

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

Form C-122

RECEIVED

45F
File

00120 091

Type Test [x] Initial [] Annual [] Special		Test Date 11/14/90	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Company	
Pool Abo		Formation Pecos Slope	
Completion Date 9/18/82		Total Depth 4500.0'	
Csg Size 4.500"		Wt. 9.500#	
Tbg Size 2.375"		Wt. 4.700#	
Perforations: From 3841.0' To 3855.0'		Perforations: From 0.0' To 0.0'	
Farm or Lease Name Bitter Lake PX St.		Well No. 1	
Unit Sec M 16		Twp Rge 10S 25E	
Type Well Single		Packer Set At 3790.0'	
Producing Thru Tubing		Resv. Temp. °F 120 @ 3732'	
Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 3788.0'		H 3788.0'	
Gg .653		%CO2 .02	
%N2 8.83		%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	58	1026	0	0	0	0 hrs.
1.	2.067 X 1.000	905	30.9	61	537	62	0	0	24 hrs.
2.	2.067 X 1.000	805	37.3	60	482	62	0	0	24 hrs.
3.	2.067 X 1.000	740	45.0	58	286	62	0	0	24 hrs.
4.	2.067 X 1.000	630	68.0	59	180	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)	√hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.947	168.44	918.20	.999	1.237	1.075	1107
2.	4.947	174.70	818.20	1.000	1.237	1.067	1141
3.	4.947	184.10	753.20	1.002	1.237	1.063	1200
4.	4.947	209.14	643.20	1.001	1.237	1.053	1349
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr °R	Tr °R	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.
1.	1.40	521	1.49	.866
2.	1.25	520	1.49	.878
3.	1.15	518	1.49	.886
4.	.98	519	1.49	.903
5.	0.00	0	0.00	0.000

Pc 1039.2 Pc2 1079.9				A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.	
Specific Gravity Separator Gas .653				Specific Gravity Flowing Fluid .653	
Critical Pressure 655.5 PSIA				Critical Temperature 348.7°R	
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2-Pw2 (2)
1.	302.7	565.3	319.5	760.4	760.4
2.	245.2	513.1	263.2	816.7	816.7
3.	89.5	331.6	110.0	970.0	970.0
4.	37.3	252.1	63.6	1016.4	1016.4
5.	0.0	0.0	0.0	0.0	0.0

Absolute Open Flow 1320 Mcfd @ 15.025 Angle of Slope, 0 27 Slope, n .500

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 10/28/91

COMPANY Yates Petroleum Corporation LEASE Bitter Lake PX St. WELL NO. 1

LOCATION: Unit M Section 16 Township 10S Range 25E

L 3788.0 H 3788.0 L/H 1.000 G .653 %CO₂ .02 %N₂ 8.83 %H₂S 0.00

d 1.995 Fr .017777 GH 2473.6 Pcr 655.5 Tcr 348.7

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	1.107	1.141	1.200	1.349	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	580.0	580.0	580.0	580.0	0.0
4 T=(Tw+Ts)/2	551.0	551.0	551.0	551.0	0.0
5 Z(Est.)	.928	.935	.959	.972	0.000
6 TZ	511.5	515.2	528.6	535.6	0.0
7 GH/TZ	4.836	4.801	4.679	4.618	0.000
8 es(Table XIV)	1.199	1.197	1.192	1.189	0.000
9 1-e ^{-s} (Table XIV)	.166	.165	.161	.159	0.000
10 Pt	550.2	495.2	299.2	193.2	0.0
11 Pt ² /1000	302.7	245.2	89.5	37.3	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	9.094	9.159	9.397	9.520	0.000
14 FcQm	10.070	10.453	11.275	12.843	0.000
15 L/H(FcQm) ²	101.410	109.263	127.133	164.938	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	16.817	18.002	20.461	26.231	0.000
17 Pw ² =Pt ² +Fw	319.5	263.2	110.0	63.6	0.0
18 Ps ² =esPw ²	383.1	315.1	131.1	75.6	0.0
19 Ps	618.9	561.4	362.0	274.9	0.0
20 P=(Pt+Ps)/2	584.6	528.3	330.6	234.1	0.0
21 Pr=(P/Pcr)	.89	.81	.50	.36	0.00
22 Tr=(T/Tcr)	1.58	1.58	1.58	1.58	0.00
23 Z(Table XI)	.928	.935	.959	.972	0.000

Company	Yates Petroleum Corporation
Well	Bitter Lake PX St. No. 1
Location	M, 16-10S-25E
County	Chaves
Date	10/28/91

