Submit in duplicate to appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

SEP 2003
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Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator	LYNX PETROLEUM				Lease or Unit Name		PACER 28 FED		
Type Test: ☑ Initial ☐ Annual ☐ Special					Test Date		Well No. 1		
Completion Date	Total Depth 12540			Plug Back TD	Elevation		Unit Ltr - Sec - TWP - Rge 28 19 31		
Csg. Size 5 1/2	Wt. 17 #	d	Set At 12540	Perforations: From: 12487	To: 12521		County ~~NEA~~ Eddy		
Tbg. Size 2 3/8	Wt. 4.7 #	d 1.995	Set At 12405	Perforations: From:	To:		Pool		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 12405			Formation MORROW		
Producing Thru TBG	Reservoir Temp. °F 197.5 @ 12350		Mean Annual Temp. °F 60	Baro. Press. P_a 13.2			Connection SALES		

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
* 12350	* 12350	0.672	0.683	0.406	N/A	N/A	4.026	FLG

	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						3390		PKR		24 HRS
1	4	X 1.750	12.2	7.84	120	2950		"		1 HR
2	4	X 1.750	121.8	9	100	2070		"		1 HR
3	4	X 1.750	53	9	78	1310		"		1 HR
4	4	X 1.750	424.2	10.2	86	1260		"		1 HR
5										

RATE OF FLOW CALCULATIONS

No.	COEFFICIENT (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor F_g	Super Compress Factor F pv	Rate of Flow Q. Mcfd
1	14.93	14.11	25.4	0.9469	1.22	1.054	256
2	14.93	20.12	135	0.9636	1.22	1.011	618
3	14.93	14.09	66.2	0.9831	1.22	1.054	460
4	14.93	37.4	437.4	0.9759	1.22	1.044	1,239
5							

No.	P_r	Temp. °R	T_r	Z
1	0.04	580	1.51	0.9
2	0.2	560	1.46	0.979
3	0.1	538	1.4	0.901
4	0.65	546	1.42	0.917
5				

Gas Liquid Hydrocarbon Ratio	13.4		Mcf bbl.
A.P. I. Gravity of Liquid Hydrocarbons	54.5		Deg.
Specific Gravity Separator Gas	0.672		XXXXXXX
Specific Gravity Flowing Fluid	XXXXX	GMIX .883	
Critical Pressure	669 P.S.I.A.	382	P.S.I.A.
Critical Temperature	382 R.	382	R

P_c 3741.5 P_c^2 13998.8

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3315.9	10995.1	3003.7
2		2526.3	6382.4	7616.4
3		1963.4	3854.9	10143.9
4		1696.8	2879.3	11119.5
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 1.259 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 1.259

AOF = Q 79825 $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 1.56

Absolute Open Flow	1,560	Mcfd @ 15.025	Angle of Slope Q:	45	Slope n:	1

Remarks: * BHP INSTERMENT SET @ THIS DEPTH--WELL PRODUCED 8.00 BBLS 54.5 CONDENSATE

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	METERING & TESTING	BM	BM

[illegible] : [illegible] PETROLEUM LEASE : PACER 28 FED. WELL NO. : 1

UNIT : SECTION : 28 TOWNSHIP : 19

L : 12350 H : 12350 L/H : 1 G/GMIX : 0.672

%CO2 : 0.683 %N2 : 0.406 H2S : DATE : 8-25-03

d : 1.995 Fr : 0.018231 GH : 8299.2 RANGE : 31

VOL 1 : 256 PSIA 1 : 3315.5 RESV.TEMP 197.5

VOL 2 : 618 PSIA 2 : 2523.6

VOL 3 : 460 PSIA 3 : 1961.5 SHUT-IN PR= 3741.5

VOL 4 : 1239 PSIA 4 : 1680.7

PCR : 669

TCR : 382

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	`1ST	`2ND	`1ST	``2ND	`1ST	`2ND	`1ST	`2ND
1 QM	0.256	0.256	0.618	0.618	0.460	0.460	1.239	1.239
2 TW	534	534	534	534	534	534	534	534
3 Ts	657.5	657.5	657.5	657.5	657.5	657.5	657.5	657.5
4 T	595.8	595.8	595.8	595.8	595.8	595.8	595.8	595.8
PR (est)	4.96		3.77		2.93		2.51	
5 Z(est)	0.814	0.854	0.785	0.800	0.790	0.784	0.802	0.788
6 TZ	484.8	508.8	467.9	476.4	470.6	467.2	477.7	469.7
7 GH/TZ	17.120	16.311	17.737	17.422	17.636	17.765	17.372	17.671
8 eS	1.900	1.843	1.945	1.922	1.937	1.947	1.918	1.940
9 1-e-S	0.474	0.458	0.486	0.480	0.484	0.486	0.479	0.485
10 Pt	3315.5	3315.5	2523.6	2523.6	1961.5	1961.5	1680.7	1680.7
11 Pt2 /1000	10992.5	10992.5	6368.6	6368.6	3847.5	3847.5	2824.8	2824.8
12 Fr	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.0182311
13 Fc=FrTZ	8.838	9.276	8.530	8.684	8.579	8.517	8.710	8.562
14 FcQm	2.26	2.37	5.27	5.37	3.95	3.92	10.79	10.61
15 L/H(FcQm)	5.1	5.6	27.8	28.8	15.6	15.3	116.5	112.5
16 Fw	2.425144	2.580326	13.50095	13.81747	7.535508	7.464905	55.74805	54.530330
17 Pw2	10995.0	10995.1	6382.1	6382.4	3855.0	3854.9	2880.5	2879.3
18 Ps2	20893.4	20269.1	12411.7	12266.6	7468.8	7504.8	5525.6	5585.7
19 Ps	4570.9	4502.1	3523.0	3502.4	2732.9	2739.5	2350.7	2363.4
20 P	3943.2	3908.8	3023.3	3013.0	2347.2	2350.5	2015.7	2022.0
21 Pr	5.89	5.84	4.52	4.50	3.51	3.51	3.01	3.02
22 Tr	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
23 Z	0.854	0.852	0.800	0.799	0.784	0.784	0.788	0.788

Pc = 3741.5 Pc2 = 13998.8

Pt2 =	*******	Pw =	3315.9
	6368.6		2526.3
	3847.5		1963.4
	2824.8		1696.8
Pc2-Pw2=	3003.7	Pw2 =	10995.1
	7616.4		6382.4
	~~10703.9~~		3854.9
	~~11119.5~~		2879.3

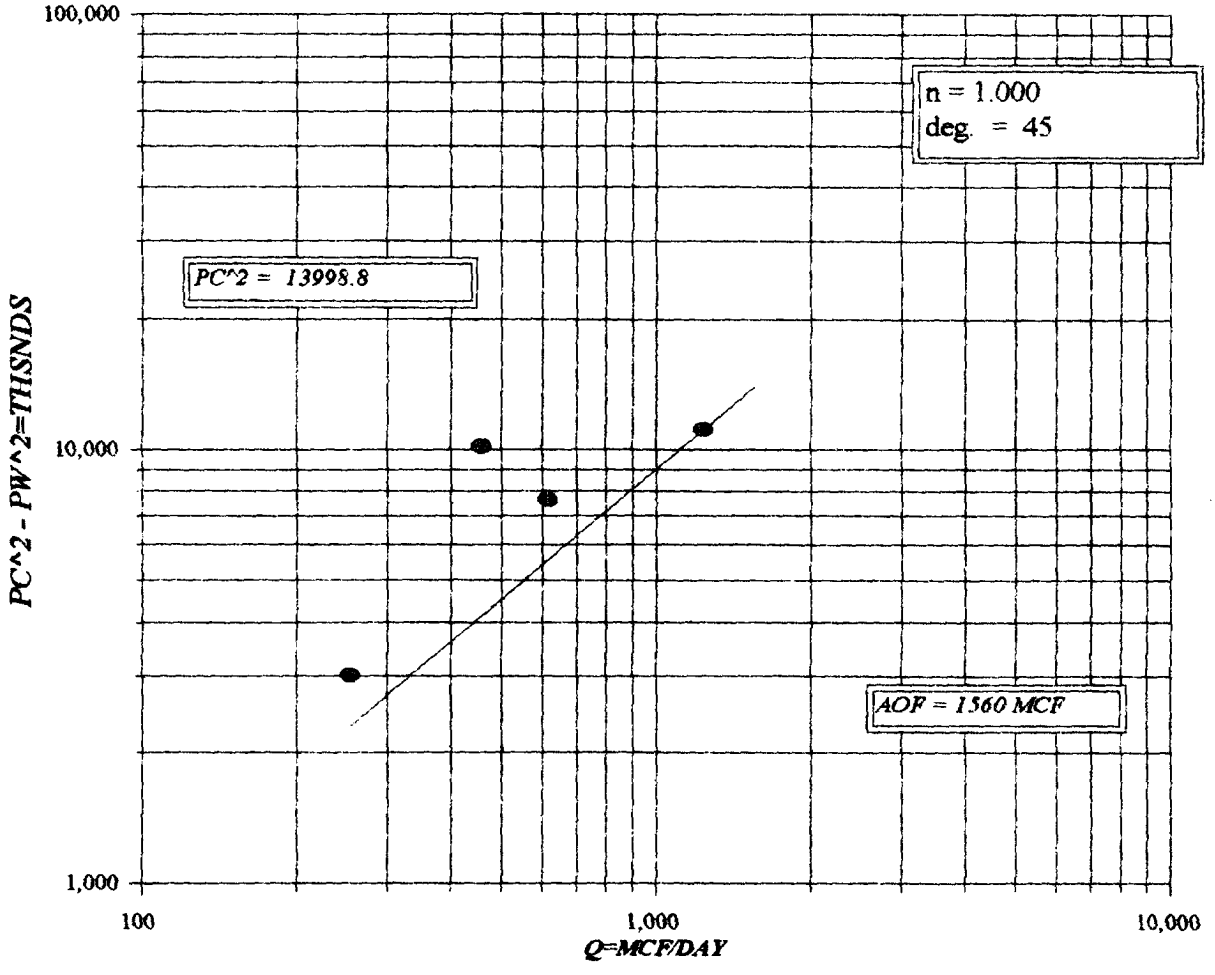
n = 1.000

Pc2/(Pc2-Pw2) =	4.661
	1.838
	1.380
	1.259
[Pc2/Pc2-Pw2]n =	4.661
	1.838
	1.380
	1.259
AOF= Q	1.193
	1.136
	0.635
	1.560

FORM C122-D

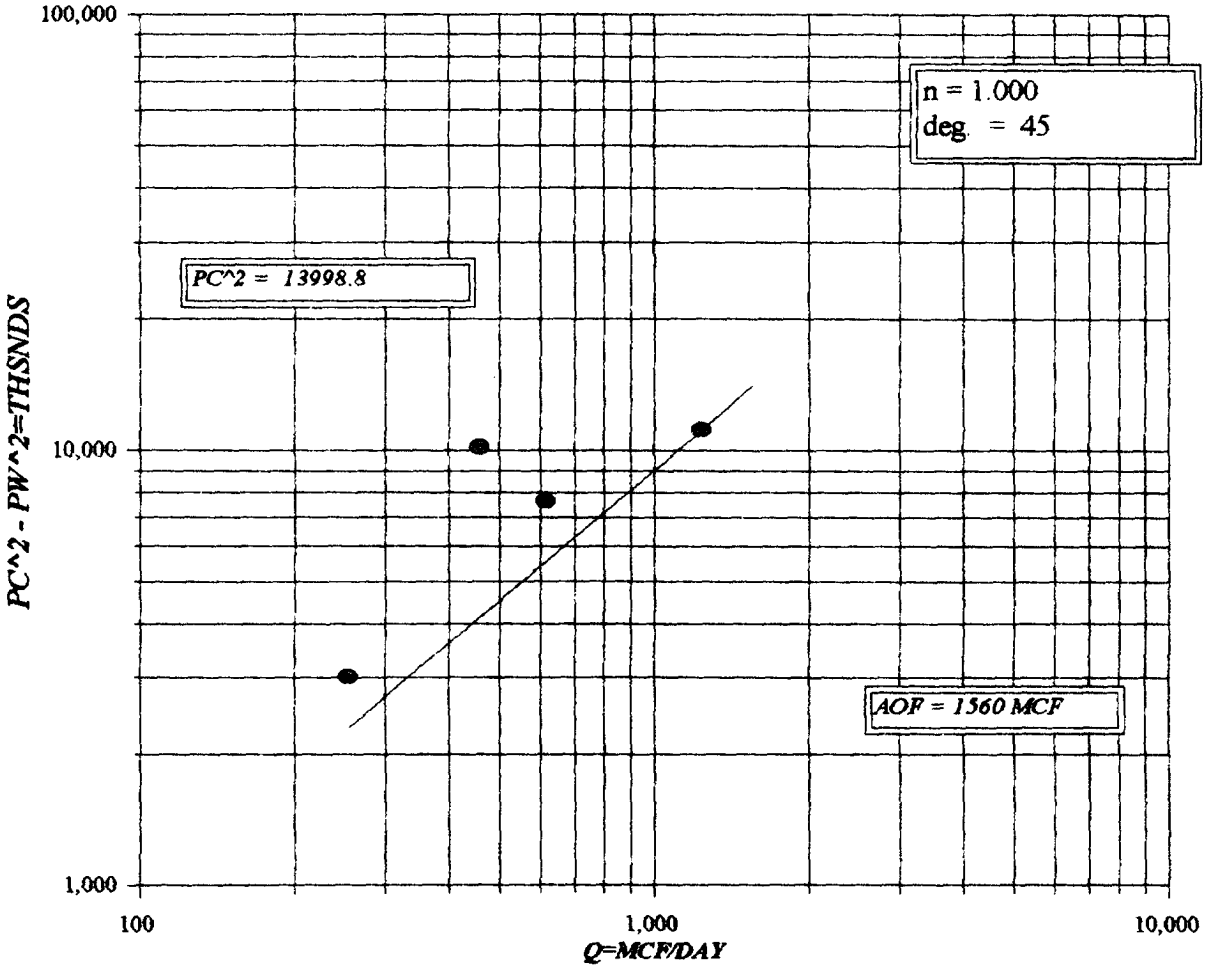
LYNX PETROLEUM

PACER 28 FEDERAL # 1



LYNX PETROLEUM

PACER 28 FEDERAL # 1



WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw) FORM C-122F
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Pa)

COMPANY	LYNX PETROLEUM	LEASE :	PAC 28	WELL NO. :	1	DATE	8-25-03
UNIT		SECTION :	28	TWNSHP :	19	RANGE :	31
L	12350	H :	12350	L/H :	1	G/GMIX :	0.6720
		CO2 :	0.683	N2 :	0.406	H2S :	
		GH :	8299.2	PCR :	669	TCR :	382

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	657.5	657.5	657.5	657.5	657.5	657.5	657.5	657.5
3	T=(Tw+Ts/2)	595.8	595.8	595.8	595.8	595.8	595.8	595.8	595.8
4	Z (EST.)	1.011	0.893	ERR	ERR	ERR	ERR	ERR	ERR
5	TZ	602	532	ERR	ERR	ERR	ERR	ERR	ERR
6	GH/TZ	13.782	15.602	ERR	ERR	ERR	ERR	ERR	ERR
7	eS(TABLE XIV)	1.677	1.795	ERR	ERR	ERR	ERR	ERR	ERR
8	Pf or Ps	5013	5013	0	0	0	0	0	0
9	Pf2 or Ps2	25130.2	25130.2	0.0	0.0	0.0	0.0	0.0	0.0
10	Pc2=Pf/eS or Pw2=Ps2/eS	14988.2	13999.0	ERR	ERR	ERR	ERR	ERR	ERR
11	Pc or Pw	3871	3742	ERR	ERR	ERR	ERR	ERR	ERR
12	P=(Pw+Ps/2)or(Pc+Pf/2)	4442	4377	ERR	ERR	ERR	ERR	ERR	ERR
13	Pr=(P/Pcr)	6.64	6.54	ERR	ERR	ERR	ERR	ERR	ERR
14	Tr(T/Tcr)	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
15	Z (TABLE XI)	0.893	0.888	ERR	ERR	ERR	ERR	ERR	ERR

Pa → Pw 1 : 3741.5 PW 2 : ERR PW 3 : ERR PW 4 : ERR

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw) FORM C-122F
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

COMPANY	LYNX PETROLEUM	LEASE :	PAC 28	WELL NO. :	1	DATE	8-25-03
UNIT		SECTION :	28	TWNSHP :	19	RANGE :	31
L	12350	H :	12350	L/H :	1	G/GMIX :	0.6720
		CO2 :	0.683	N2 :	0.406	H2S :	
		GH :	8299.2	PCR :	669	TCR :	382

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	657.5	657.5	657.5	657.5	657.5	657.5	657.5	657.5
3	T=(Tw+Ts/2)	595.8	595.8	595.8	595.8	595.8	595.8	595.8	595.8
4	Z (EST.)	0.963	0.856	0.824	0.800	0.790	0.784	0.784	0.789
5	TZ	574	510	491	476	470	467	467	470
6	GH/TZ	14.461	16.281	16.901	17.422	17.641	17.765	17.765	17.667
7	eS(TABLE XIV)	1.720	1.841	1.885	1.922	1.938	1.947	1.947	1.940
8	Pf or Ps	4499	4499	3498.6	3498.6	2736.9	2736.9	2340.7	2340.7
9	Pf2 or Ps2	20241.0	20241.0	12240.2	12240.2	7490.6	7490.6	5478.9	5478.9
10	Pc2=Pf/eS or Pw2=Ps2/eS	11768.5	10992.2	6494.4	6368.7	3865.6	3847.7	2814.3	2824.7
11	Pc or Pw	3431	3315	2548	2524	1966	1962	1678	1681
12	P=(Pw+Ps/2)or(Pc+Pf/2)	3965	3907	3024	3011	2352	2349	2009	2011
13	Pr=(P/Pcr)	5.93	5.84	4.52	4.50	3.51	3.51	3.00	3.01
14	Tr(T/Tcr)	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
15	Z (TABLE XI)	0.856	0.851	0.800	0.799	0.784	0.784	0.789	0.788

PW 1 : 3315.5 PW 2 : 2523.6 PW 3 : 1961.5 PW 4 : 1680.7

NEW MEXICO G.O.R./G. MIX

NO. OF BBLS PRODUCED	=	8.0
API GRAVITY @ 60 DEG.	=	54.5
SPECIFIC GRAVITY OF GAS	=	0.6720
TOTAL GAS PRODUCED	=	107
G.O.R.	=	13.401
G.MIX	=	0.883