

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.

LC 065347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

NMNM 91062

8. FARM OR LEASE NAME, WELL NO.

Eddy 21 Federal Com 3

9. API WELL NO.

30-015-32635

10. FIELD AND POOL, OR WILDCAT

White City; Penn (Gas)

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

Sec 21 T-24S- R-26E

12. COUNTY OR
PARISH

Eddy

13. 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. REVR. ☐ 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 1400' FSL & 860' FWL

At top prod. interval reported below 1400' FSL & 860' FWL

At total depth 1400' FSL & 860' FWL

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

2-19-03

16. DATE T.D. REACHED

3-25-03

17. DATE COMPL. (Ready to prod.)

6-20-03

18. ELEVATIONS (DF, RKB, RT, OR, ETC.)*

3358' GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

11,574'

21. PLUG, BACK T.D., MD & TVD

11,536'

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 10012' - 11308'

25. WAS DIRECTIONAL
SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

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 #	440'	17-1/2"	340 sx Prem Plus circ 170 sx to pit	
9-5/8" J-55	40 #	3190'	12 1/4"	1060 sx Prem Plus circ 175 sx to pit	
5-1/2" N-80	17#	11573'	8-3/4"	1735 sx Interfill H TOC 1600'	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	9743'	9743'

31. PERFORATION RECORD (Interval, size and number)

Please See Attached

AUG - 4 2003

ALEXIS C. SWOBODA
PETROLEUM ENGINEER**32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.**

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
6-20-03		Flowing				Producing	
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
6-27-03	24	48/64		-0-	814	21	NA
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
297	-0-		-0-	814	21	NA	

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

TEST WITNESSED BY

Sold

35. LIST OF ATTACHMENTS

NM C-122, Electric logs and Inclination Summary

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

SIGNED

Natalie Krueger

TITLE

Production Assistant

DATE

July 28, 2003

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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
Delaware	1727					
Bone Springs	5400					
Wolfcamp	8259					
Strawn	9738					
Atoka	10302					
Morrow	10577					

Eddy 21 Federal Com 3
Perforation/Fracture/Acid Record
30-015-32635

Perforation Record	Acid, Shot, Fracture, Cement Squeeze, Etc.	
	Depth Int.	Amount & Type Material Used
11236' - 11308' 6 SPF 48 Holes	11236'-11308'	20900 gal 45# gel 7% KCL w CO2 / 14500# 18/40 Versaprop
10966' - 11098' 3 & 6 SPF 135 Holes	10958'-11124'	126500 gal 45# gel 7% KCL wCO2 / 77500# 18/40 Versaprop
10745' - 10790' 6 SPF 54 Holes	10745'-10790'	46000 gal 45# 7% KCL wCO2 / 34750# 18/40 Versaprop
10532' - 10656' 6 SPF 114 Holes	10532'-10536'	2000 gal 15% NEFE HCL / 35.5 bbl 7% KCL
10366' - 10288' 6 SPF 414 Holes	10264'-10472'	2000 gal 15% NEFE HCL / 75 bbls KCL & Acid
10012' - 10184' 6 SPF 204 Holes	10012'-10184'	2000 gal 15% NEFE HCL / 77 bbls KCL & Acid

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32635	Pool Code 87280	Pool Name White City; Penn
Property Code	Property Name EDDY 21 FEDERAL COM.	Well Number 3
OGRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT CO.	Elevation 3358'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	21	24-S	26-E		1400	SOUTH	860	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 640	Joint or Infill Y	Consolidation Code C	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

						OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Zeno Farris Printed Name Mgr. Operations, Admin Title January 21, 2003 Date			
						SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. JANUARY 8, 2003 Date Surveyed Signature of Seal of Professional Surveyor NEW MEXICO 03110010 Certificate No. RONALD L. EIDSON 3239 GARY EIDSON 12641			

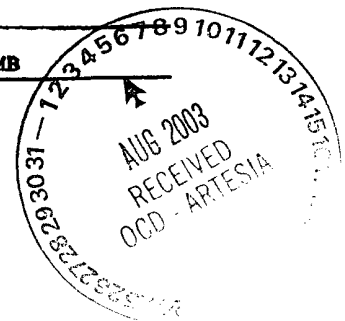
Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

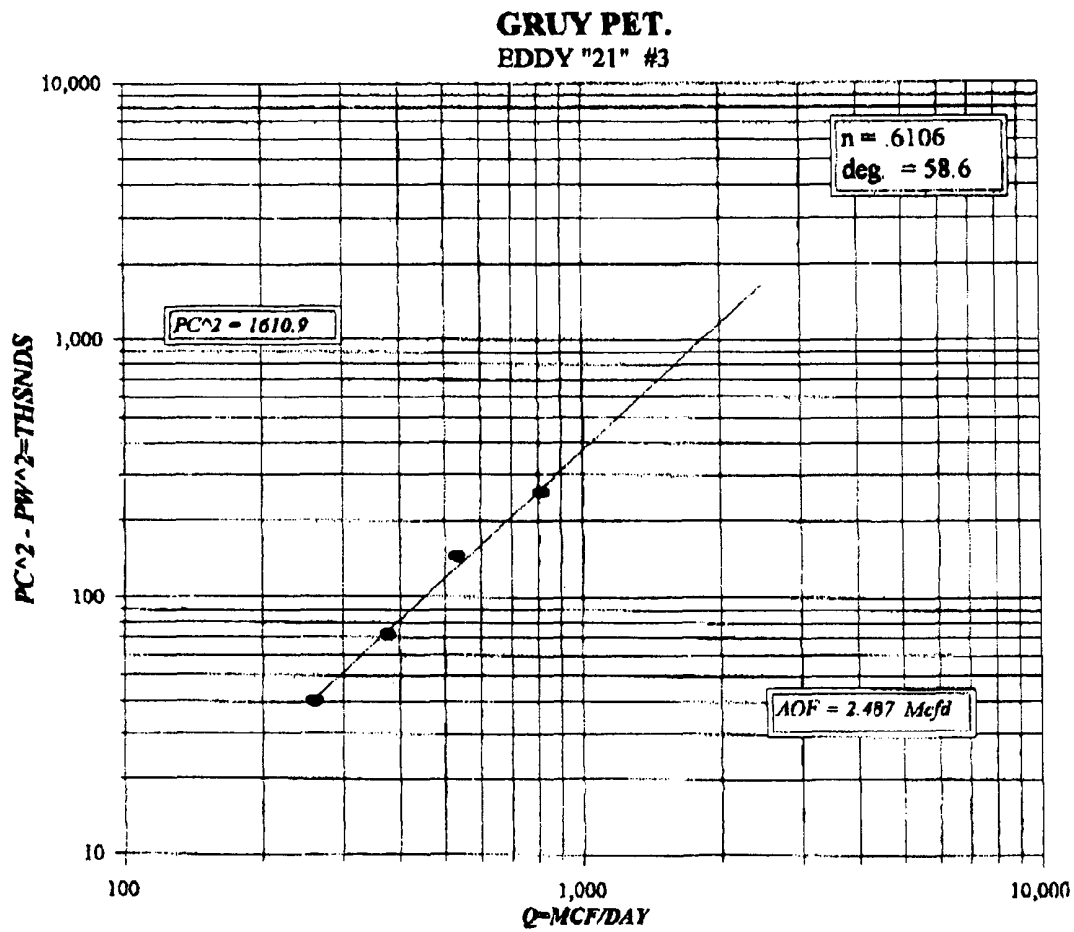
State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

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 EDDY "21"							
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6/27/03		Well No. 3					
Completion Date 6/19/03		Total Depth 11574		Plug Back TD 11536		Elevation 3358 GL					
Csg. Size 5 1/2		Wt 17		Set At 11573		Perforations: From: 10012 To: 11308					
Tbg. Size 2 3/8		Wt 4.7		Set At 9743		Perforations: From: To:					
Type Well-Single-Bradenhead-G.O. or G.O. Multiple SINGLE				Packer Set At 9743		Formation WHITE CITY PENN					
Producing Thru Tubing		Reservoir Temp. °F 171		Mean Annual Temp. °F 60		Baro. Press. P _a 13.2					
I. 9743		H 9743		Gg 0.645		Tape FLG					
Gg 0.645		%CO ₂ 5.592		%N ₂ 1.086		%H ₂ S N/A					
Prover N/A		Meter Run 4.026		Connection SALES							
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	Duration of Flow	
1	4.026 X 1.375	260	2.1	87	1239	N/A	PKR	N/A		1 HR.	
2	4.026 X 1.375	266	4.1	92	1225					1 HR.	
3	4.026 X 1.375	262	8.4	92	1193					1 HR.	
4	4.026 X 1.375	263	19.3	92	1139					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 _{sp}	Rate of Flow Q, Mcfd				
1							260				
2							377				
3	TOTAL	FLOW	METER				532				
4							814				
5											
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Mcft/bbl				
1					N/A		N/A				
2	TOTAL	FLOW	METER		0.634		XXXXXXX				
3					N/A		XXXXXX				
4					692 P.S.I.A.		P.S.I.A.				
5					359 R.		R				
P _c 1269.2		P ₂ 1610.9									
No.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{6.23}{\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3.056}{\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}}$						
1		1253.2	1570.5	40.4							
2		1240.3	1538.4	72.5							
3		1210.6	1465.4	145.5							
4		1162.9	1353.3	258.6							
5											
Absolute Open Flow 2.487					Mcfd @ 15.025		Angle of Slope (°): 58.6		Slope n: 0.6106		
Remarks: * NO LIQUID MADE DURING TEST.											
Approved By Division:			Conducted By: PRO WELL TESTING			Calculated By: MERV BUECKER			Checked By: MB		





C1220 FORM IMPORTED FROM SYMPHONY ON 5-9-01

COMPANY		GRUY PET. MANAGEMENT CO.		LEASE		EODY' 21		WELL NO.		TOWNSHIP		DATE		RANGE		PC = 1800.2		PC2 = 1810.8	
UNIT	L	M	N	SECTION	L/H	M/S	DM	1	Q/GMIX	0.643	6/27/03	26E	1800.0	1800.0	1800.0	1800.0	1800.0	1800.0	
%CO2	5.583	5.583	5.583	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	
VOL 1	240	PSIA 1	1292.2	RESV. TEMP	171.0														
VOL 2	377	PSIA 2	1290.2	SHUT-IN PRESS	1289.2														
VOL 3	533	PSIA 3	1290.2																
VOL 4	814	PSIA 4	1152.2																
PCR	892																		
TCR	398																		
LINE	RATE 1	RATE 2	RATE 3	RATE 4															
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND											
1 OM	0.260	0.260	0.377	0.377	0.632	0.632	0.814	0.814											
2 TW	534	534	534	534	534	534	534	534											
3 TA	631.0	631.0	631.0	631.0	631.0	631.0	631.0	631.0											
4 T	582.5	582.5	582.5	582.5	582.5	582.5	582.5	582.5											
5 PR (MM)	1.81	1.79	1.79	1.74	1.67	1.67	1.67	1.67											
6 Z (cm)	0.830	0.841	0.837	0.842	0.840	0.848	0.844	0.840											
7 TZ	490.8	490.4	490.4	490.6	491.9	491.9	491.9	491.9											
8 CM/TZ	16.433	16.728	16.413	16.709	16.368	16.662	16.200	16.886											
9 W	1.952	1.873	1.851	1.871	1.847	1.808	1.842	1.843											
10 W	0.440	0.448	0.440	0.466	0.450	0.463	0.457	0.463											
11 P12 / 1000	1252.2	1252.2	1238.2	1238.2	1209.2	1209.2	1192.2	1152.2											
12 P12	1868.0	1868.0	1835.1	1835.1	1454.0	1454.0	1497.6	1427.6											
13 P12	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183	0.018183											
14 P12	9.070	9.070	9.070	9.070	9.070	9.070	9.070	9.070											
15 L / (M/F/Q/M)	2.30	2.32	3.42	3.36	4.84	4.76	7.46	7.51											
16 L / (M/F/Q/M)	5.6	5.4	11.7	11.3	29.5	22.6	56.5	53.5											
17 Pw	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6											
18 Pw	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6											
19 Pw	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6											
20 Pw	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6											
21 Pw	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6	1578.6											
22 Tr	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82											
23 Z	0.841	0.841	0.842	0.842	0.842	0.842	0.842	0.842											

FORM C122-0

JUN-30-2003 02:53 PM PROWELLTESTING

5053920508

P.05

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

Telephones: (505) 397-3713

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

SAMPLE:
IDENTIFICATION: Eddy 21 #8
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 6/27/08
ANALYSIS DATE: 6/30/08
PRESSURE - PSIG 269
SAMPLE TEMP. °F 92
ATMOS. TEMP. °F

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

REMARKS: Sample taken @ the meter.

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	1.086	
Carbon Dioxide (CO2)	5.952	
Methane (C1)	89.169	
Ethane (C2)	2.738	0.720
Propane (C3)	0.634	0.147
I-Butane (IC4)	0.104	0.034
N-Butane (NC4)	0.117	0.037
I-Pentane (IC5)	0.044	0.016
N-Pentane (NC5)	0.030	0.011
Hexane Plus (C6+)	0.226	0.098
	100.000	1.073

BTU/CU.FT. - DRY 983
AT 14.650 DRY 980
AT 14.650 WET 983
AT 14.73 DRY 980
AT 14.73 WET 989

MOLECULAR WT. 18.8760

SPECIFIC GRAVITY -
CALCULATED 0.645
MEASURED

OPERATOR: GRUY PETROLEUM
WELL/LEASE: EDDY 21 FED. COM. 3
COUNTY: EDDY

080-0014

STATE OF NEW MEXICO
DEVIATION REPORT

208	1	6,540	3
916	3 1/2	6,675	2 1/2
1,107	4 1/2	6,790	1 1/2
1,200	4 1/4	7,217	1 3/4
1,300	4 1/2	7,505	1
1,347	4 1/4	8,005	1
1,367	4 3/4	8,290	1/2
1,398	4 1/4	8,608	1
1,415	4	8,894	1 1/4
1,447	4	9,275	2
1,478	3 3/4	9,656	2 1/4
1,510	3 3/4	9,848	2 1/2
1,542	3 1/4	10,033	1 3/4
1,574	3	10,261	1 3/4
1,606	2 3/4	10,762	1 1/2
1,646	2 3/4	11,260	2
1,672	2 3/4	11,550	2
1,773	2		
1,908	2		
2,170	2		
2,669	1 1/4		
3,200	2		
3,471	1		
3,884	1		
4,375	1 3/4		
4,853	1 1/2		
5,336	1		
5,813	2		
6,189	2		
6,405	3 1/4		
6,487	3		



By: Steve Moore

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 2nd day of April, 2003, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

Joni D. Hodges
Notary Public for Midland County, Texas

My Commission Expires: 4/08/2007

