

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

Form C-122

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O. C. D.

ARTESIA OFFICE

qsf
File

Type Test [x] Initial [] Annual [] Special				Test Date 3/6/85	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope				Formation Abo	
Completion Date 12/20/82				Farm or Lease Name Getty "VQ" Fed Com	
Total Depth 4250.0'				Well No. 1	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4243.0'	Perforations: From 3854.0' To 3954.0'	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 3816.0'	Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3817.0'	
Producing Thru Tubing				Baro. Press. - Pa 13.2 psia.	
Resv. Temp. °F 96 @ 3787'				State New Mexico	
L 3816.0'	H 3816.0'	Gg .641	%CO2 .24	%N2 4.89	%H2S 0.00
				Prover 0.000"	Meter Run 2.000"
				Taps Flange	

3816.0'		3816.0'		.641		.24		4.89		0.00		0.00		0.00		0.00		Duration of Flow
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									
SI	0.000	X 0.000	0	0.0	0	998	0	0	0	0	0	0	0	0	0	0	0 hrs.	
1.	2.067	X .625	210	7.3	70	738	62	0	0	0	0	0	0	0	0	0	24 hrs.	
2.	2.067	X .625	210	10.8	70	610	62	0	0	0	0	0	0	0	0	0	24 hrs.	
3.	2.067	X .625	210	16.9	70	475	62	0	0	0	0	0	0	0	0	0	24 hrs.	
4.	2.067	X .625	210	21.0	70	320	62	0	0	0	0	0	0	0	0	0	24 hrs.	
5.	0.000	X 0.000	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0 hrs.	

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	√hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	1.866	40.37	223.20	.991	1.249	1.017	95
2.	1.866	49.10	223.20	.991	1.249	1.017	115
3.	1.866	61.42	223.20	.991	1.249	1.017	144
4.	1.866	68.46	223.20	.991	1.249	1.017	161
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.	.34	530	1.49	.968	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.34	530	1.49	.968	Specific Gravity Separator Gas	.641	xxxxxx
3.	.34	530	1.49	.968	Specific Gravity Flowing Fluid	xxxxxx	.641
4.	.34	530	1.49	.968	Critical Pressure	663.4 PSIA	663.4 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	355.4°R	355.4°R

Pc 1011.2	Pc2 1022.5						
NO	Pt2	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2}$	(2) $\left[\frac{Pc2}{Pc2-Pw2}\right]^n$	
1.	564.3	751.2	564.3	458.2			
2.	388.4	623.2	388.4	634.1			
3.	238.3	488.3	238.4	784.1			
4.	111.0	333.4	111.1	911.4			
5.	0.0	0.0	0.0	0.0			

$$ROF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 176 \text{ Mcfd}$$

Absolute Open Flow 176 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .772
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 8/1/85

COMPANY Yates Petroleum Corporation LEASE Getty "VQ" Fed Com WELL NO. 1

LOCATION: Unit H Section 24 Township 6S Range 25E

L 3816.0 H 3816.0 L/H 1.000 G .641 %CO₂ .24 %N₂ 4.89 %H₂S 0.00

d 2.441 Fr .010495 GH 2446.1 Pcr 663.4 Tcr 355.4

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.095	.115	.144	.161	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	556.0	556.0	556.0	556.0	0.0
4 T=(Tw+Ts)/2	539.0	539.0	539.0	539.0	0.0
5 Z(Est.)	.891	.909	.928	.951	0.000
6 TZ	480.1	489.7	500.2	512.6	0.0
7 GH/TZ	5.095	4.995	4.890	4.772	0.000
8 e ^s (Table XIV)	1.210	1.206	1.201	1.196	0.000
9 1-e ^{-s} (Table XIV)	.174	.171	.168	.164	0.000
10 Pt	751.2	623.2	488.2	333.2	0.0
11 Pt ² /1000	564.3	388.4	238.3	111.0	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	5.042	5.142	5.251	5.381	0.000
14 FcQm	.478	.592	.757	.865	0.000
15 L/H(FcQm) ²	.228	.351	.573	.747	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.040	.060	.096	.122	0.000
17 Pw ² =Pt ² +Fw	564.3	388.4	238.4	111.1	0.0
18 Ps ² =e ^s Pw ²	683.1	468.4	286.4	132.9	0.0
19 Ps	826.5	684.4	535.2	364.6	0.0
20 P=(Pt+Ps)/2	788.8	653.8	511.7	348.9	0.0
21 Pr=(P/Pcr)	1.19	.99	.77	.53	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.891	.909	.928	.951	0.000

Company	Yates Petroleum Corporation
Well	Getty "VQ" Fed Com No. 1
Location	H, 24-6S-25E
County	Chaves
Date	8/1/85

