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

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator					Lease or Unit Name					
LOUIS DREYFUS					HARROD 7					
Type Test: ☑ Initial ☐ Annual ☐ Special					Test Date: 9/18/00			Well No.: 1		
Completion Date		Total Depth: 13110			Plug Back TD: 13063			Elevation		Unit Ltr - Sec - TWP - Rge: A 7 16-S 35-E
Csg. Size: 5 1/2	Wt.: 17	d: 4.892	Set At: 13063		Perforations: From: 12557 To: 12570					County: LEA
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 12800		Perforations: From: To:					Pool:
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE					Packer Set At: 12800					Formation:
Producing Thru: CASEING		Reservoir Temp.°F: 199.6			Mean Annual Temp. °F: 60			Baro. Press.-P_a: 13.2		Connection: SALES
L: 12563.5	H: 12563.5	Gg: 0.664	%CO_2: 2.354	%N_2: 0.801	%H_2S: N/A	Prover: N/A	Meter Run: 3.068			Taps: 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					N/A	N/A	2160	N/A	
1	3.068 X 1.000	409	4.2	80			2150		1 HR
2	3.068 X 1.000	429	18	70			2030		1 HR
3	3.068 X 1.000	434	48	80			1900		1 HR
4	3.068 X 1.000	449	170	70			1650		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							288
2	GAS VOLUMES	MEASURED	BY	TOTAL	FLOW	METER	551
3							902
4							1729
5							

No.	P_r	Temp. °R	T_r	Z
1				
2	TOTAL	FLOW	METER	
3				
4				
5				

Gas Liquid Hydrocarbon Ratio: N/A Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: 0.664 XXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 677 P.S.I.A. P.S.I.A.
Critical Temperature: 372 R. R.

P_c 2173.2 P_c^2 4722.8

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4679.2	2163.4	4680.3	42.5
2	4174.7	2044	4178	544.8
3	3660.3	1915.5	3669.2	1053.6
4	2766.2	1673	2799.1	1923.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 2.455 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 1.589

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 2748

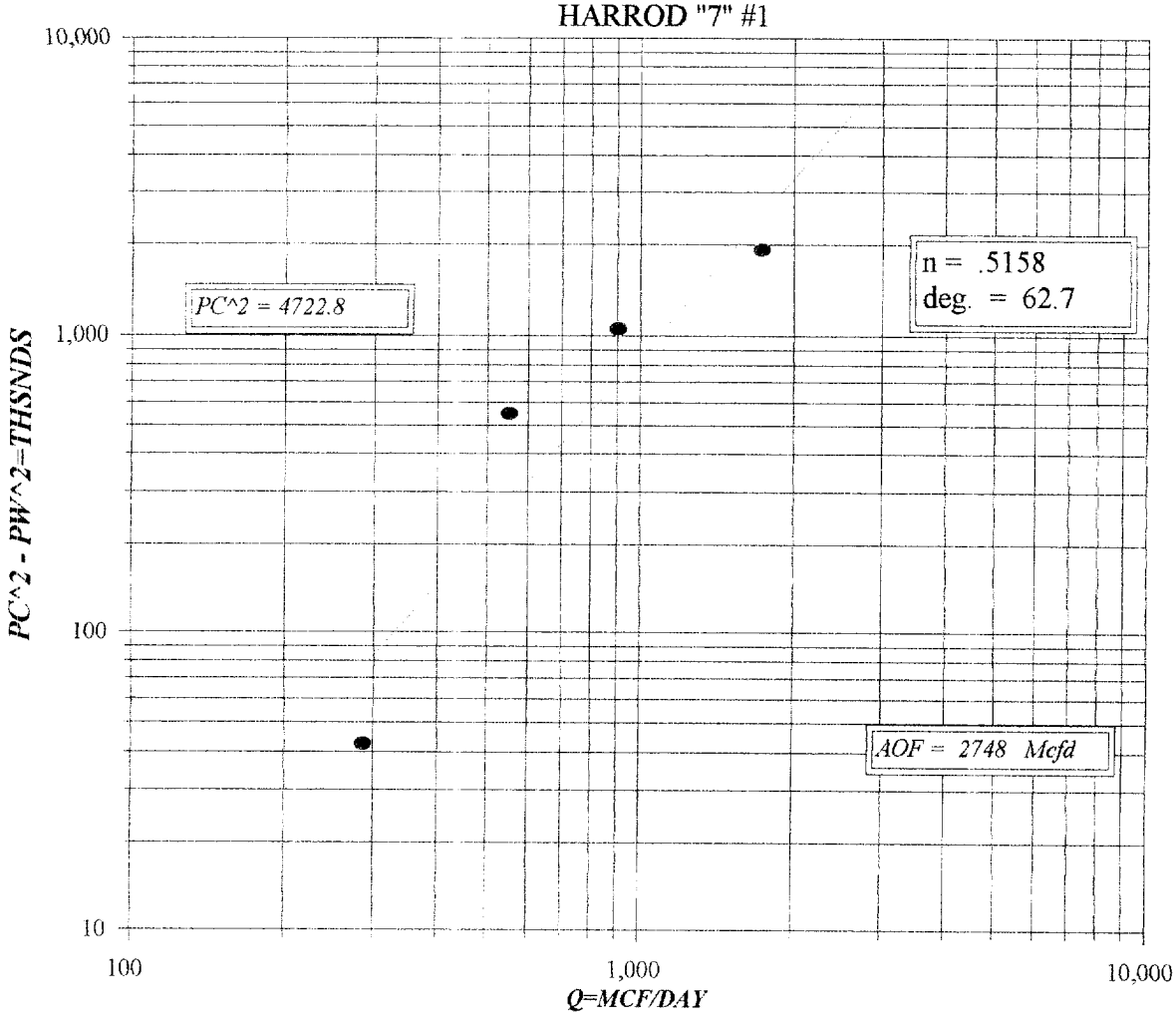
Absolute Open Flow: 2748 Mcfd @ 15.025 | Angle of Slope (): 62.7 | Slope n: 0.5158

Remarks: *NO LIQUID MADE DURING TEST.

Approved By Division:	Conducted By:	Calculated By:	Checked By:
Approved by Paul Kautz Geologist	PRO WELL TESTING	MB	BM

LOUIS DREYFUS NATURAL GAS

HARROD "7" #1



UNIT :A SECTION :16-S TOWNSHIP :33-E

L : 12564 H : 12564 : 1 G/GMIX : 0.664

%CO2 : 2.354 %N2 : 0.801 DATE :9/18/00

d : 2.517 Fr :0.009934 GH : 8342.2 RANGE :35-E

VOL 1 : 288 PSIA 1 : 2163.2 RESV.TEMP 199.6

VOL 2 : 551 PSIA 2 : 2043.2

VOL 3 : 902 PSIA 3 : 1913.2 SHUT-IN PR= 2173.2

VOL 4 : 1729 PSIA 4 : 1663.2

PCR : 677

TCR : 372

LINE	RATE 1		RATE 2		RATE 3		RATE 4	
	`1ST	`2ND	`1ST	``2ND	`1ST	`2ND	`1ST	`2ND
1 QM	0.288	0.288	0.551	0.551	0.902	0.902	1.729	1.729
2 TW	534	534	534	534	534	534	534	534
3 Ts	659.6	659.6	659.6	659.6	659.6	659.6	659.6	659.6
4 T	596.8	596.8	596.8	596.8	596.8	596.8	596.8	596.8
PR (est)	3.20		3.02		2.83		2.46	
5 Z(est)	0.806	0.806	0.809	0.805	0.812	0.805	0.823	0.810
6 TZ	481.2	481.0	482.6	480.3	484.7	480.5	490.9	483.5
7 GH/TZ	17.336	17.342	17.287	17.367	17.211	17.362	16.994	17.255
8 eS	1.916	1.916	1.912	1.918	1.907	1.918	1.891	1.910
9 1-e-S	0.478	0.478	0.477	0.479	0.476	0.479	0.471	0.476
10 Pt	2163.2	2163.2	2043.2	2043.2	1913.2	1913.2	1663.2	1663.2
11 Pt2 /1000	4679.4	4679.4	4174.7	4174.7	3660.3	3660.3	2766.2	2766.2
12 Fr	0.009934	0.009934	0.009934	0.009934	0.009934	0.009934	0.009934	0.0099347
13 Fc=FrTZ	4.781	4.779	4.794	4.772	4.815	4.773	4.877	4.803
14 FcQm	1.38	1.38	2.64	2.63	4.34	4.31	8.43	8.30
15 L/H(FcQm)	1.9	1.9	7.0	6.9	18.9	18.5	71.1	69.0
16 Fw	0.906147	0.905745	3.328767	3.309118	8.971959	8.871067	33.50836	32.857760
17 Pw2	4680.3	4680.3	4178.0	4178.0	3669.3	3669.2	2799.7	2799.1
18 Ps2	8966.2	8968.2	7989.4	8013.2	6996.4	7036.1	5295.1	5346.0
19 Ps	2994.4	2994.7	2826.5	2830.8	2645.1	2652.6	2301.1	2312.1
20 P	2578.8	2579.0	2434.9	2437.0	2279.1	2282.9	1982.2	1987.7
21 Pr	3.81	3.81	3.60	3.60	3.37	3.37	2.93	2.94
22 Tr	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
23 Z	0.806	0.806	0.805	0.805	0.805	0.805	0.810	0.810

Pt2 = [illegible]9.4 Pw = 2163.4

[illegible]4.7 2044.0

3660.3 1915.5

2766.2 1673.0

Pc2-Pw2= 42.5 Pw2 = 4680.3

544.8 4178.0

1053.6 3669.2

1923.7 2799.1

n = 0.516

Pc2/(Pc2-Pw2) = 111.234

8.669

4.483

2.455

[Pc2/Pc2-Pw2]n = 11.362

3.046

2.168

1.589

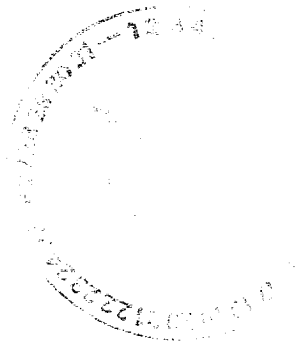
AOF= Q 3.272

1.679

1.956

2.748

FORM C122-D



Laboratory Services, Inc.
4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE:
IDENTIFICATION: Harrod 7 #1
COMPANY: Louis Dreyfus Natural Gas
LEASE:
PLANT:

SAMPLE DATA:
DATE SAMPLED: 9/18/00
ANALYSIS DATE: 9/18/00
PRESSURE – PSIG 430
SAMPLE TEMP. °F 78
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: J. C. Allred
ANALYSIS BY: Vickie Walker

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.801	
Carbon Dioxide	(CO2)	2.354	
Methane	(C1)	86.817	
Ethane	(C2)	6.143	1.639
Propane	(C3)	2.358	0.648
I-Butane	(IC4)	0.349	0.114
N-Butane	(NC4)	0.621	0.195
I-Pentane	(IC5)	0.168	0.059
N-Pentane	(NC5)	0.128	0.048
Hexane Plus	(C6+)	0.461	0.200
		100.000	2.903

BTU/CU.FT. – DRY	1108
AT 14.650 DRY	1105
AT 14.650 WET	1086
AT 14.73 DRY	1111
AT 14.73 WET	1092
SPECIFIC GRAVITY – CALCULATED	0.664
MEASURED	

MOLECULAR WT. 19.2445