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FILE

McConzo

MAY - 9 1991

O. C. D.

ARTESIAN # 122

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

Type Test [x] Initial [] Annual [] Special					Test Date 10/29/90	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		
Pool Abo				Formation Pecos Slope		Unit
Completion Date 9/9/82		Total Depth 4150.0'		Plug Back TD 4030.0'	Elevation 3542.5'	Farm or Lease Name Adell UJ Federal
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4147.0'	Perforations: From 3658.0' To 3849.0'		Well No. 1
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3634.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge A 7 10S 25E
Type Well Single				Packer Set At 3634.0'		County Chaves
Producing Thru Tubing		Resv. Temp. °F 102 @ 3627'	Mean Temp. °F 62.0	Baro. Press. - Pa 13.2 psia.		State New Mexico
L 3634.0'	H 3634.0'	Gg .660	%CO2 .37	%N2 8.77	%H2S 0.00	Prover 0.000"
						Meter Run 2.000"
						Taps Flange

NO	FLOW DATA				TUBING DATA		CASING DATA		Duration of Flow	
	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	50	1015	0	0	0	0 hrs.
1.	2.067	X 1.000	125	10.0	52	850	62	0	0	24 hrs.
2.	2.067	X 1.000	125	14.1	55	836	62	0	0	24 hrs.
3.	2.067	X 1.000	120	18.5	51	754	62	0	0	24 hrs.
4.	2.067	X 1.000	105	24.6	50	721	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)	√hw/Pm	Pressure Pm	Flow Temp Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.947	37.18	138.20	1.008	1.231	1.010	231
2.	4.947	44.14	138.20	1.005	1.231	1.010	273
3.	4.947	49.64	133.20	1.009	1.231	1.010	308
4.	4.947	53.92	118.20	1.010	1.231	1.009	334
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	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	.21	512	1.46	.979	0.000	0.000	0.000	0
2.	.21	515	1.47	.980	0.000	0.000	0.000	0
3.	.20	511	1.46	.980	0.000	0.000	0.000	0
4.	.18	510	1.45	.983	0.000	0.000	0.000	0
5.	0.00	0	0.00	0.000	0.000	0.000	0.000	0

Pc 1028.2 Pc² 1057.2

NO	Pt ²	Pw	Pw ²	Pc ² -Pw ² (1)	Pc ² / (Pc ² -Pw ²) = 2.0344	(2) [Pc ² / (Pc ² -Pw ²)] ⁿ = 1.6781
1.	745.1	863.6	745.8	311.4		
2.	721.1	849.7	722.1	335.1		
3.	588.6	768.0	589.8	467.4		
4.	539.0	735.2	540.5	516.7		
5.	0.0	0.0	0.0	0.0		

ROF = Q [Pc² / (Pc²-Pw²)]ⁿ = 561 Mcfd

Absolute Open Flow 561 Mcfd @ 15.025 Angle of Slope, 0 36 Slope, n .729
Remarks:

Approved By: Conducted By: Calculated By: Checked By:
David Messer 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 Adell UJ Federal WELL NO. 1

LOCATION: Unit A Section 7 Township 10S Range 25E

L 3634.0 H 3634.0 L/H 1.000 G .660 %CO2 .37 %N2 8.77 %H2S 0.00

d 1.995 Fr .017777 GH 2398.4 Pcr 656.8 Tcr 350.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.231	.273	.308	.334	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	562.0	562.0	562.0	562.0	0.0
4 T=(Tw+Ts)/2	542.0	542.0	542.0	542.0	0.0
5 Z(Est.)	.883	.885	.895	.899	0.000
6 TZ	478.8	479.8	485.3	487.5	0.0
7 GH/TZ	5.009	4.999	4.943	4.920	0.000
8 e ^s (Table XIV)	1.207	1.206	1.204	1.203	0.000
9 1-e ^{-s} (Table XIV)	.171	.171	.169	.168	0.000
10 Pt	863.2	849.2	767.2	734.2	0.0
11 Pt ² /1000	745.1	721.1	588.6	539.0	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.512	8.529	8.626	8.667	0.000
14 FcQm	1.962	2.327	2.657	2.899	0.000
15 L/H(FcQm) ²	3.851	5.416	7.060	8.403	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.659	.926	1.195	1.416	0.000
17 Pw ² =Pt ² +Fw	745.8	722.1	589.8	540.5	0.0
18 Ps ² =e ^s Pw ²	899.9	871.0	709.9	650.0	0.0
19 Ps	948.6	933.2	842.6	806.2	0.0
20 P=(Pt+Ps)/2	905.9	891.2	804.9	770.2	0.0
21 Pr=(P/Pcr)	1.38	1.36	1.23	1.17	0.00
22 Tr=(T/Tcr)	1.55	1.55	1.55	1.55	0.00
23 Z(Table XI)	.883	.885	.895	.899	0.000

Company	Yates Petroleum Corporation
Well	Adell UJ Federal No. 1
Location	A, 7-10S-25E
County	Chaves
Date	5/6/91

$P_c^2 - P_w^2$, THOUSANDS

