

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTOil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
SUBMIT IN DUPLICATE
See instructions on
reverse sideFOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 19915. 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. 29. API WELL NO.
30-015-3248610. 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-26E12. 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 ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. REMVR. ☐ 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.) 02-25-0318. ELEVATIONS (DF, RKB, RT, GR, ETC.)*
3280' GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD
11930'21. PLUG, BACK T.D., MD & TVD
11460'22. IF MULTIPLE COMPL.,
HOW MANY*23. INTERVALS
DRILLED BY

ROTARY TOOLS

All

CABLE TOOLS

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

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Spaced Neutron GRL, Dual Laterlog Micro-SFL, Cement Bond Log

27. WAS WELL CORRED

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)	SACKS 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'

30. TUBING RECORD

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

LES BABTAK
PETROLEUM ENGINEER

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

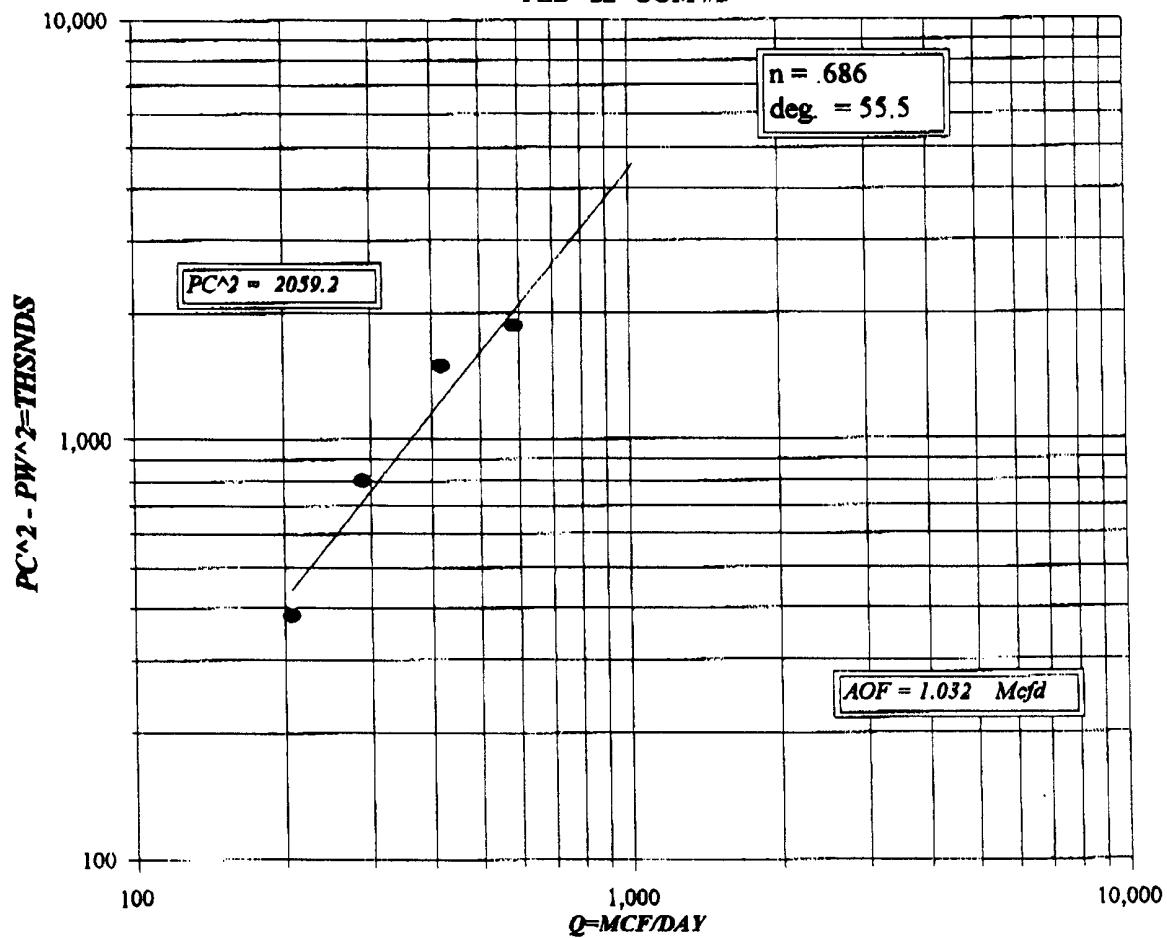
Form C-122
Revised October, 1999

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		Duration of Flow
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 Ft.	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				N/A Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons				N/A Deg.
2					Specific Gravity Separator Gas				0.773 XXXXXXX
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid				N/A XXXXXX
4					Critical Pressure				757 P.S.I.A. P.S.I.A.
5					Critical Temperature				376 R R
P _o 2050.2 P ₂ 4240.3									
No.	P _i ²	P _w	P _w ²	P _o ² - P _w ²	(1) $P_c^2 = \frac{2.266}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.753$				
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					AOF = Q $\left[\frac{P_c^2}{P_o^2 - P_w^2} \right]^n = 1.032$				
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



**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: 3/4/03
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)	76.527	
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/OU.FT. - DRY 763
AT 14.650 DRY 791
AT 14.650 WET 777
AT 14.73 DRY 785
AT 14.73 WET 781

MOLECULAR WT, 22.3929

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.

My Commission Expires: 3/31/2003

[Signature: Joni D. Hodges]
Notary Public for Midland County, Texas

