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MAY 18 1991

NEW MEXICO OIL CONSERVATION COMMISSION Form O-122
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test [x] Initial [] Annual [] Special					Test Date 10/25/90				
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company				
Pool Abo					Formation South Pecos Slope <i>for h-1-96</i>				
Completion Date 5/23/88			Total Depth 4200.0'		Plug Back TD 4172.0'		Elevation 3523.4'		Farm or Lease Name Eakin AFB Com
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4200.0'	Perforations: From 3786.0' To 3792.0'					Well No. 1
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3733.0'	Perforations: From 0.0' To 0.0'					Unit Sec Twp Rge C 17 08 25E
Type Well Single					Packer Set At 13733.0'				County Chaves
Producing Thru Tubing		Resv. Temp. °F 114 @ 3746'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.			
L 3733.0'		H 3733.0'	Gg .660	%CO2 .37	%N2 8.77	%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	61	975	0	0	0	0 hrs.
1.	2.067	X .875	115	6.1	64	907	62	0	0	24 hrs.
2.	2.067	X .875	115	9.3	65	865	62	0	0	24 hrs.
3.	2.067	X .875	140	12.3	61	844	62	0	0	24 hrs.
4.	2.067	X .875	140	18.0	60	805	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.	3.729	27.96	128.20	.996	1.231	1.010	129
2.	3.729	34.53	128.20	.995	1.231	1.010	159
3.	3.729	43.41	153.20	.999	1.231	1.011	201
4.	3.729	52.51	153.20	1.000	1.231	1.011	244
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.	.20	524	1.49	.981	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.20	525	1.50	.981	Specific Gravity Separator Gas	.660	xxxxxxxxxxxxxx
3.	.23	521	1.49	.978	Specific Gravity Flowing Fluid	xxxxxx	.660
4.	.23	520	1.48	.978	Critical Pressure	656.8	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	350.6°R	350.6°R

Pc 988.2 Pc2 976.5				
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)
1.	846.8	920.3	847.0	129.6
2.	771.2	878.4	771.6	205.0
3.	734.8	857.5	735.3	241.2
4.	669.5	818.7	670.2	306.3
5.	0.0	0.0	0.0	0.0

$$\frac{Pc2}{Pc2-Pw2} = 3.1584$$

$$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 566 \text{ Mcfd}$$

$$\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 2.3238$$

Absolute Open Flow 566 Mcfd @ 15.025 Angle of Slope, 0 36 Slope, n .733
Remarks:

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

Adopted 9-1-65

DATE 5/13/91

COMPANY Yates Petroleum Corporation LEASE Eakin AFB Com WELL NO. 1

LOCATION: Unit C Section 17 Township 08 Range 25E

L 3733.0 H 3733.0 L/H 1.000 G .660 %CO₂ .37 %N₂ 8.77 %H₂S 0.00

d 1.995 Fr .017777 GH 2463.8 Pcr 656.8 Tcr 350.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.129	.159	.201	.244	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	574.0	574.0	574.0	574.0	0.0
4 T=(Tw+Ts)/2	548.0	548.0	548.0	548.0	0.0
5 Z(Est.)	.882	.886	.889	.893	0.000
6 TZ	483.1	485.8	487.1	489.6	0.0
7 GH/TZ	5.099	5.072	5.058	5.032	0.000
8 e ^s (Table XIV)	1.211	1.209	1.209	1.208	0.000
9 1-e ^{-s} (Table XIV)	.174	.173	.173	.172	0.000
10 Pt	920.2	878.2	857.2	818.2	0.0
11 Pt ² /1000	846.8	771.2	734.8	669.5	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.595	8.635	8.664	8.703	0.000
14 FcQm	1.110	1.376	1.744	2.121	0.000
15 L/H(FcQm) ²	1.232	1.892	3.040	4.499	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.214	.328	.525	.774	0.000
17 Pw ² =Pt ² +Fw	847.0	771.6	735.3	670.2	0.0
18 Ps ² =e ^s Pw ²	1025.3	933.2	888.8	809.4	0.0
19 Ps	1012.6	966.0	942.8	899.7	0.0
20 P=(Pt+Ps)/2	966.4	922.1	900.0	858.9	0.0
21 Pr=(P/Pcr)	1.47	1.40	1.37	1.31	0.00
22 Tr=(T/Tcr)	1.56	1.56	1.56	1.56	0.00
	.882	.886	.889	.893	0.000

Company	Yates Petroleum Corporation
Well	Eakin AFB Com No. 1
Location	C, 17-06-25E
County	Chaves
Date	5/13/91

