Pcr)	1.52	1.50	1.35	1.32	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.868	.870	.881	.884	0.000

Company	Yates Petroleum Corporation
Well	Ingram "WY" Federal No. 1
Location	R, 18-7S-26E
County	Chaves
Date	12/28/84

$P_c^2 - P_w^2$, THOUSANDS



ROF= 1498