

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FOR APPROVED

OMB NO. 1004-0137

Expires: December 31, 1991

WELL NAME DESIGNATION AND SERIAL NO.

NM 0441951

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

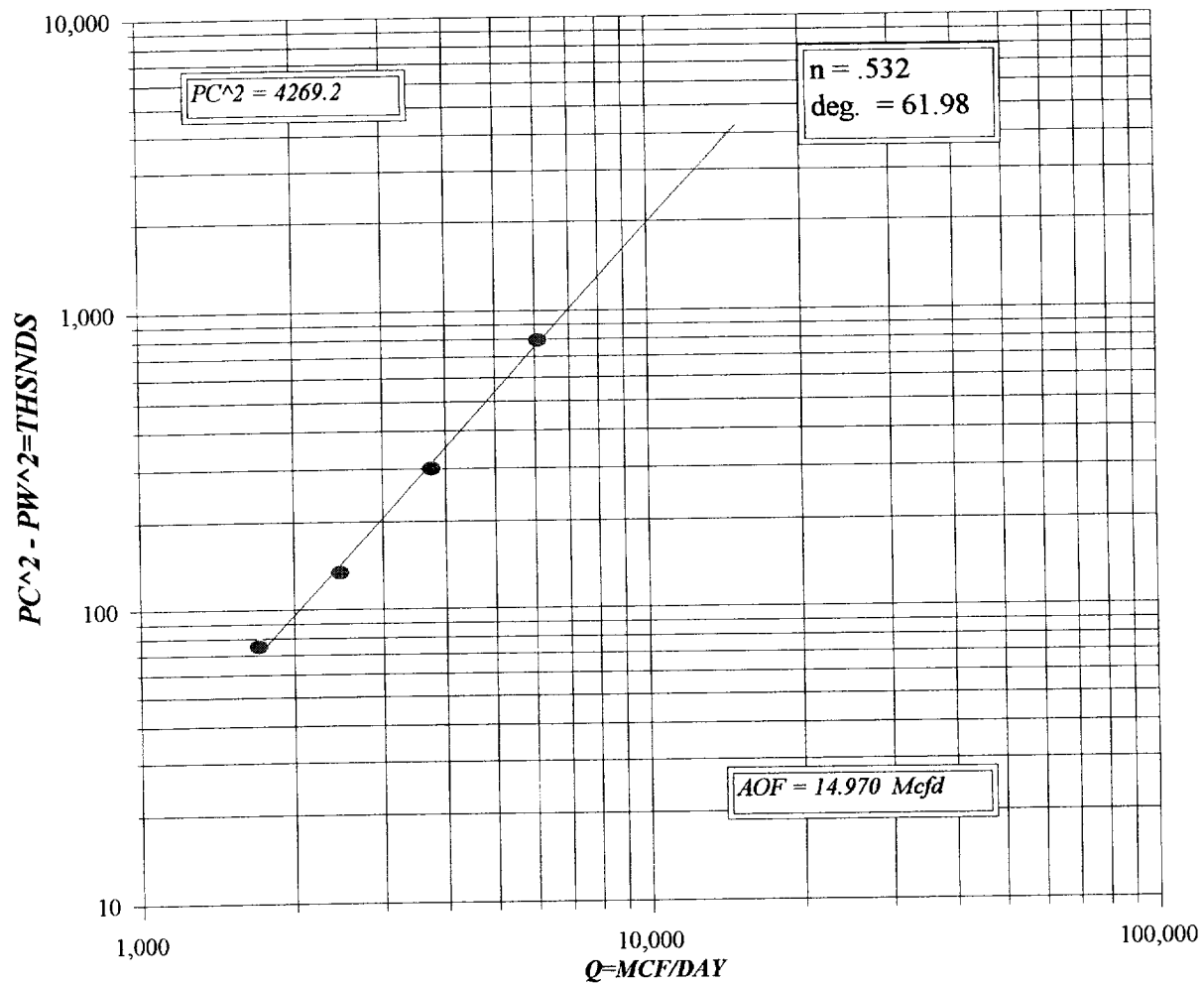
1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____				6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. REVR. ☐ Other _____				7. UNIT AGREEMENT NAME NMNM 91062	
2. NAME OF OPERATOR Gruy Petroleum Management Co.				8. FARM OR LEASE NAME, WELL NO. Eddy 21 Federal Com 2	
3. ADDRESS AND TELEPHONE NO. P O Box 140907 Irving Tx. 75014-0907				9. API WELL NO. 30-015-32386	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 890' FNL & 990' FEL At top prod. interval reported below 890 FNL & 990 FEL At total depth 890 FNL & 990 FEL UT. A				10. FIELD AND POOL, OR WILDCAT White City; Penn (Gas)	
14. PERMIT NO. _____ DATE ISSUED _____				11. SEC. T. R., M., OR BLOCK AND SURVEY OR AREA Sec 21 T-24S- R-26E	
15. DATE SPUDDED 7-30-02				13. STATE NM	
16. DATE T.D. REACHED 8-28-02				12. COUNTY OR PARISH Eddy	
17. DATE COMPL. (Ready to prod.) 10-03-02				19. ELEV. CASINGHEAD 3344' GR	
18. ELEVATIONS (DF, RKB, RT, OR, ETC.) * 3344' GR				20. TOTAL DEPTH, MD & TVD 11,627'	
21. PLUG BACK T.D., MD & TVD 11575'				22. IF MULTIPLE COMPL., HOW MANY * →	
23. INTERVALS DRILLED BY →				24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) * White City; Penn	
25. TYPE ELECTRIC AND OTHER LOGS RUN GR/CCL/CBL				26. WAS DIRECTIONAL SURVEY MADE Yes	
27. WAS WELL CORED No				28. TYPE ELECTRIC AND OTHER LOGS RUN GR/CCL/CBL	
29. CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE		WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD
13 - 3/8" H-40		48 #	457'	17-1/2"	490 sx C 4% gel circ 110 sx to pit
9-5/8" J-55		40 #	3216'	12 1/4"	1125 sx interfill circ 175 sx to pit
5-1/2" N-80		17#	11627'	8-3/4"	1800 sx Interfil/PermTOC 2550'
30. LINER RECORD					
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	
31. TUBING RECORD					
SIZE	DEPTH SET (MD)	PACKER SET (MD)			
2 7/8"	11090'	11090'			
32. PERFORATION RECORD (Interval, size and number)					
11236' - 11241' 3 spf 18 Holes 11258' - 11285' 6 SPF 78 Holes Set RBP @ 11220' 11134 - 11160' 6 SPF 132 Holes					
33. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED			
11236 - 11285		47000 gal 45# gel 7% KCL w CO2 30000 # 20/40 interprop sand			
34. PRODUCTION					
DATE FIRST PRODUCTION 10-15-02		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing		WELL STATUS (Producing or Shut in) ACCEPTED FOR RECORD	
DATE OF TEST 10-24-02	HOURS TESTED 24	CHOKE SIZE 29/64	PROD'N. FOR TEST PERIOD →	OIL—BSL. -0-	GAS—MCF. 6130
FLOW. TUBING PRESS. 2818	CASING PRESSURE -0-	CALCULATED 24-HOUR RATE →	OIL—BSL. -0-	GAS—MCF. 6130	WATER—BSL. -0-
35. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold		TEST WITNESSED BY LES BABYAK PETROLEUM ENGINEER		GAS-OIL RATIO NA	
36. LIST OF ATTACHMENTS NM C-122, Electric logs and Inclination Summary					
37. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records					
SIGNED <u>Zeno Farris</u>		TITLE Manager Operations Admin.		DATE 11-12-02	

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

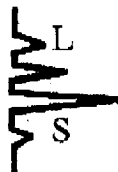
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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
Bone Spring	5250					
Wolfcamp	8320					
Strawn	9925					
Atoka	10420					
Morow	10890					

GRUY PET. MANAGEMENT CO.
EDDY 21 FED COM #2



COMPANY : GRUY PET. MANAGEMENT CO		LEASE : EDDY 21 FED COM		WELL : 2		Pc = 2066.2		Pc2 = 4269.2		*		
UNIT : 11090		SECTION : 21		TOWNSHIP : 24S		Pc2 = 4154.3		Pw = 2047.8		*		
L : 11090		H : 11090		L/H : 1		DATE : 01/00/00		Pw = 2033.5		*		
%CO2 : 1.177		%N2 : 0.272		H2S : 1		RANGE : 26E		1992.4		*		
d : 2.441		Fr : 0.010763		GH : 8197.0				1863.4		*		
=====												
VOL 1 : 1717		PSIA 1 : 2038.2		RESV.TEMP : 186.0		Pc2-Pw2 = 75.6		Pw2 = 4193.6		*		
VOL 2 : 2479		PSIA 2 : 2013.2				134.1		4135.1		*		
VOL 3 : 3771		PSIA 3 : 1944.2		SHUT-IN PRE! = 2826.2		299.4		3969.8		*		
VOL 4 : 6130		PSIA 4 : 1723.2				797.0		3472.2		*		
=====												
PCR : 675						n = 0.532				*		
TCR : 342										*		
Pc2/(Pc2-Pw2) =						56.501				*		
						31.826				*		
						14.261				*		
						5.356				*		
=====												
LINE	RATE 1		RATE 2		RATE 3		RATE 4					
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND				
1 QM	1.717	1.717	2.479	2.479	3.771	3.771	6.130	6.130				
2 TW	534	534	534	534	534	534	534	534				
3 Ts	646.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0				
4 T	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0				
PR (est)	3.02		2.98		2.88		2.55					
5 Z(est)	0.853	0.850	0.853	0.850	0.854	0.850	0.860	0.851				
6 TZ	503.0	501.7	503.2	501.7	504.0	501.7	507.4	502.3				
7 GH/TZ	16.296	16.338	16.288	16.339	16.264	16.340	16.156	16.317				
8 eS	1.842	1.845	1.842	1.845	1.840	1.845	1.833	1.844				
9 I-e-S	0.457	0.458	0.457	0.458	0.457	0.458	0.454	0.458				
10 Pt	2038.2	2038.2	2013.2	2013.2	1944.2	1944.2	1723.2	1723.2				
11 Pt2 /1000	4154.3	4154.3	4053.0	4053.0	3779.9	3779.9	2969.4	2969.4				
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763				
13 Fc=FrTZ	5.414	5.400	5.416	5.400	5.424	5.399	5.461	5.407				
14 FcQm	9.30	9.27	13.43	13.39	20.46	20.36	33.47	33.14				
15 L/H(FcQm)2	86.4	86.0	180.3	179.2	418.4	414.6	1120.5	1098.5				
16 Fw	39.509887	39.380542	82.409418	82.083283	191.05505	189.92771	509.16293	502.754497				
17 Pw2	4193.8	4193.6	4135.4	4135.1	3971.0	3969.8	3478.6	3472.2				
18 Ps2	7726.8	7738.8	7617.1	7631.0	7307.6	7326.3	6375.6	6402.5				
19 Ps	2779.7	2781.9	2759.9	2762.4	2703.3	2706.7	2525.0	2530.3				
20 P	2409.0	2410.0	2386.6	2387.8	2323.7	2325.5	2124.1	2126.8				
21 Pr	3.57	3.57	3.54	3.54	3.44	3.45	3.15	3.15				
22 Tr	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73				
23 Z	0.850	0.850	0.850	0.850	0.850	0.850	0.851	0.851				
=====												
										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: Eddy 21 Fed. Com. #2
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 10/24/02
ANALYSIS DATE: 10/24/02
PRESSURE - PSIG 283
SAMPLE TEMP. °F 49
ATMOS. TEMP. °F

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

REMARKS: Sample taken @ the meter run.

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.272	
Carbon Dioxide (CO2)	1.177	
Methane (C1)	97.072	
Ethane (C2)	1.323	0.353
Propane (C3)	0.156	0.043
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	0.396

BTU/CU.FT. - DRY 1008
AT 14.650 DRY 1005
AT 14.650 WET 987
AT 14.73 DRY 1010
AT 14.73 WET 993

MOLECULAR WT. 16.6318

SPECIFIC GRAVITY -
CALCULATED 0.574
MEASURED

OPERATOR: MAGNUM HUNTER RESOURCES, INC.
WELL/LEASE: EDDY 21 FED. COM. 2
COUNTY: EDDY

080-0009

STATE OF NEW MEXICO
DEVIATION REPORT

206	2	10,147	3/4
300	1 3/4	10,812	1
552	1 3/4	11,289	1
638	1 3/4	11,627	1
727	2 1/2		
811	2		
910	2		
999	2		
1,094	2		
1,183	1 1/2		
1,285	1 1/2		
1,380	1 1/2		
1,475	1 3/4		
1,564	1 1/4		
1,756	1 1/4		
2,231	1		
2,711	1/2		
3,211	1/4		
3,698	1		
4,171	3/4		
4,648	3/4		
5,132	1		
5,603	1		
6,076	1		
6,584	1 1/4		
7,095	3/4		
7,321	3/4		
7,818	2		
8,240	2		
8,716	3/4		
9,193	3/4		
9,672	1 1/2		



By: Steve Moore

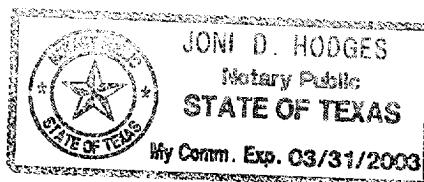
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 4th day of September, 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



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 Paseo
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 FED COM			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10/24/02	Well No. 2
Completion Date		Total Depth 11627		Plug Back TD 11575		Elevation	Unit Ltr - Sec - TWP - Rge 21 24S 26E
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11627	Perforations: From: 11134 To: 11160		County EDDY	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11090	Perforations: From: To:		Pool	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11090		Formation MORROW	
Producing Thru Tubing		Reservoir Temp. °F 186	Mean Annual Temp. °F 60	Baro. Press. -P _a 13.2		Connection SALES	
L 11090	H 11090	Gg 0.574	%CO ₂ 1.177	%N ₂ 0.272	%H ₂ S N/A	Prover N/A	Meter Run 4.027
						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
SI						2053	N/A
1	4.027 X 2.250		272	8.9	69	2025	
2	4.027 X 2.250		275	16.9	70	2000	
3	4.027 X 2.250		277	40.1	54	1931	
4	4.027 X 2.250		285	98.3	47	1710	
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							1717
2							2479
3	TOTAL	FLOW	METER				3771
4							6130
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 0.574 XXXXXXXX		
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid N/A XXXXXX		
4					Critical Pressure 675 P.S.I.A. P.S.I.A.		
5					Critical Temperature 342 R. R.		
P _c 2066.2 P _{c2} 4269.2							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{5.356}{\quad} \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.442}{\quad}$		
1		2047.8	4193.6	75.6			
2		2033.5	4135.1	134.1			
3		1992.4	3969.8	299.4			
4		1863.4	3472.2	797			
5					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{14970}{\quad}$		
Absolute Open Flow 14970 Mcfd @ 15.025				Angle of Slope (°): 61.98		Slope n: 0.532	
Remarks: * NO LIQUID MADE DURING TEST.							
Approved By Division:		Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: MB	