

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

also
File
RECEIVED
C-122
JUL 22 '88

Type Test [x] Initial [] Annual [] Special				Test Date 4/13/88		O. C. D. OKLAHOMA, OKLAHOMA	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool <u>HOG TANK MORROW</u> Undesignated				Formation Morrow		Unit	
Completion Date 4/15/82		Total Depth 9210.0'		Plug Back TD 8932.0'		Elevation 3719.0'	
Farm or Lease Name Oakason NV Federal				Well No. 3			
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 9210.0'	Perforations: From 8905.0' To 8911.0'		Unit Sec Twp Rge G 34 19S 24E	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 8904.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 8873.0'		County Eddy	
Producing Thru Tubing		Resv. Temp. °F 167 @ 8868'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 8904.0'		H 8904.0'		Gg .595		%CO2 .71	
				%N2 .22		%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	63		2900	0	0	0	0 hrs.
1.	2.067 X 1.125	330	28.1	63		2557	62	0	0	24 hrs.
2.	2.067 X 1.125	300	32.3	64		2546	62	0	0	24 hrs.
3.	2.067 X 1.125	270	41.2	63		2534	62	0	0	24 hrs.
4.	2.067 X 1.125	260	44.0	63		2500	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.	6.397	98.20	343.20	.997	1.296	1.027	834
2.	6.397	100.58	313.20	.996	1.296	1.024	851
3.	6.397	108.02	283.20	.997	1.296	1.022	912
4.	6.397	109.64	273.20	.997	1.296	1.021	925
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.	.51	523	1.48	.949	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.46	524	1.49	.954	Specific Gravity Separator Gas	.595	xxxxxxxxxxxxxx
3.	.42	523	1.48	.958	Specific Gravity Flowing Fluid	xxxxxx	.595
4.	.40	523	1.48	.960	Critical Pressure	674.9 PSIA	674.9 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	352.5°R	352.5°R

Pc 2913.2 Pc2 8486.7

NO	Pt2	Pw	Pw2	Pc2-Pw2	(1)	Pc2	=	3.9225	(2)	Pc2	=	2.7241
1.	6605.9	2571.4	6611.9	1874.8								
2.	6549.5	2560.4	6555.8	1931.0								
3.	6488.2	2548.6	6495.4	1991.3								
4.	6316.2	2514.7	6323.6	2163.2								
5.	0.0	0.0	0.0	0.0								

$$ROF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2521 \text{ Mcfd}$$

Absolute Open Flow 2521 Mcfd @ 15.025 Angle of Slope, 0 36 Slope, n .733
Remarks:

Approved By:	Conducted By: Tracy Richardson	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 6/20/88

COMPANY Yates Petroleum Corporation LEASE Oakason NV Federal WELL NO. 3

LOCATION: Unit G Section 34 Township 19S Range 24E

L 8904.0 H 8904.0 L/H 1.000 G .595 %CO₂ .71 %H₂ .22 %H₂S 0.00

d 2.441 Fr .010495 GH 5297.9 Pcr 674.9 Tcr 352.5

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.834	.851	.912	.925	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	627.0	627.0	627.0	627.0	0.0
4 T=(Tw+Ts)/2	574.5	574.5	574.5	574.5	0.0
5 Z(Est.)	.841	.841	.840	.839	0.000
6 TZ	483.1	483.0	482.8	482.3	0.0
7 GH/TZ	10.966	10.970	10.974	10.986	0.000
8 e ^s (Table XIV)	1.509	1.509	1.509	1.510	0.000
9 1-e ^{-s} (Table XIV)	.337	.337	.337	.338	0.000
10 Pt	2570.2	2559.2	2547.2	2513.2	0.0
11 Pt ² /1000	6605.9	6549.5	6488.2	6316.2	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	5.071	5.069	5.067	5.061	0.000
14 FcQm	4.227	4.312	4.623	4.684	0.000
15 L/H(FcQm) ²	17.865	18.594	21.373	21.937	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	6.023	6.271	7.210	7.407	0.000
17 Pw ² =Pt ² +Fw	6611.9	6555.8	6495.4	6323.6	0.0
18 Ps ² =e ^s Pw ²	9975.0	9891.7	9802.3	9547.1	0.0
19 Ps	3158.3	3145.1	3130.9	3089.8	0.0
20 P=(Pt+Ps)/2	2864.3	2852.2	2839.0	2801.5	0.0
21 Pr=(P/Pcr)	4.24	4.23	4.21	4.15	0.00
22 Tr=(T/Tcr)	1.63	1.63	1.63	1.63	0.00
23 Z(Table XI)	.841	.841	.840	.839	0.000

Company	Yates Petroleum Corporation
Well	Oakason NY Federal No. 3
Location	G, 34-19S-24E
County	Eddy
Date	6/20/88

