

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

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

5. LEASE DESIGNATION AND SERIAL NO.

NMLC065347

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

White City Penn 20 GCU 2 #3

9. API WELL NO.

30-015-33525

10. FIELD AND POOL, OR WILDCAT

White City; Penn (Gas)

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

Sec 20-T24S-R26E

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' FSL & 1700' FEL

At top prod. interval reported below 990' FSL & 1700' FEL

At total depth 990' FSL & 1700' FEL

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 08-16-04 16. DATE T.D. REACHED 09-16-04 17. DATE COMPL. (Ready to prod.) 12-30-04 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3377' GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 11550' 21. PLUG, SACK T.D., MD & TVD 11500' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 10738' - 11060' White City; Penn (Gas) 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Spaced Neutron, DLL Microguard, 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" J-55	54.5 #	440'	17-1/2"	425 sx Prem circ 104 sx	
9-5/8" NS-110	40 #	1522'	12 1/4"	900 sx IntC/Prem circ 262 sx	
5-1/2" NS-110	17#	11544'	8-3/4"	2050 sx IntH/SupH/IntC/Prem circ 143 sx	
TOC surface					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	10690'	10690'

31. PERFORATION RECORD (Interval, size and number)

11018' - 11060' 6 JSPF 132 Holes

10938' - 10950' 6 JSPF 72 Holes

10738' - 10814' 6 JSPF 132 Holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
11018' - 11060	42704gal foam CO2 50000# 18/40 VProp
10938' - 10950'	36372gal foam CO2 47000# 18/40 VProp
10738' - 10814'	22276gal foam CO2 35000# 18/40 VProp

33. PRODUCTION

DATE FIRST PRODUCTION 12-30-04 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) Producing

DATE OF TEST 01-23-05 HOURS TESTED 24 CHOKED SIZE 48/64 PROD'N. FOR TEST PERIOD OIL—BBL. -0- GAS—MCF. 524 WATER—BBL. -0- GAS-OIL RATIO NA

FLOW. TUBING PRESS. 520 CASING PRESSURE 250 CALCULATED 24-HOUR RATE OIL—BBL. -0- GAS—MCF. 524 WATER—BBL. -0- ACCEPTED FOR RECORD

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

Sold

RECEIVED

TEST WITNESSED BY

MAR - 9 2005

35. LIST OF ATTACHMENTS

NM C-122, Electric logs and Inclination Summary

MAR 12 2005

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

SIGNED

Natalie Krueger

TITLE

Regulatory Analyst

DATE March 3, 2005

*(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 Spring	5355'					
Cisco	9205'					
Canyon	9533'					
Strawn	9681'					
Atoka	10232'					
Morrow	10540'					

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

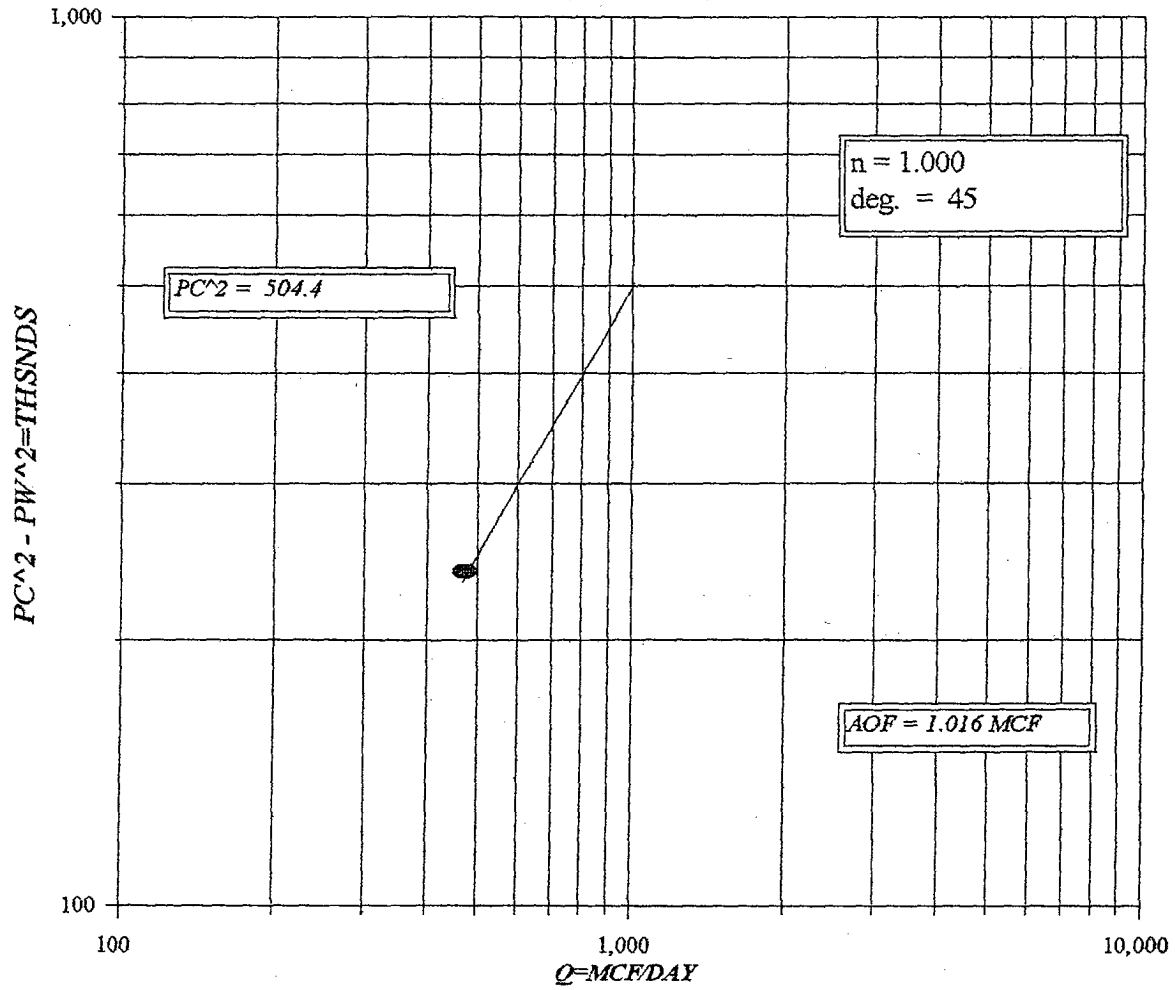
State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator GRUY PETROLEUM					Lease or Unit Name WHITE CITY PENN 20 COM						
Type Test ☒ Initial ☐ Annual ☐ Special							Test Date 1/23/05		Well No. 3		
Completion Date 11/16/04			Total Depth 11550		Plug Back TD 11500		Elevation		Unit Ltr - Sec - TWP - Rge		
Csg. Size 5 1/2	Wt. 17 #	d 4.892	Set At 11500		Perforations: From: 10738 To: 11050				County EDDY		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10690		Perforations: From: To:				Pool		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE					Packer Set At 10690			Formation			
Producing Thru TBG		Reservoir Temp. °F 180.9 @ 10690		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2			Connection SALES		
L 10695	H 10695	Gg 0.6	%CO ₂ 2.934	%N ₂ 0.235	%H ₂ S X	Prover N/A	Meter Run 3.068	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						697		PKR		48 HRS	
1	3 X	1.000	472	4.1	68	500		"		24 HRS	
2											
3											
4											
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								480			
2											
3				TOTAL		FLOW	METER				
4											
5											
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio			DRY GAS		Mcf bbl.	
1					A.P. I. Gravity of Liquid Hydrocarbons			DRY		Deg.	
2					Specific Gravity Separator Gas			0.6		XXXXXXX	
3		N/A			Specific Gravity Flowing Fluid			XXXXXX		N/A	
4					Critical Pressure			* 663		P.S.I.A.	
5					Critical Temperature			* 355		R.	
P _c 710.2 P ₂ 504.4											
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $P_c^2 = \frac{2.117}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.117$						
1		515.9	266.2	238.2							
2											
3											
4											
5											
					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.016$						
					79825						
Absolute Open Flow					1.016		Mcf @ 15.025		Angle of Slope Q: 45		Slope n: 1
Remarks: NO FLUID PRODUCED - CORR. TO 2.934% CO ₂											
Approved By Division:			Conducted By: Pro Well Testing & Wire Line			Calculated By: BM			Checked By: BM		

GRUY PETROLEUM
WHITE CITY PENN 20 COM # 2





Laboratory Services, Inc.

2609 West Marland
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

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

SAMPLE: IDENTIFICATION White City Penn 20-2 #3
COMPANY: Gruy Management
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED 1/21/05 10:00 am
ANALYSIS DATE: 1/25/05
PRESSURE - PSIG 600
SAMPLE TEMP. °F 65
ATMOS. TEMP. °F 60

GAS (XX) LIQUID ()
SAMPLED BY: Jim Rice
ANALYSIS BY: Vickie Biggs

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.235	
Carbon Dioxide (CO2)	2.934	
Methane (C1)	94.990	
Ethane (C2)	1.281	0.342
Propane (C3)	0.144	0.040
I-Butane (IC4)	0.021	0.007
N-Butane (NC4)	0.018	0.006
I-Pentane (IC5)	0.015	0.005
N-Pentane (NC5)	0.010	0.004
Hexane Plus (C6+)	<u>0.352</u>	<u>0.153</u>
	100.000	0.557

BTU/CU.FT. - DRY 1005
AT 14.650 DRY 1002
AT 14.650 WET 984
AT 14.73 DRY 1007
AT 14.73 WET 990

MOLECULAR WT. 17.4084

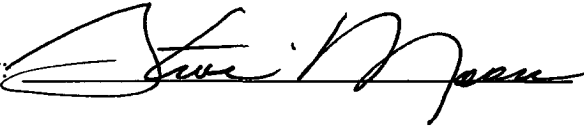
SPECIFIC GRAVITY -
CALCULATED 0.600
MEASURED

OPERATOR: MAGNUM HUNTER RESOURCES dba GRUY PETROLEUM
WELL/LEASE: WHITE CITY PENN 20 GCU #3
COUNTY: EDDY, NM

075-0030

STATE OF NEW MEXICO
DEVIATION REPORT

165	3/4	5,954	1/2
437	3	6,074	1
468	3	6,555	1/2
495	2 1/2	7,030	1/2
522	3	7,501	3
645	3	7,533	3
708	3 1/2	7,564	2 1/2
772	1	7,627	2 1/2
803	3 3/4	7,659	2 1/2
866	2 1/2	7,723	2 1/2
929	2 1/2	7,786	2
993	2 1/2	7,849	1 1/2
1,056	2 1/2	7,975	1
1,088	3	8,165	1
1,151	1 1/2	8,386	1/2
1,215	1 1/2	8,798	1/2
1,340	1 1/2	9,083	1
1,403	1 1/2	9,399	1/2
1,518	1 3/4	9,622	1/2
1,814	1/2	9,874	1/2
2,287	1/2	10,123	1/2
2,856	1/2	10,341	1/2
3,393	1/2	10,564	1/2
3,931	1/2	10,818	1/2
4,436	1/2	11,037	1/2
4,872	3/4	11,500	1 3/4
4,910	1/2		
5,479	1/2		

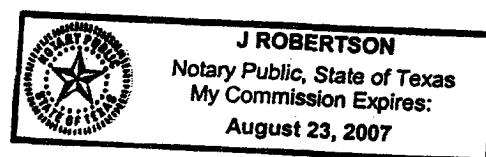
By: 

STATE OF TEXAS
COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on October 6th, 2004, by
Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.


Notary Public for Midland County, Texas

My Commission Expires: 8/23/2007



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 30-015-33525	Pool Code	Pool Name White City; Penn (Gas)
Property Code	Property Name WHITE CITY PENN "20" GAS COM. UNIT 2	Well Number 3
OGRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT COMPANY	Elevation 3377'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	20	24-S	26-E		990	SOUTH	1700	EAST	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	Joint or Infill	Consolidation Code	Order No.
640	Y	C	

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

