

45P
File

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

Form C-122

Type Test [x] Initial [] Annual [] Special				Test Date 3/3/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope ABO				Formation Abo	
Completion Date 4/27/87		Total Depth 5000.0'		Elevation 3850.1'	
Csg Size 4.500"		Wt. 9.500#		Perforations: From 4750.0' To 4756.0'	
Tbg Size 2.375"		Wt. 4.700#		Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 4686.0'	
Producing Thru Tubing		Resv. Temp. °F 108 @ 4754'		Baro. Press. - Pa 13.2 psia	
L 4686.0'		H 4686.0'		Gg .640	
%		CO2 .16		%	
N2 4.26		%		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	40	870	0	0	0	0 hrs.
1.	2.067 X 1.250	150	12.8	40	812	62	0	0	24 hrs.
2.	2.067 X 1.250	150	25.1	40	766	62	0	0	24 hrs.
3.	2.067 X 1.250	150	53.1	40	709	62	0	0	24 hrs.
4.	2.067 X 1.250	150	70.0	40	670	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)	hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	8.134	45.71	163.20	1.020	1.250	1.015	481
2.	8.134	64.00	163.20	1.020	1.250	1.015	674
3.	8.134	93.09	163.20	1.020	1.250	1.015	980
4.	8.134	106.88	163.20	1.020	1.250	1.015	1125
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 Deg.	Specific Gravity Separator Gas xxxxxxx	Specific Gravity Flowing Fluid xxxxxx	Critical Pressure 664.2 PSIA	Critical Temperature 357.0°R
1.	.25	500	1.40	.971						
2.	.25	500	1.40	.971						
3.	.25	500	1.40	.971						
4.	.25	500	1.40	.971						
5.	0.00	0	0.00	0.000						

Pc	883.2	Pc ²	780.0							
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1)	Pc ²	(2)	Pc ²	Pc ² -Pw ²	n
1.	681.0	827.3	684.5	95.6		2.6626		2.1008		
2.	607.2	783.7	614.1	165.9						
3.	521.6	732.4	536.5	243.6						
4.	466.8	697.5	486.5	293.5						
5.	0.0	0.0	0.0	0.0						

Absolute Open Flow 2363 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .758

Remarks:			
Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 4/29/88

COMPANY Yates Petroleum Corporation LEASE Filaree AEL Federal WELL NO. 1

LOCATION: Unit 0 Section 33 Township 8S Range 26E

L 4686.0 H 4686.0 L/H 1.000 G .640 %CO₂ .16 %N₂ 4.26 %H₂S 0.00

d 1.995 Fr .017777 GH 2999.0 Pcr 664.2 Tcr 357.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.481	.674	.980	1.125	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	568.0	568.0	568.0	568.0	0.0
4 T=(Tw+Ts)/2	545.0	545.0	545.0	545.0	0.0
5 Z(Est.)	.883	.888	.896	.901	0.000
6 TZ	481.0	484.2	488.1	490.8	0.0
7 GH/TZ	6.235	6.194	6.144	6.110	0.000
8 e ^s (Table XIV)	1.263	1.261	1.259	1.257	0.000
9 1-e ^{-s} (Table XIV)	.208	.207	.206	.205	0.000
10 Pt	825.2	779.2	722.2	683.2	0.0
11 Pt ² /1000	681.0	607.2	521.6	466.8	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.557	8.607	8.682	8.730	0.000
14 FcQm	4.117	5.798	8.507	9.821	0.000
15 L/H(FcQm) ²	16.946	33.618	72.365	96.446	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.531	6.968	14.884	19.741	0.000
17 Pw ² =Pt ² +Fw	684.5	614.1	536.5	486.5	0.0
18 Ps ² =e ^s Pw ²	864.6	774.7	675.4	611.7	0.0
19 Ps	929.9	880.2	821.8	782.1	0.0
20 P=(Pt+Ps)/2	877.5	829.7	772.0	732.7	0.0
21 Pr=(P/Pcr)	1.32	1.25	1.16	1.10	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.883	.888	.896	.901	0.000

Company	Yates Petroleum Corporation
Well	Filaree AEL Federal No. 1
Location	O, 33-8S-26E
County	Chaves
Date	4/29/88

