

dsp

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 02/09/2000			
Company Yates Petroleum Corp				Connection Amoco P/L Int. Trucking					
Pool Undesignated				Formation Atoka				Unit	
Completion Date 02/05/2000		Total Depth 9602		Plug Back TD 9175		Elevation 3602		Farm or Lease Name Ceniza AGZ Com	
Csg. Size 7.000	Wt. 26.000	d 6.276	Set At 9602	Perforations: From 8727 To 8733				Well No. 2	
Tbg. Size 2.875	Wt. 6.500	d 2.441	Set At 8615	Perforations: From 8727 To 8733				Unit Sec. Twp. Rge. M 12 20S 24E	
Type Well Single				Packer Set At 8623				County Eddy	
Producing Thru Tubing		Resv. Temp. °F 145 @ 8700		Mean Temp. °F 62		Baro. Press. - Pa 13.2		State New Mexico	
L 9602	H 1205	Gg 0.610	%CO ₂ 2.718	%N ₂ 0.306	%H ₂ S 0.000	Prover 0.000	Meter Run 3.000	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
Sl.	0.000	x	0.000	0	0.0	0	800	0			0
1.	3.068	x	0.750	250	0.8	60	700	60			24
2.	3.068	x	0.750	250	2.0	60	550	60			24
3.	3.068	x	0.750	250	3.0	60	400	60			24
4.	3.068	x	0.750	250	4.0	60	250	60			24
5.		x									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	2.672	14.0	263.2	1.0000	1.280	1.022	49
2.	2.672	22.9	263.2	1.0000	1.280	1.022	80
3.	2.672	28.1	263.2	1.0000	1.280	1.022	98
4.	2.672	32.4	263.2	1.0000	1.280	1.022	113
5.							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.39	520	1.47	0.958	0	
2.	0.39	520	1.47	0.958	0.000	
3.	0.39	520	1.47	0.958	0.610	XXXXXXXXXX
4.	0.39	520	1.47	0.958	0.610	0.610
5.						

NO.	P _r	P _w	P _w	P _c - P _w	(1) $\frac{P_c}{P_c - P_w} =$	(2) $\left[\frac{P_c}{P_c - P_w} \right]^n =$
1.	508.7	713.2	508.7	152.6	1.922	1.476
2.	317.2	563.3	317.3	344.0		
3.	170.7	413.3	170.9	490.4		
4.	69.3	263.5	69.4	591.9		
5.						

Absolute Open Flow		Mcf @ 15.025		Angle of Slope θ 31		Slope, n 0.596	
Remarks							
Approved By Commission							
Conducted By: Manuel Miranda				Calculated By: Katie Brunson		Checked By:	

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

DATE 02/09/2000

COMPANY Yates Petroleum Corp LEASE Ceniza AGZ Com WELL NO. 2

LOCATION: Unit M Section 12 Township 20S Range 24E

L 9602 H 1205 L/H 7.968 G 0.610 %CO₂ 2.718 %N₂ 0.306 %H₂S 0.000

d 2.441 Fr 0.010495 GH 735.0 Pcr 682.9 Tcr 353.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	0.049	0.080	0.098	0.113	
2 Tw(W.H.°R)	520	520	520	520	
3 Ts(B.H.°R)	605	605	605	605	
4 T = (Tw+Ts) / 2	562.2	562.2	562.2	562.2	
5 Z (Est.)	0.917	0.933	0.950	0.968	
6 TZ	515.3	524.5	534.1	544.1	
7 GH / TZ	1.426	1.401	1.376	1.351	
8 e ^s (Table XIV)	1.055	1.054	1.053	1.052	
9 1-e ^s (Table XIV)	0.052	0.051	0.050	0.049	
10 Pt	713.2	563.2	413.2	263.2	
11 Pt ² / 1000	508.7	317.2	170.7	69.3	
12 Fr (Table XV)	0.010495	0.010495	0.010495	0.010495	
13 Fc = FrTZ	5.408	5.505	5.606	5.710	
14 FcQm	0.27	0.44	0.55	0.65	
15 L / H(FcQm) ²	0.6	1.6	2.4	3.3	
16 Fw = L / H(FcQm) ² (1-e ^s)	0.03	0.08	0.12	0.17	
17 Pw ² = Pt ² +Fw	508.7	317.3	170.9	69.4	
18 Ps ² = e ^s Pw ²	536.6	334.4	179.9	73.0	
19 Ps	732.6	578.3	424.2	270.3	
20 P = (Pt+Ps) / 2	722.9	570.7	418.7	266.7	
21 Pr = (P / Pcr)	1.06	0.84	0.61	0.39	
22 Tr = (T / Tcr)	1.59	1.59	1.59	1.59	
23 Z (Table XI)	0.917	0.933	0.950	0.968	

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