

c15f
File

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

Form O-122
RECEIVED

Type Test [X] Initial [] Annual [] Special					Test Date 3/2/88		APR 22 '88	
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company		State N.M.	
Pool Name EAGLE CREEK					Formation Morrow		Unit EAGLE CREEK	
Completion Date 12/5/84		Total Depth 8976.0'		Plug Back TD 8886.0'		Elevation 3374.0'		Farm or Lease Name Cole ARE Com
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 8970.0'	Perforations: From 8614.0' To 8628.0'		Well No. 1		
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 8572.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge J 5 18S 26E		
Type Well Single					Packer Set At 18572.0'		County Eddy	
Producing Thru Tubing		Resv. Temp. °F 179 @ 8621'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 8572.0'	H 8572.0'	Gg .629	%CO2 .89	%N2 .78	%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	2730	0	0	0	0 hrs.	
1.	2.067 X .875	260	38.8	40	2389	62	0	0	24 hrs.	
2.	2.067 X .875	260	52.5	40	2234	62	0	0	24 hrs.	
3.	2.067 X .875	280	89.6	40	2068	62	0	0	24 hrs.	
4.	2.067 X .875	285	100.0	40	2000	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)	hw/Pm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	102.96	273.20	1.020	1.261	1.027	507
2.	3.729	119.76	273.20	1.020	1.261	1.027	590
3.	3.729	162.08	293.20	1.020	1.261	1.029	800
4.	3.729	172.68	298.20	1.020	1.261	1.030	853
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pn	Temp. °R	Tn	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons °	Specific Gravity Separator Gas xxxxxxx	Specific Gravity Flowing Fluid xxxxxxx
1.	.41	500	1.38	.948	0.000	629	629	629
2.	.41	500	1.38	.948	673.5	673.5	673.5	673.5
3.	.44	500	1.38	.944	361.9	361.9	361.9	361.9
4.	.44	500	1.38	.943				
5.	0.00	0	0.00	0.000				

Pc 2743.2 Pc2 7525.1

NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2	Pc2-Pw2	(2)	Pc2	Pc2-Pw2	n
1.	5770.6	2403.5	5777.0	1748.1	2.1783	2.1783	1.8113	1.8113	1.8113	1.8113
2.	5049.9	2249.1	5058.6	2466.6						
3.	4331.4	2085.0	4347.4	3177.8						
4.	4053.0	2017.7	4071.1	3454.0						
5.	0.0	0.0	0.0	0.0						

ROF = Q $\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 1545$ Mcfd

Absolute Open Flow 1545 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .763

Remarks:

Approved By:	Conducted By: Tracy Richardson	Calculated By: Andrea Carpenter	Checked By:
--------------	-----------------------------------	------------------------------------	-------------

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

Adopted 9-1-65

DATE 4/22/88

COMPANY Yates Petroleum Corporation LEASE Cole ARE Com WELL NO. 1

LOCATION: Unit J Section 5 Township 8S Range 26E

L 8572.0 H 8572.0 L/H 1.000 G .629 %O₂ .89 %N₂ .78 %H₂S 0.00

d 1.995 Fr .017777 GH 5391.8 Pcr 673.5 Tcr 361.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.507	.590	.800	.853	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	639.0	639.0	639.0	639.0	0.0
4 T=(Tw+Ts)/2	580.5	580.5	580.5	580.5	0.0
5 Z(Est.)	.826	.824	.824	.824	0.000
6 TZ	479.7	478.4	478.2	478.5	0.0
7 GH/TZ	11.240	11.270	11.275	11.267	0.000
8 e ^S (Table XIV)	1.524	1.526	1.526	1.526	0.000
9 1-e ^{-S} (Table XIV)	.344	.345	.345	.345	0.000
10 Pt	2402.2	2247.2	2081.2	2013.2	0.0
11 Pt ² /1000	5770.6	5049.9	4331.4	4053.0	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.528	8.501	8.504	8.507	0.000
14 FcQm	4.324	5.015	6.803	7.254	0.000
15 L/H(FcQm) ²	18.700	25.147	46.281	52.622	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-S})	6.432	8.670	15.953	18.134	0.000
17 Pw ² =Pt ² +Fw	5777.0	5058.6	4347.4	4071.1	0.0
18 Ps ² =e ^S Pw ²	8805.5	7720.5	6634.0	6211.7	0.0
19 Ps	2967.4	2778.6	2575.7	2492.3	0.0
20 P=(Pt+Ps)/2	2684.8	2512.9	2328.4	2252.0	0.0
21 Pr=(P/Pcr)	3.99	3.73	3.46	3.34	0.00
22 Tr=(T/Tcr)	1.60	1.60	1.60	1.60	0.00
23 Z(Table XI)	.826	.824	.824	.824	0.000

Company	Yates Petroleum Corporation
Well	Cole ARE Com No. 1
Location	J, 5-8S-26E
County	Eddy
Date	4/22/88

