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

Form C-122

RECEIVED
OCT 2 - 1991
O. C. D.
ARTESIA, OFFICE

Type Test [x] Initial [ ] Annual [ ] Special							Test Date 1/8/91		
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company					
Pool Abo				Formation South Pecos Slope				Unit	
Completion Date 9/6/84		Total Depth 4700.0'		Plug Back TD 4638.0'		Elevation 3712.0'		Farm or Lease Name Comanche Hills ZU	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4700.0'	Perforations: From 4248.0' To 4414.0'				Well No. 1	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 4219.0'	Perforations: From 0.0' To 0.0'				Unit Sec N 25	Twp 10S Rge 25E
Type Well Single				Packer Set At 4219.0'				County Chaves	
Producing Thru Tubing		Resv. Temp. °F 110 @ 4331'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico	
L 4219.0'	H 4219.0'	Gg .653	%CO2 .02	%N2 3.85	%H2S 0.00	Prover 0.000"	Meter Run 2.000"	Taps Flange	

	FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Size	Orifice X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	Duration of Flow
SI	0.000	X 0.000	0	0.0	63	670	0	0	0	0 hrs.
1.	2.067	X 1.000	440	10.7	58	436	62	0	0	24 hrs.
2.	2.067	X 1.000	420	14.1	61	388	62	0	0	24 hrs.
3.	2.067	X 1.000	390	19.1	63	371	62	0	0	24 hrs.
4.	2.067	X 1.000	370	22.0	64	290	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)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.947	69.64	453.20	1.002	1.237	1.042	445
2.	4.947	78.15	433.20	.999	1.237	1.039	497
3.	4.947	87.76	403.20	.997	1.237	1.036	555
4.	4.947	91.82	383.20	.996	1.237	1.034	579
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.68	518	1.43	.921
2.	.65	521	1.44	.926
3.	.61	523	1.44	.932
4.	.58	524	1.44	.936
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
Specific Gravity Separator Gas	.653	xxxxxxxxxxxxx
Specific Gravity Flowing Fluid	xxxxx	.653
Critical Pressure	663.8 PSIA	663.8 PSIA
Critical Temperature	362.7°R	362.7°R

Pc 683.2 Pc^2 466.8

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	201.8	452.5	204.8	262.0
2.	161.0	405.8	164.7	302.1
3.	147.6	390.2	152.3	314.5
4.	91.9	311.6	97.1	369.7
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2} = 1.2632$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 1.1951$

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n =$ 692 Mcfd

Absolute Open Flow	692 Mcfd @ 15.025	Angle of Slope, θ 37	Slope, n .763

Remarks:

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

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

Adopted 9-1-65

DATE 10/29/91

COMPANY Yates Petroleum Corporation LEASE Comanche Hills ZU WELL NO. 1

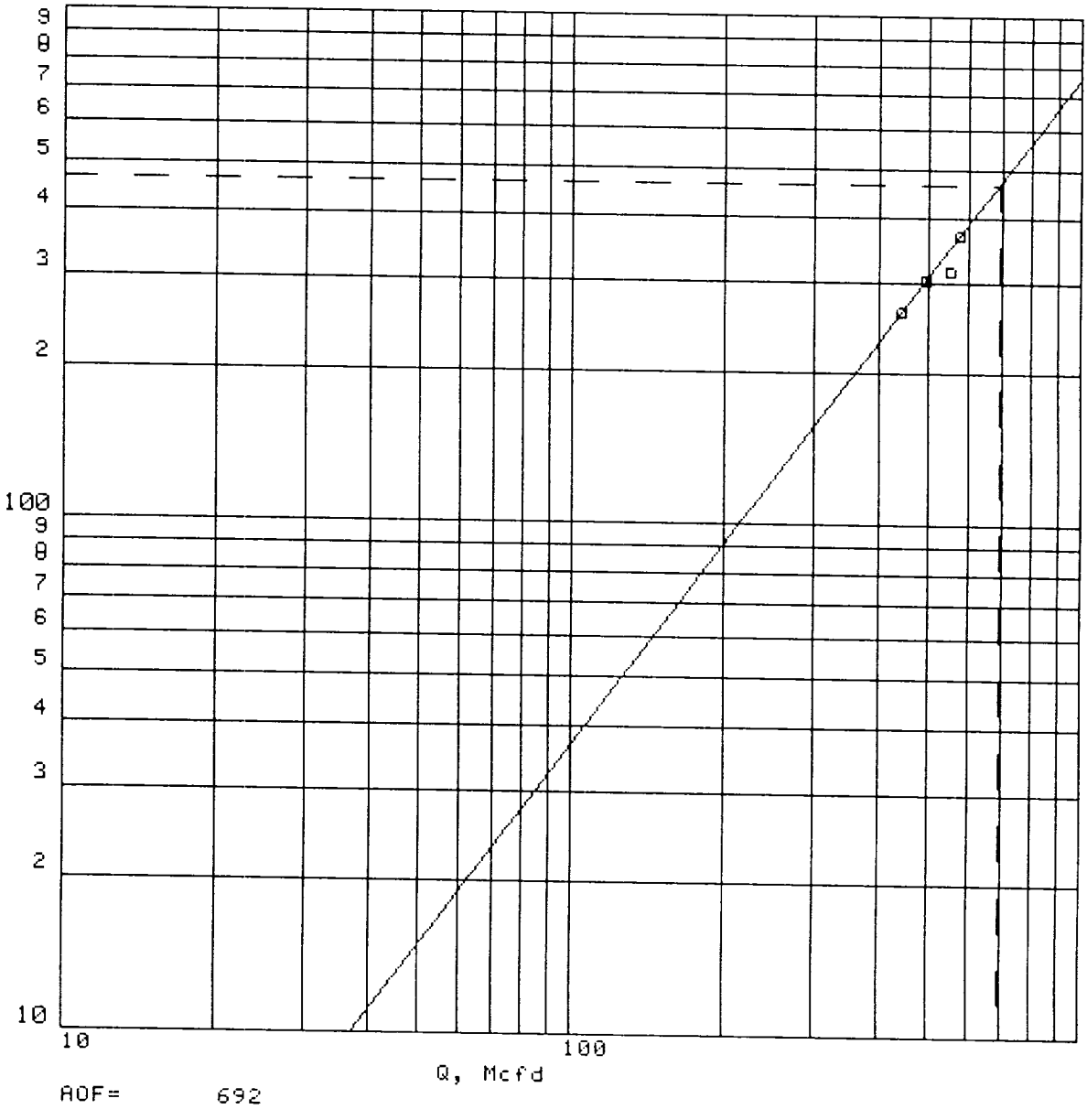
LOCATION: Unit N Section 25 Township 10S Range 25E

L 4219.0 H 4219.0 L/H 1.000 G .653 %CO2 .02 %N2 3.85 %H2S 0.00

d 1.995 Fr .017777 GH 2755.0 Pcr 663.8 Tcr 362.7

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.445	.497	.555	.579	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	570.0	570.0	570.0	570.0	0.0
4 T=(Tw+Ts)/2	546.0	546.0	546.0	546.0	0.0
5 Z(Est.)	.931	.939	.941	.954	0.000
6 TZ	508.6	512.5	513.9	520.7	0.0
7 GH/TZ	5.417	5.375	5.361	5.291	0.000
8 e^s(Table XIV)	1.225	1.223	1.223	1.219	0.000
9 $1-e^{-s}$(Table XIV)	.184	.183	.182	.180	0.000
10 Pt	449.2	401.2	384.2	303.2	0.0
11 $Pt^2/1000$	201.8	161.0	147.6	91.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	9.041	9.112	9.137	9.256	0.000
14 FcQm	4.023	4.526	5.069	5.357	0.000
15 $L/H(FcQm)^2$	16.187	20.484	25.695	28.697	0.000
16 $Fw=L/H(FcQm)^2(1-e^{-s})$	2.976	3.739	4.679	5.165	0.000
17 $Pw^2=Pt^2+Fw$	204.8	164.7	152.3	97.1	0.0
18 $Ps^2=e^sPw^2$	250.9	201.5	186.2	118.4	0.0
19 Ps	500.9	448.9	431.5	344.1	0.0
20 P=(Pt+Ps)/2	475.0	425.0	407.9	323.6	0.0
21 Pr=(P/Pcr)	.72	.64	.61	.49	0.00
22 Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23 Z(Table XI)	.931	.939	.941	.954	0.000

Company	Yates Petroleum Corporation
Well	Comanche Hills ZU No. 1
Location	N, 25-10S-25E
County	Chaves
Date	10/29/91



AOF= 692