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File

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

Form O-122

APR 22 '88

Type Test [x] Initial [] Annual [] Special				Test Date 3/2/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope A00				Formation Abo	
Completion Date 12/29/84		Total Depth 4247.0'		Elevation 3672.1'	
Csg Size 4.500"		Set At 4247.0'		Perforations: From 3754.0' To 3972.0'	
Tbg Size 2.375"		Set At 3738.0'		Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3738.0'	
Producing Thru Tubing		Resv. Temp. °F 103 @ 3863'		Baro. Press. - Pa 13.2 psia.	
L 3738.0'		H 3738.0'		Meter Run 2.000"	
Gg .649		%CO2 .03		%N2 5.79	
				%H2S 0.00	
				Prover 0.000"	
				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	830	0	0	0	0 hrs.
1.	2.067 X 1.375	135	11.0	40	739	62	0	0	24 hrs.
2.	2.067 X 1.375	130	31.3	40	639	62	0	0	24 hrs.
3.	2.067 X 1.375	125	41.5	40	611	62	0	0	24 hrs.
4.	2.067 X 1.375	120	47.0	40	580	62	0	24	0 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.	10.204	40.38	148.20	1.020	1.241	1.013	529
2.	10.204	66.95	143.20	1.020	1.241	1.013	876
3.	10.204	75.73	138.20	1.020	1.241	1.012	990
4.	10.204	79.12	133.20	1.020	1.241	1.012	1034
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	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.22	500	1.40	.974	0.000 Deg.	.649	xxxxxxx	.649	660.7 PSIA	355.9°R
2.	.22	500	1.40	.975						
3.	.21	500	1.40	.976						
4.	.20	500	1.40	.976						
5.	0.00	0	0.00	0.000						

Pc 843.2 Pc2 711.0

NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2	Pc2-Pw2 (2)	n
1.	565.8	754.6	569.3	141.6	2.0638	1.7277	
2.	425.4	659.7	435.3	275.7			
3.	389.6	634.3	402.3	308.7			
4.	351.9	604.8	365.8	345.2			
5.	0.0	0.0	0.0	0.0			

AOF = $Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 1787 \text{ Mcfd}$

Absolute Open Flow 1787 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .755

Remarks:

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

Adopted 9-1-65

DATE 4/22/88

COMPANY Yates Petroleum Corporation LEASE Caudill RZ Com WELL NO. 7

LOCATION: Unit K Section 17 Township 6S Range 26E

L 3738.0 H 3738.0 L/H 1.000 G .649 %CO₂ .03 %N₂ 5.79 %H₂S 0.00

d 1.995 Fr .017777 GH 2426.0 Pcr 660.7 Tcr 355.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.529	.876	.990	1.034	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.)	.892	.905	.909	.913	0.000
6 TZ	484.0	491.2	493.2	495.5	0.0
7 GH/TZ	5.012	4.939	4.919	4.896	0.000
8 e ^{-s} (Table XIV)	1.207	1.203	1.202	1.202	0.000
9 1-e ^{-s} (Table XIV)	.171	.169	.168	.168	0.000
10 Pt	752.2	652.2	624.2	593.2	0.0
11 Pt ² /1000	565.8	425.4	389.6	351.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.604	8.731	8.770	8.808	0.000
14 FcQm	4.548	7.649	8.686	9.110	0.000
15 L/H(FcQm) ²	20.682	58.506	75.451	82.986	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.544	9.892	12.706	13.920	0.000
17 Pw ² =Pt ² +Fw	569.3	435.3	402.3	365.8	0.0
18 Ps ² =e ^s Pw ²	687.1	523.8	483.8	439.5	0.0
19 Ps	828.9	723.8	695.6	663.0	0.0
20 P=(Pt+Ps)/2	790.6	688.0	659.9	628.1	0.0
21 Pr=(P/Pcr)	1.20	1.04	1.00	.95	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.892	.905	.909	.913	0.000

Company	Yates Petroleum Corporation
Well	Caudill RZ Com No. 7
Location	K, 17-6S-26E
County	Chaves
Date	4/22/88

