NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

C-122

RECEIVED
MAR 26 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1-27-81	
Company: Yates Petroleum Corporation			Connection: Transwestern Pipeline Co.		
Pool: No. Turkey Track ~~Morrow~~			Formation: Morrow		Unit
Completion Date: 7-4-80	Total Depth: 11500 KB		Plug Back TD: 11220 KB	Elevation: 3453 KB	Farm or Lease Name: Dixon Yates LM Fed.
Csg. Size: 4½" / Wt.: 11.6# / d: 4.000 / Set At: 11423 KB			Perforations: From 11130 To 11144		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 11108 KB			Perforations: From To		Unit: G / Sec.: 28 / Twp.: 18S / Rge.: 29E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 11108-11111		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 174 @ 11137	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11130	11130	0.7145	2.70	0.72	N.7	----	2"	Flanged

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2860	57			Weeks
1.	2.067 X 1.000	810	4	53	2230	66			16 hrs
2.	2.067 X 1.000	820	10	53	2064	70			24 hrs
3.	2.067 X 1.000	830	22	54	1720	73			24 hrs
4.	2.067 X 1.000	830	43	55	877	75			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	4.946	57.38	823.2	1.007	1.224	1.095	383
2	4.946	91.28	833.2	1.007	1.224	1.096	610
3	4.946	136.20	843.2	1.006	1.224	1.097	910
4	4.946	190.41	843.2	1.005	1.224	1.096	1270
5							

NO.	P_t	Temp. °R	T_r	Z
1	1.211	513	1.364	.834
2.	1.225	513	1.364	.832
3.	1.240	514	1.367	.8315
4.	1.240	515	1.370	.8328
5				

Gas Liquid Hydrocarbon Ratio 54.26 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas 0.667 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 7145
Critical Pressure 680 P.S.I.A. 888 P.S.I.A.
Critical Temperature 376 R 467 R

P_c 43382 P_c^2 18820

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1			12180	6640
2			10503	8317
3			7310	11510
4			1624	17196
5				

(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 1.09444$ (2) $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 1.09444$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 1390$

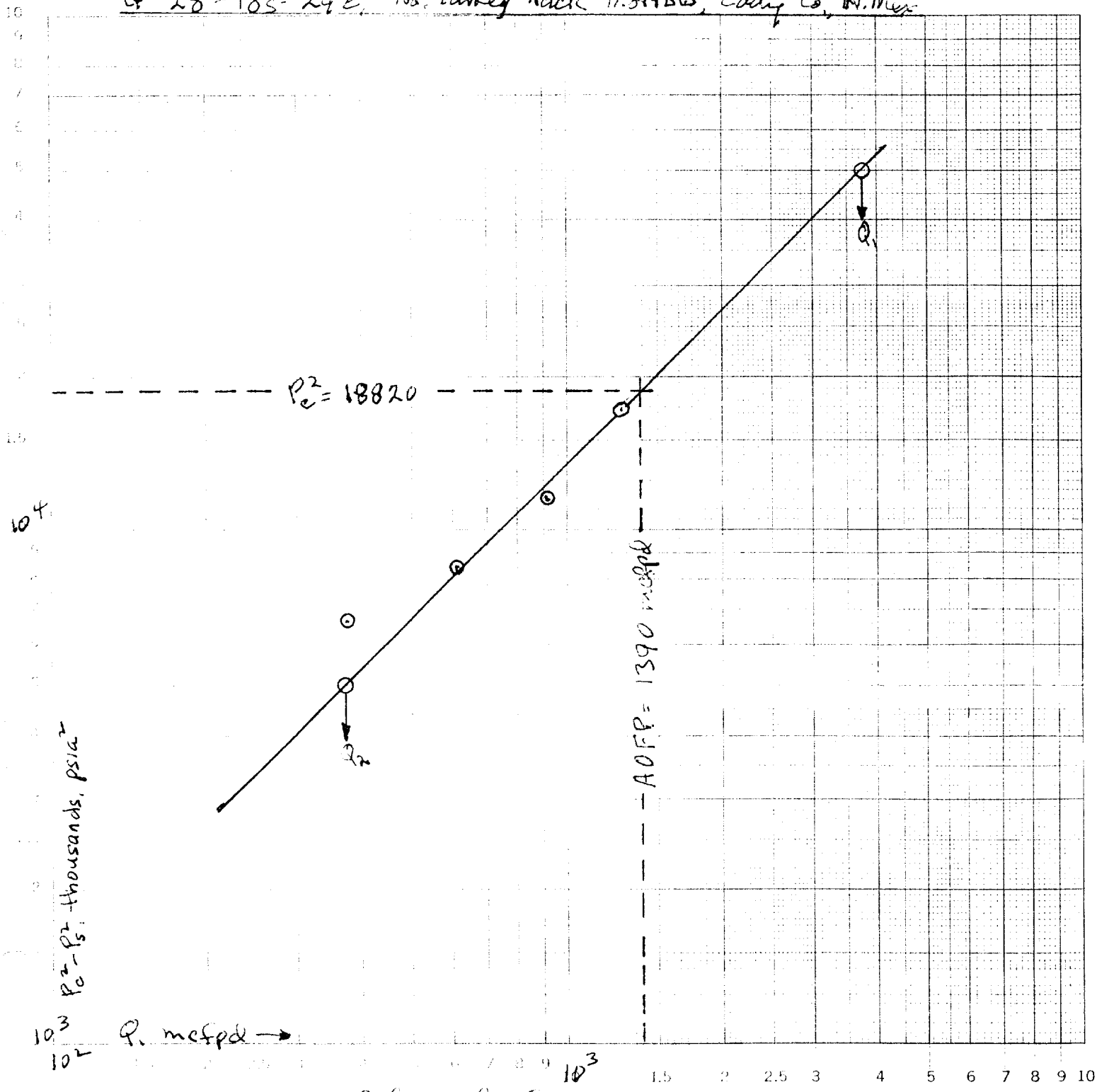
Absolute Open Flow 1390 Mcfd @ 15.025 Angle of Slope θ 45 deg. Slope, n 1.000

Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations, worksheet C122D attached

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Trembly Jr.	Eddie Mahfood	

YPC - Dixon Yates LM Fed No. 1

G 28 - 18S - 29E, No. Turkey Track Morrow, Eddy Co, N. Mex.



$Q_1 = 3710$ mcfpd $\log Q_1 = 3.5694$

$Q_2 = 311$ mcfpd $\log Q_2 = 2.5694$

$n = 1.0000$

WORKSHEET FOR CALCULATION OF ST IC COLUMN WELLHEAD RESSURE (P_w)

API RP
Adopted 9-1-65

COMPANY _____ LEASE _____ WELL NO. 1 DATE _____

LOCATION: Unit _____ Section 26 Township 12 Range 24

L _____ H _____ L/H _____ G _____ % CO_2 3.52 % N_2 _____ % H_2S _____

d _____ F_r _____ GH _____ P_{cr} _____ T_{cr} _____

LINE	S1	1	2	3	4				5	6
1 Q_m	—									
2 T_w (W.H. °R)	517									
3 T_s (B.H. °R)										
4 $T = (\frac{T_w + T_s}{2})$										
5 Z (Est.)										
6 TZ		7.56			4.54.64					
7 GH/TZ					17.491.5					6965
8 e^s (Table XIV)					1.9269					1.9418
9 $1-e^{-s}$ (Table XIV)					0.4316					0.4856
10 P_t					346.2					346.2
11 $P_t^2/1000$					792.46					792.46
12 F_t (Table XV)					0.655493					66366
13 $F_c = F_t$ TZ					7.5630					7.4756
14 $F_c Q_m$					9.605					9.494
15 $L/H (F_c Q_m)^2$					92.256					96.136
16 $F_w = L/H (F_c Q_m)^2 (1-e^{-s})$					44.32					43.72
17 $P_w^2 = P_t^2 + F_w$					836.78					836.18
18 $P_s^2 = e^s P_w^2$	18820				1612.5					1623.7
19 P_s					1269.8					1274.2
20 $P = (\frac{P_t + P_s}{2})$					1080.0					1082.2
21 $P_r = (P/P_{cr})$					1.216					1.219
22 $T_r = (T/T_{cr})$					1.250					1.250
					0.770					0.7695