

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

Form C-122

File

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 01/17/1993	
Company Yates Petroleum Corp			Connection Enron		
Pool Abo			Formation Pecos Slope		
Completion Date 01/05/1993		Total Depth 5150		Plug Back TD 5102	
				Elevation 3856	
Farm or Lease Name Dandelion AFW Federal Com					
Csg Size 4.500		Wt 10.500		Set At 4.052	
				5150	
Tbg Size 2.375		Wt 4.700		Set At 1.995	
				4610	
Type Well Single			Packer Set At 4610		
Producing Thru Tubing			Baro. Press. - Pa 13.2		
Resv Temp °F 113 @ 4775			Mean Temp °F 62		
			State New Mexico		
Prover 4610		Meter Run 2.000		Taps Flange	
Gg 0.656		%CO ₂ 0.000		%N ₂ 6.422	
				%H ₂ S 0.000	

DEC 27 '94

NO	FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
	Prover Line Size	X	Orifice Size	Press p.s.i.g.	Diff. hw	Temp. °F	Press p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	0.000	x	0.000	0	0.0	0	220	0			0
1	2.067	x	1.000	100	14.0	49	170	62			24
2	2.067	x	1.000	100	24.1	51	147	62			24
3	2.067	x	1.000	100	32.0	47	123	62			24
4	2.067	x	1.000	100	41.0	44	100	62			24
5		x									

NO	Coefficient (24 Hour)	√hwPm	Pressure Pm	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
2	4.946	53.4	118.1	1.0088	1.235	1.011	332
3	4.946	60.2	113.2	1.0127	1.235	1.011	376
4	4.946	68.1	113.2	1.0158	1.235	1.011	427
5							

NO	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio		Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons	Deg.	
1	0.17	509	1.43	0.979	0	0.000	
2	0.18	511	1.43	0.979	0.656	XXXXXXXXXX	
3	0.17	507	1.42	0.979	XXXXXXXXXX	0.656	
4	0.17	504	1.41	0.979	659	P.S.I.A.	659 P.S.I.A.
5					357	°R	357 °R

NO	Pc	Pw	Pw²	Pc² - Pw²	Equations	
					(1) $\frac{Pc^2}{Pc^2 - Pw^2} =$	(2) $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n =$
1	233.2	54.4	34.6	19.8	1.629	1.485
2			27.6	26.8		
3			21.0	33.4		
4			16.0	38.4		
5						

Absolute Open Flow **559** Mcfd @ 15.025 Angle of Slope θ **39** Slope, n **0.810**

Remarks:

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

DATE 01/17/1993

COMPANY Yates Petroleum Corp LEASE Dandelion AFW Federal Com WELL NO 1
 LOCATION: Unit H Section 10 Township 9S Range 26E
 L 4610 H 4610 L/H 1.000 G 0.656 %CO₂ 0.000 %N₂ 6.422 %H₂S 0.000
 d 1.995 Fr 0.017777 GH 3024.2 Pcr 659.3 Tcr 356.5

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	0.248	0.332	0.376	0.427	
2 Tw(W.H.°R)	522	522	522	522	
3 Ts(B.H.°R)	573	573	573	573	
4 T = (Tw+Ts) / 2	547.2	547.2	547.2	547.2	
5 Z (Est.)	0.972	0.976	0.979	0.982	
6 TZ	532.0	533.8	535.6	537.3	
7 GH / TZ	5.684	5.666	5.646	5.629	
8 e ^s (Table XIV)	1.238	1.237	1.236	1.235	
9 1-e ^{-s} (Table XIV)	0.192	0.191	0.191	0.190	
10 Pt	183.2	160.2	136.2	113.2	
11 Pt ² / 1000	33.6	25.7	18.6	12.8	
12 Fr (Table XV)	0.017777	0.017777	0.017777	0.017777	
13 Fc = FrTZ	9.458	9.489	9.521	9.551	
14 FcQm	2.35	3.15	3.58	4.08	
15 L / H(FcQm) ²	5.5	9.9	12.8	16.6	
16 Fw = L / H(FcQm) ² (1-e ^{-s})	1.06	1.90	2.45	3.17	
17 Pw ² = Pt ² +Fw	34.6	27.6	21.0	16.0	
18 Ps ² = e ^s Pw ²	42.8	34.1	25.9	19.7	
19 Ps	207.0	184.6	161.1	140.5	
20 P = (Pt+Ps) / 2	195.1	172.4	148.6	126.8	
21 Pr = (P / Pcr)	0.30	0.26	0.23	0.19	
22 Tr = (T / Tcr)	1.53	1.53	1.53	1.53	
23 Z (Table XI)	0.972	0.976	0.979	0.982	

Company
Well
Location

Yates Petroleum Corp
Dandelion AFW Federal Com #1
H 10-9S-26E

County
Date

Chaves
01-17-1993

Q, Mcfd

