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File

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

Form C-122
RECEIVED

Type Test [x] Initial [] Annual [] Special				Test Date 12/22/88		JAN 23 '90	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D.	
Pool South Pecos Slope				Formation Abo		Unit ARTESIA, OFFICE	
Completion Date 2/25/88		Total Depth 5400.0'		Plug Back TD 5347.0'		Elevation 3774.3'	
Farm or Lease Name Night Owl AFA St Cm				Well No. 1			
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 5400.0'	Perforations: From 4676.0' To 4790.0'			
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 4652.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 4652.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 110 @ 4700'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 4652.0'		H 4652.0'		Gg .646		%CO2 .04	
				%N2 5.18		%H2S 0.00	
				Prover 0.000"		Meter Run 2.000"	
						Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice 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	55	800	0	0	0	0 hrs.
1.	2.067	X 1.000	680	1.0	57	700	62	0	0	24 hrs.
2.	2.067	X 1.000	600	2.0	53	650	62	0	0	24 hrs.
3.	2.067	X 1.000	600	3.9	56	596	62	0	0	24 hrs.
4.	2.067	X 1.000	530	5.1	55	526	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.	4.947	26.33	693.20	1.003	1.244	1.062	173
2.	4.947	35.02	613.20	1.007	1.244	1.056	229
3.	4.947	48.90	613.20	1.004	1.244	1.055	319
4.	4.947	52.63	543.20	1.005	1.244	1.049	341
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.	1.05	517	1.45	.886	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.93	513	1.44	.896	Specific Gravity Separator Gas	.646
3.	.93	516	1.45	.898	Specific Gravity Flowing Fluid	.646
4.	.82	515	1.44	.909	Critical Pressure	661.9 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	356.6°R

NO	Pt ²	Pw	Pw ²	Pc ² -Pw ² (1)	Pc ² Pc ² -Pw ²	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n$
1.	508.7	713.3	508.8	152.5	1.7861	1.5626
2.	439.8	663.4	440.1	221.2		
3.	371.1	609.7	371.7	289.6		
4.	290.7	539.8	291.4	369.9		
5.	0.0	0.0	0.0	0.0		

ROF = $Q \left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = 534 \text{ Mcfd}$

Absolute Open Flow 534 Mcfd @ 15.025 Angle of Slope, θ 38 Slope, n .770

Remarks: _____

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

Adopted 9-1-65

DATE 1/22/90

COMPANY Yates Petroleum Corporation LEASE Night Owl AFA St Cm WELL NO. 1

LOCATION: Unit I Section 22 Township 9S Range 26E

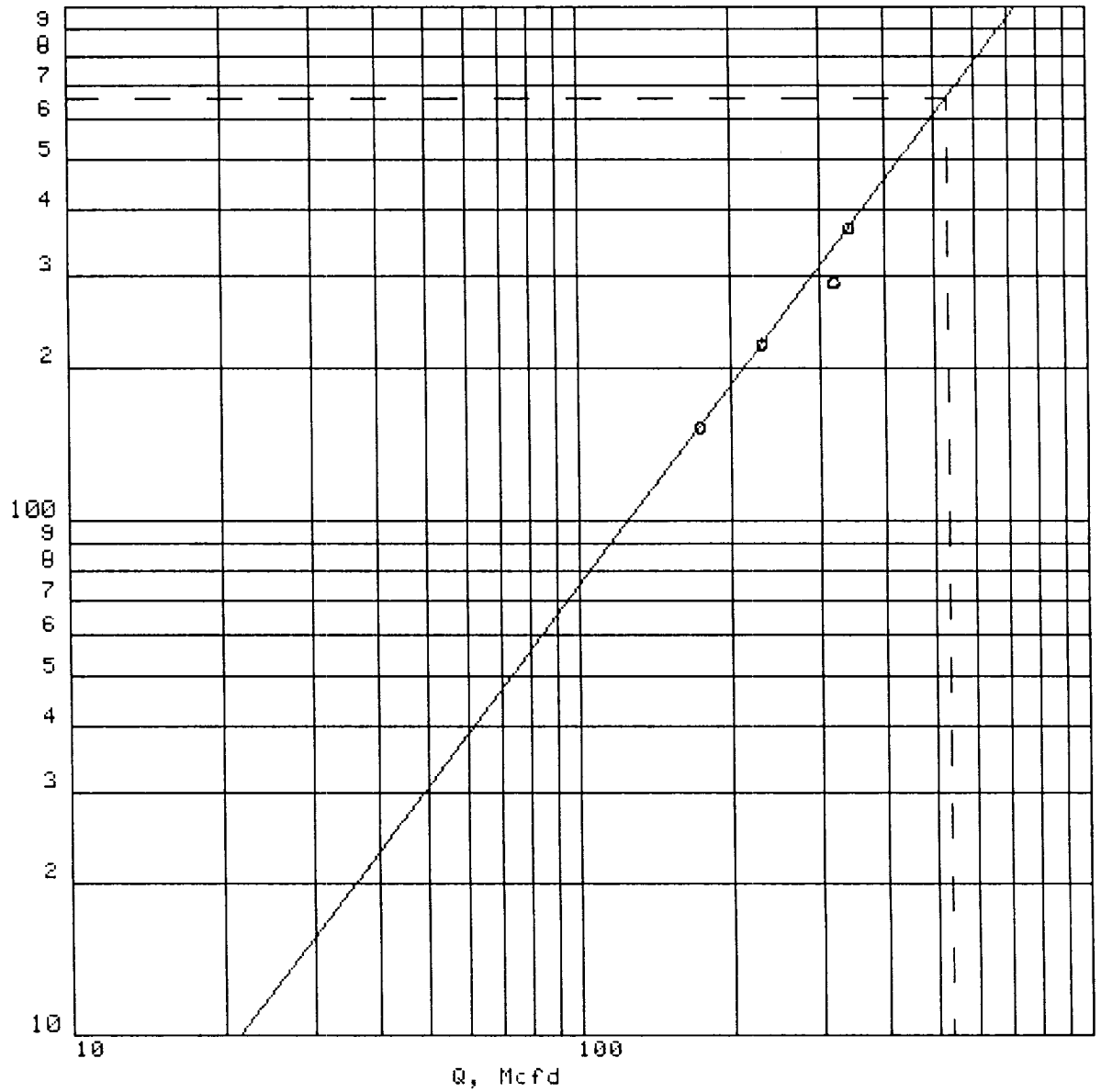
L 4652.0 H 4652.0 L/H 1.000 G .646 %CO2 .04 %N2 5.18 %H2S 0.00

d 2.441 Fr .010495 GH 3005.2 Pcr 661.9 Tcr 356.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.173	.229	.319	.341	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	570.0	570.0	570.0	570.0	0.0
4 T=(Tw+Ts)/2	546.0	546.0	546.0	546.0	0.0
5 Z(Est.)	.898	.905	.913	.922	0.000
6 TZ	490.5	494.2	498.2	503.6	0.0
7 GH/TZ	6.127	6.081	6.032	5.968	0.000
8 e ^s (Table XIV)	1.258	1.256	1.254	1.251	0.000
9 1-e ^{-s} (Table XIV)	.205	.204	.202	.201	0.000
10 Pt	713.2	663.2	609.2	539.2	0.0
11 Pt ² /1000	508.7	439.8	371.1	290.7	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	5.148	5.186	5.231	5.285	0.000
14 FcQm	.889	1.189	1.668	1.805	0.000
15 L/H(FcQm) ²	.790	1.414	2.782	3.256	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.162	.288	.563	.653	0.000
17 Pw ² =Pt ² +Fw	508.8	440.1	371.7	291.4	0.0
18 Ps ² =e ^s Pw ²	640.2	552.9	466.0	364.5	0.0
19 Ps	800.2	743.5	682.6	603.7	0.0
20 P=(Pt+Ps)/2	756.7	703.4	645.9	571.5	0.0
21 Pr=(P/Pcr)	1.14	1.06	.98	.86	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.898	.905	.913	.922	0.000

Company	Yates Petroleum Corporation
Well	Night Owl RFA St Cm No. 1
Location	I, 22-9S-26E
County	Chaves
Date	1/22/90

$P_c^2 - P_w^2$, THOUSANDS



ROF= 534