

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

c/sf
File

RECEIVED BY Form C-12 NOV 08 1984 O. C. D. ARTESIA OFFICE

Type Test [x] Initial [] Annual [] Special				Test Date 9/6/84	
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company		
Pool Pecos Slope <i>FW</i>			Formation Abo Pool		
Completion Date 1/9/84		Total Depth 4209.0'		Plug Back TD 4148.0'	
Elevation 3603.0'		Farm or Lease Name Federal "HY"			
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4209.0'	Perforations: From 3625.0' To 3878.0'	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3571.0'	Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3571.0'	
Producing Thru Tubing		Resv. Temp. °F 103 @ 3575'		Baro. Press. - Pa 13.2 psia.	
L 3571.0'		H 3571.0'		Gg .649	
%CO2 .03		%N2 5.96		%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	1014	0	0	0	0 hrs.
1.	2.067 X .875	249	35.1	70	938	62	0	0	24 hrs.
2.	2.067 X .875	218	48.0	70	918	62	0	0	24 hrs.
3.	2.067 X .875	209	79.8	70	893	62	0	0	24 hrs.
4.	2.067 X .875	199	117.0	70	860	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	95.93	262.20	.991	1.241	1.020	449
2.	3.729	105.35	231.20	.991	1.241	1.017	491
3.	3.729	133.16	222.20	.991	1.241	1.017	621
4.	3.729	157.57	212.20	.991	1.241	1.016	734
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.	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.	Specific Gravity Separator Gas .649	Specific Gravity Flowing Fluid xxxxxxx .649	Critical Pressure 660.4 PSIA	Critical Temperature 355.4°R
1.	.40	530	1.49	.961						
2.	.35	530	1.49	.966						
3.	.34	530	1.49	.968						
4.	.32	530	1.49	.969						
5.	0.00	0	0.00	0.000						

Pc 1027.2 Pc2 1055.1

NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2 / (Pc2-Pw2)	(2) [Pc2 / (Pc2-Pw2)]^n
1.	904.8	952.4	907.2	148.0	3.6815	2.6412
2.	867.1	932.7	870.0	185.1		
3.	821.2	908.7	825.8	229.4		
4.	762.5	876.9	768.9	286.2		
5.	0.0	0.0	0.0	0.0		

ROF = 0 [Pc2 / (Pc2-Pw2)]^n = 1938 Mcfd

Absolute Open Flow 1938 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .745
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 10/31/84

COMPANY Yates Petroleum Corporation LEASE Federal "HY" WELL NO. 9

LOCATION: Unit I Section 28 Township 7S Range 25E

L 3571.0 H 3571.0 L/H 1.000 G .649 %CO₂ .03 %N₂ 5.96 %H₂S 0.00

d 1.995 Fr .017777 GH 2317.6 Pcr 660.4 Tcr 355.4

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.449	.491	.621	.734	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	563.0	563.0	563.0	563.0	0.0
4 T=(Tw+Ts)/2	542.5	542.5	542.5	542.5	0.0
5 Z(Est.)	.867	.870	.873	.877	0.000
6 TZ	470.6	471.9	473.6	475.8	0.0
7 GH/TZ	4.925	4.911	4.894	4.871	0.000
8 e ^s (Table XIV)	1.203	1.202	1.201	1.200	0.000
9 1-e ^{-s} (Table XIV)	.169	.168	.168	.167	0.000
10 Pt	951.2	931.2	906.2	873.2	0.0
11 Pt ² /1000	904.8	867.1	821.2	762.5	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.366	8.389	8.419	8.458	0.000
14 FcQm	3.753	4.123	5.226	6.207	0.000
15 L/H(FcQm) ²	14.088	16.996	27.307	38.530	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	2.376	2.859	4.578	6.432	0.000
17 Pw ² =Pt ² +Fw	907.2	870.0	825.8	768.9	0.0
18 Ps ² =e ^s Pw ²	1091.1	1045.9	992.1	923.0	0.0
19 Ps	1044.6	1022.7	996.0	960.7	0.0
20 P=(Pt+Ps)/2	997.9	977.0	951.1	917.0	0.0
21 Pr=(P/Pcr)	1.51	1.48	1.44	1.39	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.867	.870	.873	.877	0.000

Company	Yates Petroleum Corporation
Well	Federal "HY" No. 9
Location	I, 28-7S-25E
County	Chaves
Date	10/31/84

