

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
301 W. Grand Avenue
Albuquerque, NM 88210
(See other in-formation on reverse side)FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.

NM 0402170

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

SW 1034

8. FARM OR LEASE NAME, WELL NO.

Federal 22 Com No. 2

9. API WELL NO.

30-015-32486

10. FIELD AND POOL, OR WILDCAT

White City; Penn (Gas)

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

Sec 22 T-24S- R-26E

12. COUNTY OR PARISH
Eddy13. STATE
NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ REPAIR ☐ PLUG BACK ☐ DIFF. REPAIR ☐ Other _____

2. NAME OF OPERATOR

Gruy Petroleum Management Co.

3. ADDRESS AND TELEPHONE NO.

P O Box 140907 Irving Tx. 75014-0907

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface 990' FNL & 660' FEL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 11-07-02 16. DATE T.D. REACHED 12-11-02 17. DATE COMPL. (Ready to prod.) 02-25-03 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3280' GR 19. ELEV. CASING HEAD

20. TOTAL DEPTH, MD & TVD 11930' 21. PLUG, BACK T.D., MD & TVD 11460' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
White City; Penn Morrow 11469' - 11036'
White City; Penn Strawn 10628' - 10286'
25. WAS DIRECTIONAL SURVEY MADE
Yes26. TYPE ELECTRIC AND OTHER LOGS RUN
Dual Spaced Neutron GRL, Dual Laterlog Micro-SFL, Cement Bond Log
27. WAS WELL CORED
No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13 - 3/8" H-40	48 #	445'	17-1/2"	490 sx cement circ 69 sx to surf	
9-5/8" J-55	40 #	3214'	12 1/4"	1000 sx interfil/Prem circ 81 sx to surf	
7" LT&C	26#	10700'	8-3/4"	425 sx Interfil/Sup H TOC 6977'	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4-1/2" P-110	10469'	11929'	135 sx Sup H		2 3/8"	10983'	10983'

31. PERFORATION RECORD (Interval, size and number)

Please See Attachment

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
Please See Attachment	

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
02-25-03	Flowing	03-04-03	24 hours	48/64"		-0-	589		-0-
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE				OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)
350						-0-	589	-3-	-0-

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold

35. LIST OF ATTACHMENTS

NM C-122, Electric logs and Deviation Report

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE Production Assistant

DATE July 7, 2003

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38.

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
				Bone Springs	6243'	
				Wolfcamp	8465'	
				Upper Strawn	10228'	
				Atoka	10677'	
				Morrow	11110'	

Federal 22 Com 2
Perforation/Fracture/Acid Record
30-015-32486

Perforation Record		Acid, Shot, Fracture, Cement Squeeze, Etc.	
Morrow Formation		Morrow Formation	
	Depth Int.	Amount & Type Material Used	
Set CIBP @ 11470' w/ 10' cement			
11484' – 11489' 6 SPF 78 Holes	11484' - 11512'	2900 gals foamed 45# gelled KCL & CO2/15350# 20/40 intprp	
11334' – 11346' 6 SPF 72 Holes	11334' - 11346'	35000 gals foamed 45# gelled KCL / 20200# 20/40 intprp	
11148' – 11416' 6 SPF 150 Holes			
11036' – 11046' 6 SPF 60 Holes	11036' - 11154'	70800 gals foamed 45# gelled KCL & CO2 / 40000# 18/40 Vrsaprp	
Strawn Formation		Strawn Formation	
	Depth Int.	Amount & Type Material Used	
10608' – 10628' 4 JSPF 80 Holes			
10592' – 10607' 4 JSPF 152 Holes	10592' - 10628'	3500 gals 15% NEFE acid & 1.3 SG RCN ball slrs, 7% KCL	
10412' – 10426' 4 SPF 56 Holes	10412' - 10426'	1650 gals 15% NEFE HCL & 100 1.3 SG RCNBS	
10272' – 10286' 6 SPF 84 Holes	10272' - 10286'	1500 gals 15% NEFE HCL & 100 1.3 RCNBS, 7% KCL	

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

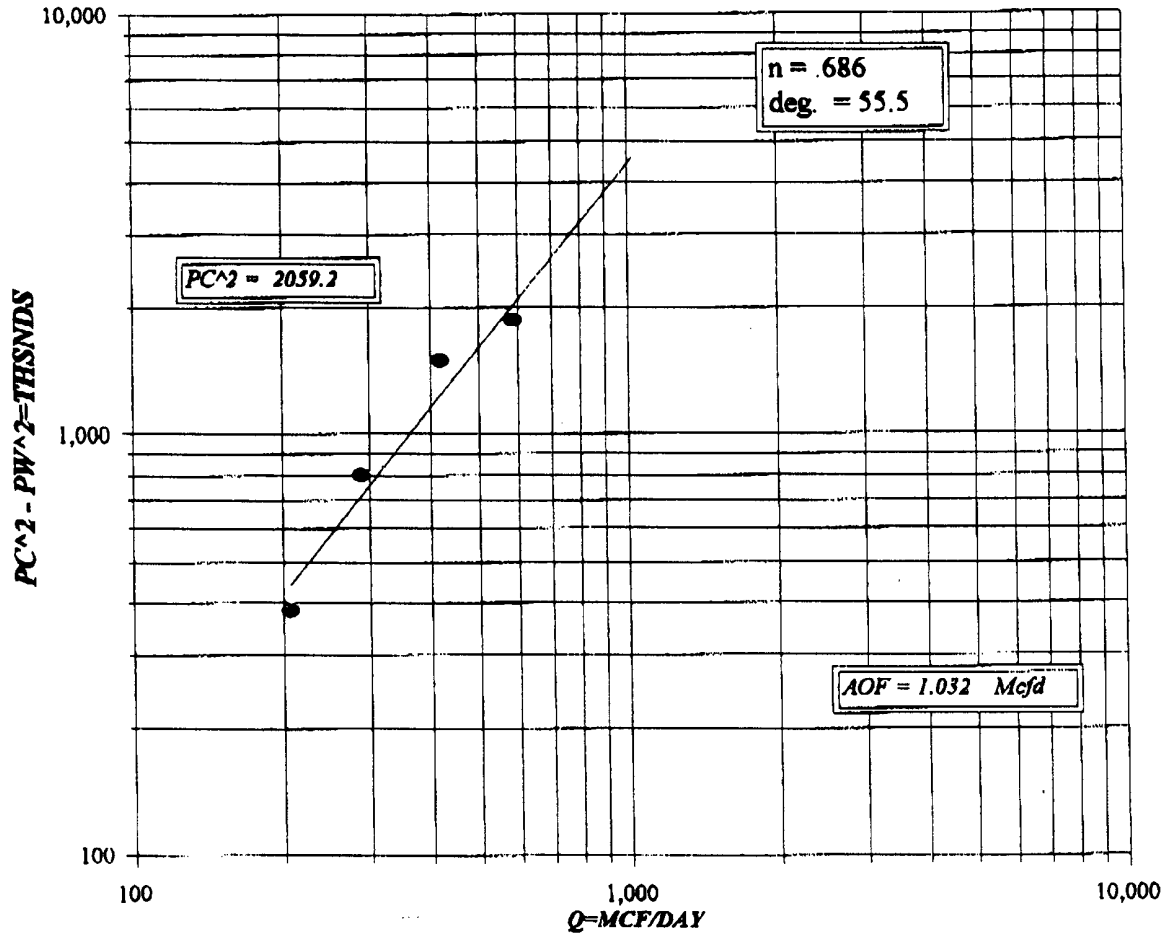
Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator GRUY PET. MANAGEMENT CO.				Lease or Unit Name FED "22" COM					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3/4/03		Well No. 2	
Completion Date		Total Depth 11930		Plug Back TD 11460		Elevation		Unit Ltr - Sec - TWP - Rge 22 24S 26E	
Csg. Size 4 1/2	Wt. 13.5	d 3.92	Set At 11930	Perforations: From: 11036 To: 11512		County EDDY			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10983	Perforations: From: To:		Pool			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 10983		Formation STRAWN			
Producing Thru Tubing		Reservoir Temp. °F 188		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		Connection SALES	
L 10983	H 10983	Gg 0.773	%CO ₂ 21.905	%N ₂ 0.459	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG	
FLOW DATA				TUBING DATA			CASING DATA		
No.	Prover Line Size	Orifice x 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
SI						2046	N/A	PKR	N/A
1	4.026 X 1.375		297	1	64	1950			1 HR.
2	4.026 X 1.375		296	2	66	1839			1 HR.
3	4.026 X 1.375		296	4.3	70	1639			1 HR.
4	4.026 X 1.375		297	9.1	72	1522			1 HR.
5									
RATE OF FLOW CALCULATIONS									
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor P _g	Super Compress Factor F _{pv}	Rate of Flow Q. Mcfd	
1								207	
2								289	
3	TOTAL		FLOW	METER				418	
4								589	
5									
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio				Mcf bbl.
1					N/A				
2					A.P.I. Gravity of Liquid Hydrocarbons				Deg.
3					N/A				
4					Specific Gravity Separator Gas				XXXXXX
5					Specific Gravity Flowing Fluid				XXXXXX
1					Critical Pressure				757 P.S.I.A.
2					Critical Temperature				376 R
3									P.S.I.A.
4									R
5									R
P _o 2059.2 P ₂ 4240.3									
No.	P _i ²	P _w	P _w ²	P _o ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.266}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.753}{\quad}$				
1		1963.6	3855.7	384.6					
2		1853	3433.6	806.7					
3		1654.1	2736	1504.3					
4		1539.3	2369.3	1871					
5									
Absolute Open Flow 1032					Mcf/d @ 15.025		Angle of Slope (°): 55.55		Slope n: 0.6858
Remarks: * NO LIQUID MADE DURING TEST.									
Approved By Division:			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: MB		

GRUY PET. MANAGEMENT CO.

FED "22" COM #2



C1220 FORM IMPORTED FROM SYMPHONY ON 9-9-01

COMPANY : GRUY PET. MANAGEMENT CO.		LEASE : FED "22" COM		WELL NO. : 2		Pc = 2089.2		Pc2 = 4240.3	
UNIT : L	10983	M : 10983	SECTION : 22	L/H : 1	TOWNSHIP : 248	Q/GMDX : 0.778	P12 = 3884.2	Pw = 1965.4	
%CC2 : d	21.909	%N2 : Fr	0.018183	M28 : QM	8197.0	DATE : 3/4/03	3430.6	1853.0	
	1.996					RANGE : 26X	2729.8	1664.1	
							2356.8	1539.3	
VOL 1 : 207						P81A 1 : 1963.2		RESV.TEMP : 188.0	
VOL 2 : 289						P81A 2 : 1882.2		Pc2-Pw2 = 384.6	
VOL 3 : 418						P81A 3 : 1692.2		Pw2 = 3855.7	
VOL 4 : 589						P81A 4 : 1536.2		406.7	
						SHUT-IN PZI = 2089.2		1504.3	
								1871.0	
PCR : 757								n = 0.886	
TCR : 376									
LINE	RATE 1		RATE 2		RATE 3		RATE 4		Pc2/(Pc2-Pw2) = 11.024
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	6.256
1 QM	0.207	0.207	0.289	0.289	0.418	0.418	0.689	0.689	2.819
2 TW	594	594	834	834	834	834	534	534	2.266
3 T6	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	
4 T	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	
PR (est)	2.89	2.45	2.45	2.18	2.18	2.09	2.09	2.09	
5 Z(est)	0.805	0.798	0.810	0.796	0.821	0.806	0.829	0.811	
6 TZ	475.6	468.6	478.8	470.5	485.2	475.5	489.7	479.8	
7 QM/TZ	17.239	17.491	17.129	17.423	16.896	17.238	18.740	17.096	
8 e8	1.909	1.927	1.901	1.922	1.884	1.909	1.878	1.899	
9 l-e-8	0.476	0.481	0.474	0.480	0.469	0.476	0.466	0.478	
10 Pt	1963.2	1963.2	1952.2	1952.2	1652.2	1652.2	1636.2	1636.2	
11 P12 /1000	3954.2	3954.2	3480.6	3480.6	2729.8	2729.8	2356.8	2356.8	
12 Fr	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	
13 Fc-FITZ	8.646	8.521	8.701	8.856	8.822	8.547	8.904	8.718	
14 FcQm	1.79	1.76	2.81	2.47	3.68	3.51	5.24	5.14	
15 L/H(FcQm)2	3.2	3.1	6.3	6.1	13.6	13.1	27.5	26.4	
16 Fw	15249446	14966381	2994971	2932099	63812916	62189768	12821529	124798533	
17 Pw2	3855.7	3855.7	3433.6	3433.6	2796.1	2796.0	2388.7	2389.3	
18 Pa2	7969.7	7429.6	6627.2	6599.2	8188.9	8222.1	4439.3	4498.3	
19 Pa	2712.9	2725.7	2554.8	2568.9	2270.7	2288.2	2107.0	2120.9	
20 P	2396.0	2344.8	2208.8	2210.6	1961.4	1963.7	1821.1	1828.1	
21 Pr	3.09	3.10	2.91	2.92	2.69	2.60	2.41	2.41	
22 Tr	1.67	1.67	1.67	1.67	1.57	1.57	1.57	1.57	
23 Z	0.798	0.798	0.796	0.796	0.805	0.804	0.811	0.811	

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: Federal 22 #2
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 8/4/03
ANALYSIS DATE: 3/4/03
PRESSURE - PSIG 295
SAMPLE TEMP. °F 70
ATMOS. TEMP. °F

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

REMARKS: Sample taken @ the meter run.

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.459	
Carbon Dioxide (CO2)	21.905	
Methane (C1)	76.627	
Ethane (C2)	0.998	0.266
Propane (C3)	0.111	0.031
I-Butane (IC4)	0.000	0.000
N-Butane (NC4)	0.000	0.000
I-Pentane (IC5)	0.000	0.000
N-Pentane (NC5)	0.000	0.000
Hexane Plus (C6+)	0.000	0.000
	100.000	0.297

BTU/CU.FT. - DRY 783
AT 14.650 DRY 791
AT 14.650 WET 777
AT 14.73 DRY 785
AT 14.73 WET 781

MOLECULAR WT, 22.8929

SPECIFIC GRAVITY -
CALCULATED 0.773
MEASURED

OPERATOR: GRUY PETROLEUM
WELL/LEASE: FED. 22 COM. 2
COUNTY: EDDY

075-0015

STATE OF NEW MEXICO
DEVIATION REPORT

213	1/2
445	1/2
797	1 1/2
1,175	1 3/4
1,492	1
1,967	1/2
2,467	1/4
2,949	1
3,214	1/4
3,688	3/4
4,596	3/4
5,071	1
5,545	1/2
6,020	2
6,209	1
6,686	1/2
7,157	3/4
7,630	1 3/4
8,105	1/4
8,579	1/4
9,004	1
9,529	1
10,003	2
10,477	1 3/4
10,744	1 3/4
11,252	1 1/4
11,740	1 1/2
11,930	1 1/2



By: [Signature]

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 17th day of December, 2002, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

Joni D. Hodges
Notary Public for Midland County, Texas

My Commission Expires: 3/31/2003

