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MAY - 9 1991

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WEARTESIA, OFFICE

Type Test [x] Initial [] Annual [] Special					Test Date 7/1/90	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		
Pool Pecos Slope				Formation Abo		Unit
Completion Date 4/13/90		Total Depth 4300.0'		Plug Back TD 4248.0'		Elevation 3649.5'
Farm or Lease Name Catterson SS Fed						Well No. 3
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4300.0'	Perforations: From 3704.0' To 3944.0'		Unit Sec Twp Rge A 7 7S 26E
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3654.0'	Perforations: From 0.0' To 0.0'		County Chaves
Type Well Single				Packer Set At 3655.0'		State New Mexico
Producing Thru Tubing		Resv. Temp. °F 95 @ 3625'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.
L 3654.0'	H 3654.0'	Gg .639	%O2 .57	%N2 5.69	%H2S 0.00	Prover 0.000"
Meter Run 2.000"		Taps Flange				

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size 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	98	778	0	0	0	0 hrs.
1.	2.067 X 1.250	115	7.8	101	747	62	0	0	24 hrs.
2.	2.067 X 1.250	115	15.0	97	720	62	0	0	24 hrs.
3.	2.067 X 1.250	155	20.2	98	704	62	0	0	24 hrs.
4.	2.067 X 1.250	170	31.0	99	670	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.	8.134	31.62	128.20	.963	1.251	1.008	312
2.	8.134	43.85	128.20	.966	1.251	1.008	435
3.	8.134	58.29	168.20	.965	1.251	1.011	579
4.	8.134	75.36	183.20	.964	1.251	1.011	748
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.	.19	561	1.59	.984	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.19	557	1.58	.984	Specific Gravity Separator Gas	.639
3.	.25	558	1.59	.979	Specific Gravity Flowing Fluid	xxxxxx
4.	.28	559	1.59	.978	Critical Pressure	663.6 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	352.0°R

Pc	791.2	Pc ²	626.0						
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1)	$\frac{Pc^2}{Pc^2-Pw^2}$	=	$\frac{4.1131}{2.8560}$	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$
1.	577.9	761.0	579.1	46.9					
2.	537.6	734.8	539.9	86.1					
3.	514.4	720.1	518.5	107.5					
4.	466.8	688.2	473.7	152.3					
5.	0.0	0.0	0.0	0.0					

R0F = 0 $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n$ = $\frac{2136}{Mcfd}$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2136 \text{ Mcfd}$$

Absolute Open Flow 2136 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .742
Remarks:

Approved By:	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

Adopted 9-1-65

DATE 5/6/91

COMPANY Yates Petroleum Corporation LEASE Catterson SS Fed WELL NO. 3

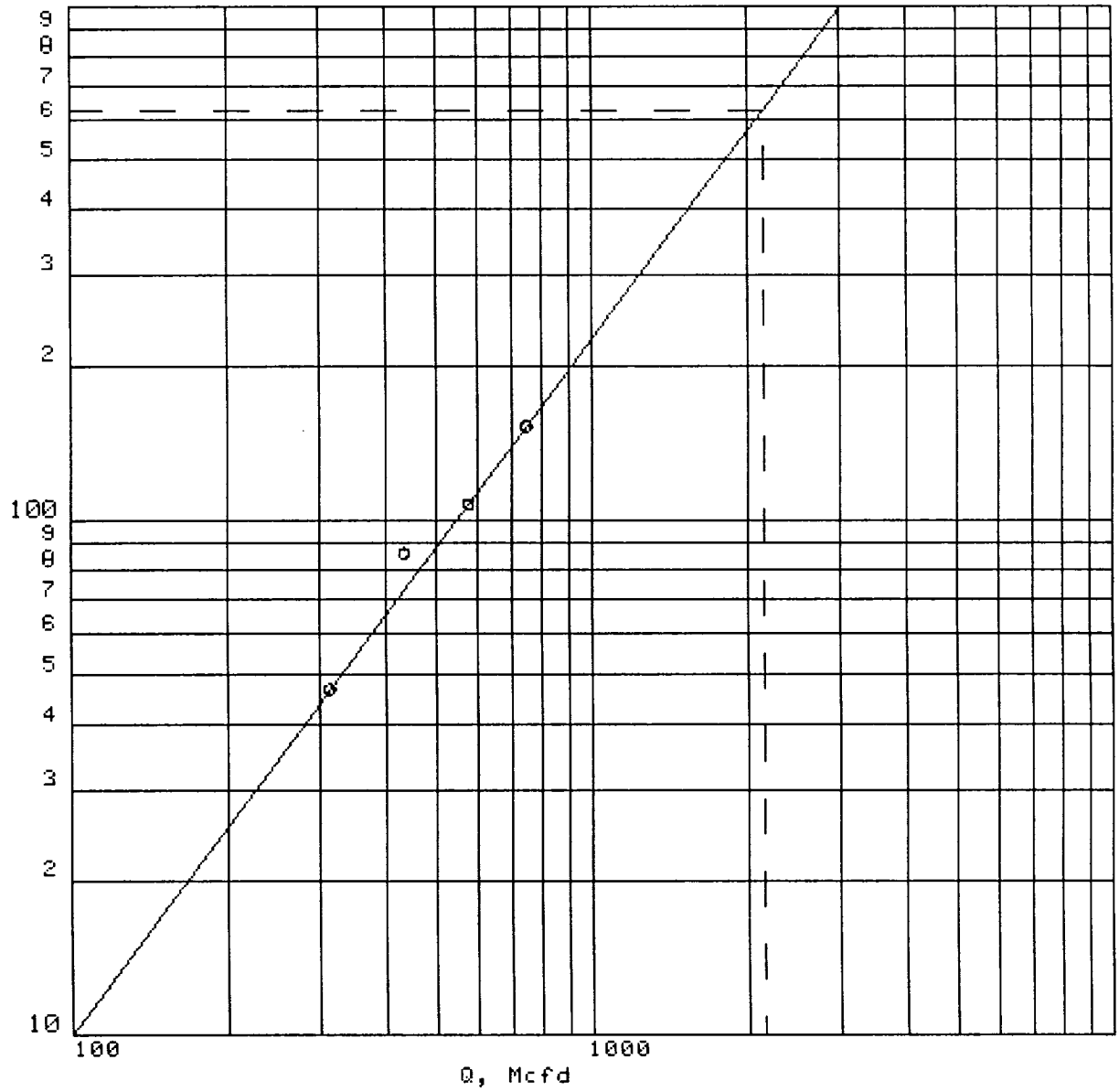
LOCATION: Unit A Section 7 Township 7S Range 26E

L 3654.0 H 3654.0 L/H 1.000 G .639 %CO₂ .57 %N₂ 5.69 %H₂S 0.00

d 1.995 Fr .017777 GH 2334.9 Pcr 663.6 Tcr 352.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.312	.435	.579	.748	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	555.0	555.0	555.0	555.0	0.0
4 T=(Tw+Ts)/2	538.5	538.5	538.5	538.5	0.0
5 Z(Est.)	.893	.897	.899	.903	0.000
6 TZ	481.0	482.9	484.0	486.4	0.0
7 GH/TZ	4.854	4.835	4.824	4.801	0.000
8 e ^s (Table XIV)	1.200	1.199	1.198	1.197	0.000
9 1-e ^{-s} (Table XIV)	.166	.166	.165	.165	0.000
10 Pt	760.2	733.2	717.2	683.2	0.0
11 Pt ² /1000	577.9	537.6	514.4	466.8	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.551	8.589	8.608	8.646	0.000
14 FcQm	2.670	3.733	4.981	6.468	0.000
15 L/H(FcQm) ²	7.128	13.934	24.807	41.829	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	1.186	2.310	4.104	6.892	0.000
17 Pw ² =Pt ² +Fw	579.1	539.9	518.5	473.7	0.0
18 Ps ² =e ^s Pw ²	694.7	647.2	621.2	567.1	0.0
19 Ps	833.5	804.5	788.2	753.1	0.0
20 P=(Pt+Ps)/2	796.8	768.8	752.7	718.1	0.0
21 Pr=(P/Pcr)	1.20	1.16	1.13	1.08	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.893	.897	.899	.903	0.000

Company	Yates Petroleum Corporation
Well	Catterson SS Fed No. 3
Location	A, 7-7S-26E
County	Chaves
Date	5/6/91



ROF= 2136