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NE MEXICO OIL CONSERVATION COMM ON

MULTIPOINT AND ONE POINT BACK PRESSURE TES. FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

JUL 9 1982

O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 5-8-82	
Company: Yates Petroleum Corporation			Connection: Transwestern Pipeline Company		Unit: NM 28297
Pool: Pecos Slope Abo			Formation: Abo		
Completion Date: 1-25-82	Total Depth: 4160		Plug Back TD: 4101	Elevation: 3872 Gr	Farm or Lease Name: Everette 00 Federal
Csg. Size: 4-1/2	Wt.: 9.5#	d: 4.090	Set At: 4160	Perforations: From 3795 To 3805	Well No.: 6
Tbg. Size: 2-3/8	Wt.: 4.7#	d: 1.995	Set At: 3771	Perforations: From ---- To ----	Unit: H Sec.: 25 Twp.: 5s Rge.: 24e
Type well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: -------		County: Chaves
Producing Thru: tubing	Reservoir Temp. °F: 110 @ 3.769		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3771	3771	.658	.57	7.72	0	---	2"	flanged

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					983				Days
1.	2.067 x .750	360	19.6	72	400	63			24 hrs
2.	2.067 x .750	370	11.5	72	580	60			24 hrs
3.	2.067 x .750	365	6.7	72	651	65			24 hrs
4.	2.067 x .750	340	6.0	72	723	61			24 hrs
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.709	85.5	373.2	.9795	1.233	1.033	289
2	2.709	66.5	383.2	.9795	1.233	1.034	225
3	2.709	50.3	378.2	.9795	1.233	1.034	170
4	2.709	46	353.2	.9795	1.233	1.031	155
5							

NO.	P_t	Temp. °R	T_f	Z
1	.633	532	1.50	.937
2	.649	532	1.50	.936
3	.641	532	1.50	.936
4	.598	532	1.50	.940
5				

Gas Liquid Hydrocarbon Ratio ____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas .658 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 590 P.S.I.A. ____ P.S.I.A.
Critical Temperature 354 R ____ R

P_c 996.2 P_c^2 992.4

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	170.7		171.9	820.5
2	351.7		352.4	640
3	442		442.4	550
4	542.1		542.4	450
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2095$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2236$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 353$

Absolute Open Flow 353 Mcfd @ 15.025 Angle of Slope θ ____ Slope, n 1.0607

Remarks: Static pressure by Bennett Wireline, flowing pressure by DWT calculations. Worksheet C122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Scott Yates	

COMPANY Yates Pet Corp. LEASE Eueic [illegible] Fed WELL NO. [illegible] DATE [illegible]

LOCATION: Unit [illegible] Section 25 Township [illegible] Range 24E

L 3771 H 3771 L/H 1 G .658 % CO_2 .57 % N_2 7.72 % H_2S 0

d 1.995 F_r .01823 / GH 2481.3 P_{cr} 590 (TABLE IX & X) T_{cr} 354 (TABLE IX & X)

	LINE	Rate 1		Rate 2		Rate 3		Rate 4			
		1st trial		1st		1st		1st			
	1 Q_m	.287		.225		.170		.155			
	2 T_w (W.H. °R)	523		520		525		521			
	3 T_s (B.H. °R)	570		570		570		[illegible]			
6	4 $T = (\frac{T_w + T_s}{2})$	546.5		545		547.5		545.5			
	5 Z (Est.)	.933		.907		.899		.885			
9	6 TZ	509.9		494.3		492.2		482.8			
	7 GH/TZ	4.866		5.020		5.0[illegible]		5.140			
	8 e^s (Table XIV)	1.200		1.207		1.208		1.213			
	9 $1 - e^{-s}$ (Table XIV)	.167		.171		[illegible]		.176			
19	10 P_t	413.2		593.2		664.2		73[illegible].2			
24	11 $P_t^2/1000$	170.7		351.7		442.0		542.1			
	12 F_r (Table XV)	.018231		.01823[illegible]		[illegible]		[illegible]			
32	13 $F_c = F_r TZ$	9.296		9.012		8.973		8.801			
34	14 $F_c Q_m$	2.686		2.028		1.525		1.364			
35	15 $L/H (F_c Q_m)^2$	7.217		4.111		2.327		1.861			
37	16 $F_w = L/H(F_c Q_m)^2(1-e^{-s})$	1.205		.703		.400		[illegible]			
40	17 $P_w^2 = P_t^2 + F_w$	171.9		352.4		442.4		542.4			
42	18 $F_s^2 = e^s P_w^2$	206.3		425.3		534.[illegible]		657.9			
44	19 F_s	454.2		652.2		731.0		811.1			
49	20 $\bar{P} = (\frac{P_t + P_s}{2})$	433.7		622.6		697.9		773.1			
	21 $P_r = (\bar{P}/P_{cr})$	.74		1.06		1.18		1.31			
	22 $T_r = (T/T_{cr})$	1.54		1.54		1.55		1.54			
	23 Z (Table XI)	.933		.907		.899		.885			

…erettcoc Fed

#6

H-25-5s-24E