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: GRUY PETROLEUM MANAGEMENT		Lease or Unit Name: MESCALERO "20"	
Type Test: ☑ Initial ☐ Annual ☐ Special		Test Date: 6/7/04	Well No.: 1
Completion Date	Total Depth	Plug Back TD: 13750	Elevation	Unit Ltr - Sec - TWP - Rge: J 20 19S 34E
Csg. Size: 5 1/2 / Wt.: 17 / d: 4.892 / Set At: 13750		Perforations: From: 13206 To: 13490		County: LEA
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 13160		Perforations: From: To:		Pool:
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE		Packer Set At: 13160		Formation: MORROW
Producing Thru: TUBING	Reservoir Temp.: 191	Mean Annual Temp.: 60	Baro. Press.-P_a: 13.2	Connection: SALES

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
13160	13160	0.681	3.759	0.621			2.067	FLG

	FLOW DATA				TUBING DATA		CASING DATA		
No.	Prover Line Size x Orifice Size	Press p.s.i.g.	Diff. h_w	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.	Duration of Flow
SI					2257				
1	2.067 X 1.125	584	2.2	81	2164				1 HRS
2	2.067 X 1.125	587	4.8	77	2090				1 HRS
3	2.067 X 1.125	588	9.2	74	1937				1 HRS
4	2.067 X 1.125	592	21.3	74	1671				1 HRS
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							301
2	TOTAL	FLOW	METER				464
3							657
4							911
5							

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

Gas Liquid Hydrocarbon Ratio	N/A	Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons	N/A	Deg.
Specific Gravity Separator Gas	0.681	XXXXXXX
Specific Gravity Flowing Fluid	XXXXX	
Critical Pressure	684 P.S.I.A.	P.S.I.A.
Critical Temperature	374 R.	R

P_c 2270.2 P_c^2 5153.8

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2177.9	4743.4	410.4
2		2044.1	4178.2	975.6
3		1954.1	3818.5	1335.3
4		1692.9	2866	2287.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 2.253 (2) $\left(\frac{P_c^2}{P_c^2 - P_w^2}\right)^n =$ 1.727

AOF = Q $\left(\frac{P_c^2}{P_c^2 - P_w^2}\right)^n =$ 1.568

Absolute Open Flow	1.568	Mcfd @ 15.025	Angle of Slope (): 56.19	Slope n: 0.669

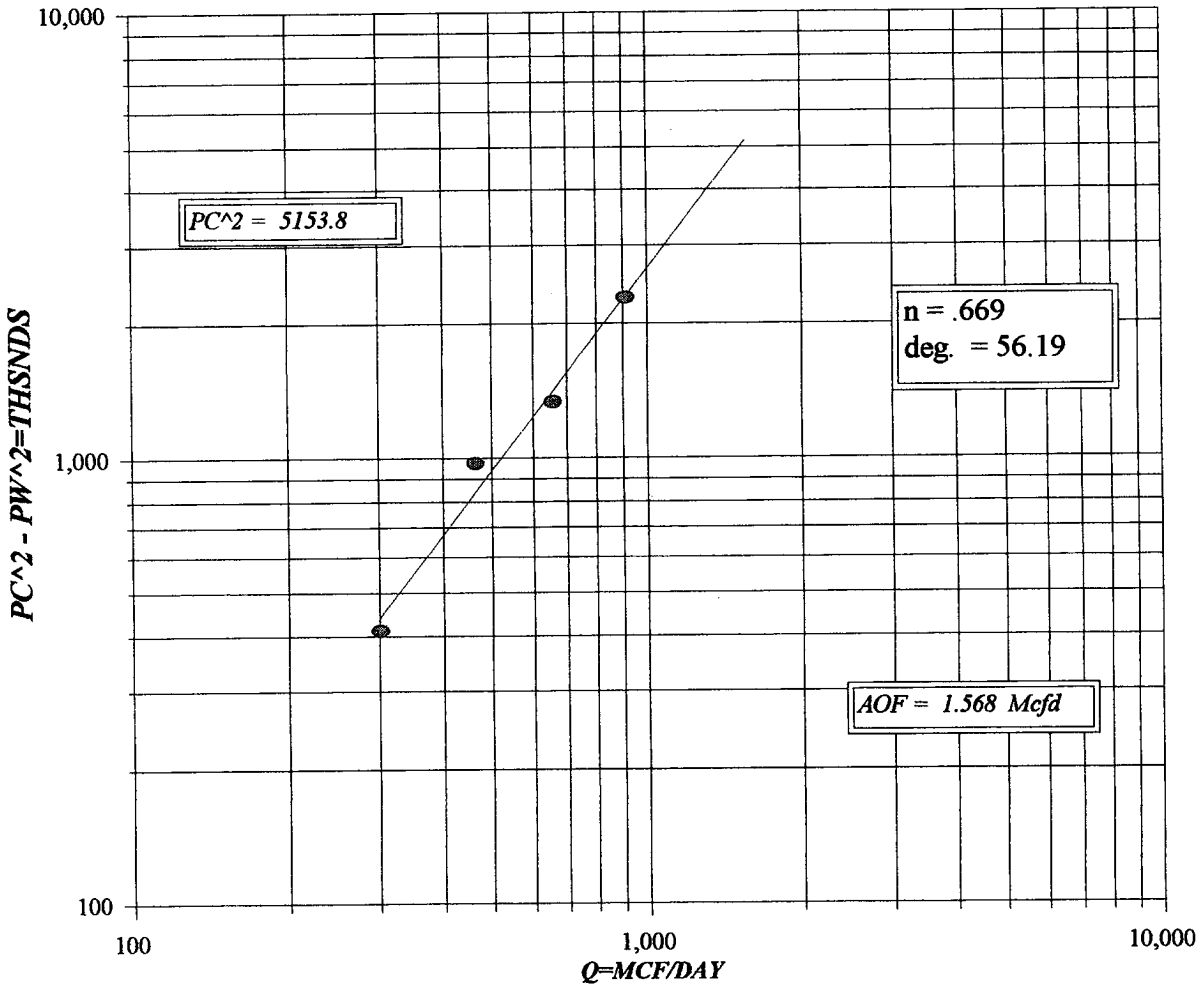
Remarks: * NO LIQUID MADE DURING TEST.

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTING	MERV BUECKER	BM

RECEIVED Hobbs OCD

GRUY PETROLEUM MANAGEMENT

MESCALERO "20" #1



C122D FORM IMPORTED FROM SYMPHONY ON 9-9-01

COMPANY :	GRUY PET. MANAGEMENT C(	LEASE :	MESCALERO "20"	WELL NO. :	1				
UNIT :	J	SECTION :	20	TOWNSHIP :	19S				
L :	13160	H :	13160	L/H :	1	G/GMIX :	0.618		
%CO2 :	3.759	%N2 :	0.621	H2S :		DATE :	6/7/04		
d :	1.995	Fr :	0.018183	GH :	8197.0	RANGE :	35E		
VOL 1 :	301	PSIA 1 :	2177.2			RESV.TEMP	191.0		
VOL 2 :	464	PSIA 2 :	2042.2						
VOL 3 :	657	PSIA 3 :	1950.2			SHUT-IN PRES =	2270.2		
VOL 4 :	911	PSIA 4 :	1684.2						
				PCR :	684				
				TCR :	374				

LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		`1ST	`2ND	`1ST	`2ND	`1ST	`2ND	`1ST	`2ND
1	QM	0.301	0.301	0.464	0.464	0.657	0.657	0.911	0.911
2	TW	534	534	534	534	534	534	534	534
3	Ts	651.0	651.0	651.0	651.0	651.0	651.0	651.0	651.0
4	T	592.5	592.5	592.5	592.5	592.5	592.5	592.5	592.5
	PR (est)	3.18		2.99		2.85		2.46	
5	Z(est)	0.797	0.797	0.800	0.796	0.803	0.796	0.814	0.801
6	TZ	472.5	472.2	474.2	471.5	475.8	471.6	482.5	474.7
7	GH/TZ	17.348	17.358	17.287	17.384	17.229	17.381	16.989	17.266
8	eS	1.917	1.917	1.912	1.919	1.908	1.919	1.891	1.911
9	l-e-S	0.478	0.478	0.477	0.479	0.476	0.479	0.471	0.477
10	Pt	2177.2	2177.2	2042.2	2042.2	1950.2	1950.2	1684.2	1684.2
11	Pt2 /1000	4740.2	4740.2	4170.6	4170.6	3803.3	3803.3	2836.5	2836.5
12	Fr	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183
13	Fc=FrTZ	8.592	8.587	8.622	8.574	8.651	8.575	8.773	8.632
14	FcQm	2.59	2.58	4.00	3.98	5.68	5.63	7.99	7.86
15	L/H(FcQm)2	6.7	6.7	16.0	15.8	32.3	31.7	63.9	61.8
16	Fw	3.1984286	3.1960222	7.63477	7.579762	15.373196	15.200496	30.096183	29.4765833
17	Pw2	4743.4	4743.4	4178.2	4178.2	3818.7	3818.5	2866.6	2866.0
18	Ps2	9091.0	9094.5	7989.7	8018.7	7286.3	7327.5	5420.7	5476.1
19	Ps	3015.1	3015.7	2826.6	2831.7	2699.3	2706.9	2328.2	2340.1
20	P	2596.2	2596.5	2434.4	2437.0	2324.8	2328.6	2006.2	2012.2
21	Pr	3.80	3.80	3.56	3.56	3.40	3.40	2.93	2.94
22	Tr	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
23	Z	0.797	0.797	0.796	0.796	0.796	0.796	0.801	0.801

Pc =	2270.2	Pc2 =	5153.8
Pt2 =	4740.2	Pw =	2177.9
	4170.6		2044.1
	3803.3		1954.1
	2836.5		1692.9
Pc2-Pw2=	410.4	Pw2 =	4743.4
	975.6		4178.2
	1335.3		3818.5
	2287.8		2866.0
n =	0.669		
Pc2/(Pc2-Pw2) =	12.558		
	5.282		
	3.860		
	2.253		
[Pc2/Pc2-Pw2]n =	5.435		
	3.045		
	2.468		
	1.722		
AOF= Q	1.636		
	1.413		
	1.622		
	1.568		

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: Mescalero 20 Fed. #1
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA:
DATE SAMPLED: 6/7/04
ANALYSIS DATE: 6/7/04
PRESSURE – PSIG 591
SAMPLE TEMP. °F 74
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: B.P.
ANALYSIS BY: Vickie Biggs

REMARKS: Sample taekn @ the meter run.

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.621	
Carbon Dioxide	(CO2)	3.759	
Methane	(C1)	84.401	
Ethane	(C2)	6.852	1.828
Propane	(C3)	2.831	0.778
I-Butane	(IC4)	0.318	0.104
N-Butane	(NC4)	0.611	0.192
I-Pentane	(IC5)	0.106	0.039
N-Pentane	(NC5)	0.088	0.032
Hexane Plus	(C6+)	0.413	0.179
		100.000	3.152

BTU/CU.FT. – DRY	1103
AT 14.650 DRY	1099
AT 14.650 WET	1080
AT 14.73 DRY	1105
AT 14.73 WET	1086

MOLECULAR WT. 19.7370

SPECIFIC GRAVITY –
CALCULATED 0.681
MEASURED