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

O. G. D. C-122
ARTESIA, OFFICE

Type Test [x] Initial [] Annual [] Special				Test Date 9/23/89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope				Unit	
Completion Date 7/2/89		Total Depth 4100.0'		Plug Back TD 4042.0'	
				Elevation 3730.2'	
Csg Size 4.500"		Wt. 9.500#		d 4.090"	
Set At 4100.0'		Perforations: From 3540.0' To 3648.0'		Well No. 2	
Tbg Size 2.375"		Wt. 4.700#		d 1.995"	
Set At 3453.0'		Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge H 33 6S 25E	
Type Well Single				Packer Set At 63453.0'	
Producing Thru Tubing		Resv. Temp. °F 92 @ 3760'		Mean Temp. °F 62.0	
				Baro. Press. - Pa 13.2 psia.	
L 3453.0'		H 3453.0'		Gg .644	
		XCO2 .03		XN2 5.18	
		XH2S 0.00		Prover 0.000"	
				Meter Run 2.000"	
				Taps Flange	

FLOW DATA			TUBING DATA		CASING DATA		Duration of Flow		
NO	Prover Size	Orifice % Size	Press. psig	Diff. hw	Temp. °F	Press. psig		Temp. °F	
SI	0.000	% 0.000	0	0.0	68	873	0	0	0 hrs.
1.	2.067	% 1.250	100	9.0	65	750	62	0	24 hrs.
2.	2.067	% 1.250	100	17.3	69	709	62	0	24 hrs.
3.	2.067	% 1.250	100	27.0	66	583	62	0	24 hrs.
4.	2.067	% 1.250	100	49.8	68	367	62	0	24 hrs.
5.	0.000	% 0.000	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.	8.134	31.92	113.20	.995	1.246	1.008	324
2.	8.134	44.25	113.20	.991	1.246	1.009	449
3.	8.134	55.28	113.20	.994	1.246	1.007	561
4.	8.134	75.08	113.20	.992	1.246	1.007	761
5.	0.300	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcfd/bbl.
1.	.17	525	1.47	.985	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.17	529	1.49	.983	Specific Gravity Separator Gas	.644	xxxxxxxxxxxxxx
3.	.17	526	1.48	.985	Specific Gravity Flowing Fluid	xxxxxx	.644
4.	.17	528	1.48	.986	Critical Pressure	661.9 PSIA	661.9 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	356.0°R	356.0°R

Pc	886.2	Pc2	785.4				
NO	Pt2	Pw	Pw2	Pc2-Pw2(1)	Pc2	Pc2-Pw2	(2) [Pc2 / (Pc2-Pw2)]^n = 1.1685
1.	582.5	764.0	583.7	201.7			
2.	521.6	723.8	523.9	261.4			
3.	355.5	599.3	359.2	426.2			
4.	144.6	389.4	151.7	633.7			
5.	0.0	0.0	0.0	0.0			

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 889 \text{ Mcfd}$$

Absolute Open Flow 889 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .743
Remarks:

Approved By: Conducted By: Calculated By: Checked By:
David Weaver Andrea Carpenter

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

Adopted 9-1-65

DATE 5/6/91

COMPANY Yates Petroleum Corporation LEASE Finley RV Com WELL NO. 2

LOCATION: Unit H Section 33 Township 6S Range 25E

L 3453.0 H 3453.0 L/H 1.000 G .644 %CO₂ .03 %N₂ 5.18 %H₂S 0.00

d 1.995 Fr .017777 GH 2223.7 Pcr 661.9 Tcr 356.0

LINE		1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1	Qm	.324	.449	.561	.761	0.000
2	Tw(W.F.°R)	522.0	522.0	522.0	522.0	0.0
3	Ts(B.F.°R)	552.0	552.0	552.0	552.0	0.0
4	T=(Tw+Ts)/2	537.0	537.0	537.0	537.0	0.0
5	Z(Est.)	.887	.893	.911	.942	0.000
6	TZ	476.4	479.4	489.0	506.0	0.0
7	GH/TZ	4.668	4.638	4.547	4.394	0.000
8	e ^s (Table XIV)	1.191	1.190	1.186	1.179	0.000
9	1-e ^s (Table XIV)	.161	.160	.157	.152	0.000
10	Pt	763.2	722.2	596.2	380.2	0.0
11	Pt ² /1000	582.5	521.6	355.5	144.6	0.0
12	Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13	Fc=FrTZ	8.468	8.527	8.696	8.997	0.000
14	FcQm	2.747	3.826	4.881	6.844	0.000
15	L/H(FcQm) ²	7.547	14.635	23.829	46.843	0.000
16	Fw=L/H(FcQm) ² (1-e ^s)	1.212	2.335	3.734	7.116	0.000
17	Pw ² =Pt ² +Fw	583.7	523.9	359.2	151.7	0.0
18	Ps ² =e ^s Pw ²	695.4	623.4	425.9	178.8	0.0
19	Ps	833.9	789.5	652.6	422.9	0.0
20	P=(Pt+Ps)/2	798.5	755.9	624.4	401.5	0.0
21	Pr=(P/Pcr)	1.21	1.14	.94	.61	0.00
22	Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23	Z(Table XI)	.887	.893	.911	.942	0.000

Company	Yates Petroleum Corporation
Well	Finley RV Com No. 2
Location	H, 33-6S-25E
County	Chaves
Date	5/6/91

