

**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 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 515' FNL & 305' FEL

At top prod. interval reported below 1078 FNL' & 1408' FEL

At total depth 1109' FNL & 1492' FEL

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH
Eddy

13. STATE
NM

15. DATE SPUDDED

07-23-03

16. DATE T.D. REACHED

09-04-03

17. DATE COMPL. (Ready to prod.)

12-10-03

18. ELEVATIONS (DP, RKB, RT, GR, ETC.)*

3451' GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

11954 MD11737 TVD

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

11910 MD 11695 TVD

22. IF MULTIPLE COMPL., HOW MANY*

→

→

23. INTERVALS DRILLED BY

All

ROTARY TOOLS

All

CABLE TOOLS

All

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

White City; Penn (Gas) 11673' - 11830' MD

White City Penn (Gas) 11472' - 11620' TVD

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Spaced Neutron & DLL Microguard

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 #	417'	17-1/2"	450 sx Prem Plus circ 140 sx to pit	
9-5/8" NS-110	40#	1,938'	12-1/4"	950 sx Inter C/Prem/Thix circ 150 sx to Pit	
P-110/N-80	17#	11,954'	8 3/4"	1,875 sx Super H/Perm circ 60 sx TOC Surface	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

ACCEPTED FOR RECORD

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	11,830'	11,623'

31. PERFORATION RECORD (Interval, size and number)

11,808 - 11,830 6 SPF 102 Holes

11,776 - 11,779 6 SPF 18 Holes

11,727 - 11,742 6 SPF 60 Holes

11,673 - 11,689 6 SPF 72 Holes

FEB 9 2004

ALEXIS C. SWOBODA
PETROLEUM ENGINEER

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
11,673 - 11,830	160000 gal 45# gel 7% KCL+CO2/96500#
	18/40 versaprop

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
12-13-03		Flowing				Producing	
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
12-19-03	24	48/64	→	-0-	269	90	N/A
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
225	560	→	-0-	269	90	NA	

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

Sold

TEST WITNESSED BY

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

Zeno Farris

TITLE

Manager Operations Administration

DATE

February 3, 2004

*(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
Morrow	11442'	11892'				

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

FEB 10 2004

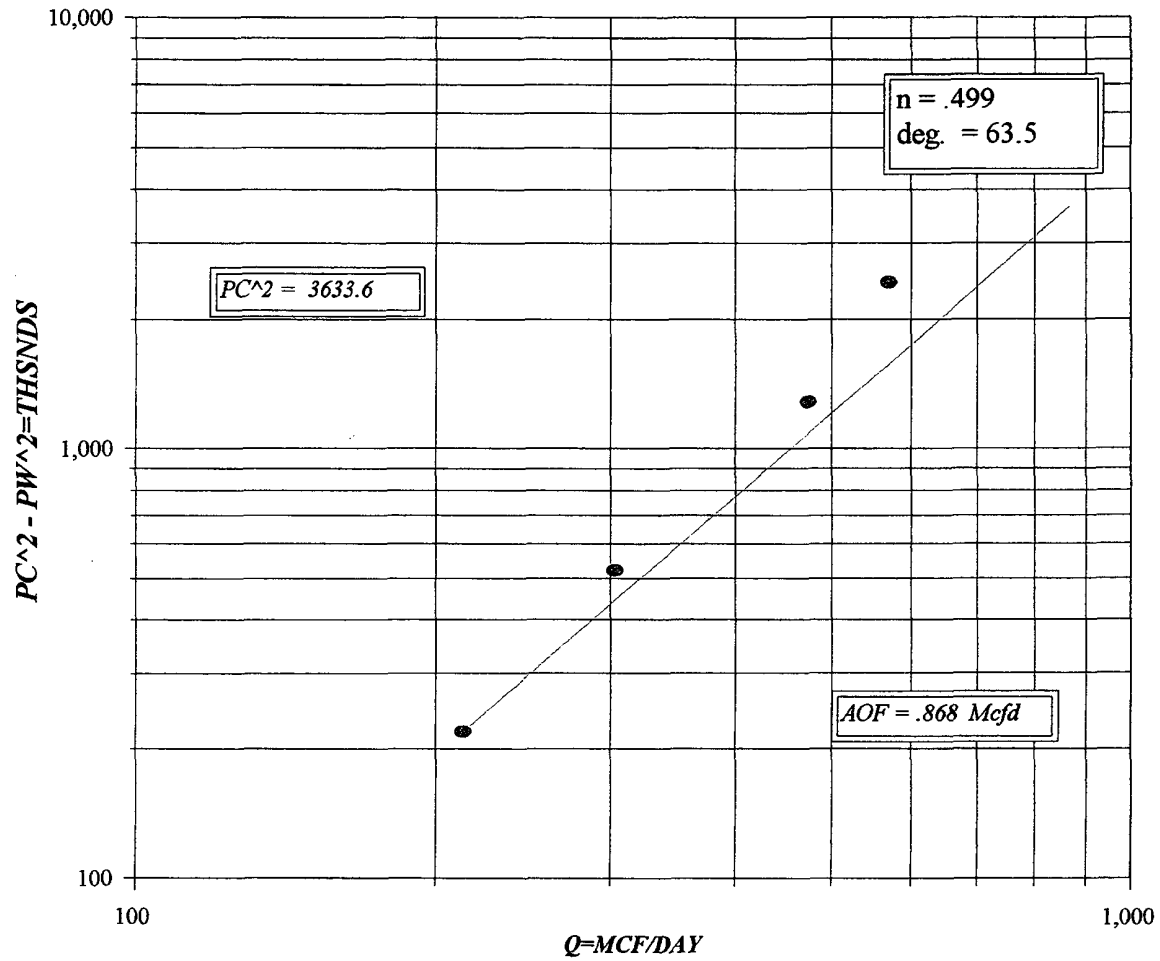
OCD-ARTESIA

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator GRUY PET. MANAGEMENT				Lease or Unit Name EXXON FED			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12/17/03	Well No. 3
Completion Date 10/27/03		Total Depth 11956		Plug Back TD 11910		Elevation 3451 GL	Unit Ltr - Sec - TWP - Rge B 17 24S 26E
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11954	Perforations: From: 11673 To: 11830		County EDDY	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11830	Perforations: From: To:		Pool	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11623		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 188	Mean Annual Temp. 60	Baro. Press.-P _a 13.2		Connection SALES	
L 11623	H 11623	Gg 0.729	%CO ₂ 17.263	%N ₂ 0.204	%H ₂ S	Prover 4.026	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.	Press p.s.i.g.	Temp.
SI							
1	4.026 X 2.000		229	0.5	68	1834	
2	4.026 X 2.000		233	0.6	83	1750	
3	4.026 X 2.000		236	1.5	105	1515	
4	4.026 X 2.000		236	2	87	1074	
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							214
2	TOTAL	FLOW	METER				304
3							475
4							572
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 0.729 XXXXXXXX		
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid XXXXXX		
4					Critical Pressure 741 P.S.I.A. P.S.I.A.		
5					Critical Temperature 366 R. R		
P _c 1906.2 P _{c2} 3633.6							
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.49$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.055$		
1		1847.6	3413.8	219.8			
2		1764.2	3112.2	521.4			
3		1530.9	2343.7	1289.9			
4		1093	1194.7	2438.9			
5					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0.868$		
Absolute Open Flow 0.868				Mcf/d @ 15.025	Angle of Slope (°): 63.5	Slope n: 0.499	
Remarks: * NO LIQUID MADE DURING TEST.							
Approved By Division:		Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM	

GRUY PET. MANAGEMENT

EXXON FED #3





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: Exxon Fed. #3
COMPANY: Gruy Petroleum
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 12/17/03 1:00 pm
ANALYSIS DATE: 12/18/03
PRESSURE - PSIG 220
SAMPLE TEMP. °F 95
ATMOS. TEMP. °F 55

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

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.204	
Carbon Dioxide (CO2)	17.263	
Methane (C1)	81.227	
Ethane (C2)	1.125	0.300
Propane (C3)	0.136	0.037
I-Butane (IC4)	0.020	0.007
N-Butane (NC4)	0.025	0.008
I-Pentane (IC5)	0.000	0.000
N-Pentane (NC5)	0.000	0.000
Hexane Plus (C6+)	0.000	0.000
	100.000	0.352

BTU/CU.FT. - DRY 845
AT 14.650 DRY 843
AT 14.650 WET 828
AT 14.73 DRY 847
AT 14.73 WET 833

MOLECULAR WT. 21.1077

SPECIFIC GRAVITY -
CALCULATED 0.729
MEASURED

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

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32865	Pool Code	Pool Name White City Penn (Gas)
Property Code	Property Name EXXON FEDERAL COM.	Well Number 3
OGRID No. 162683	Operator Name GRUY PETROLEUM MANAGEMENT CO.	Elevation 3451'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	24-S	26-E		515'	NORTH	305'	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
B	17	24-S	26-E		1109'	NORTH	1492'	EAST	EDDY

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

DETAIL 3441.6' 3449.6' 1047' 1047' 515' 305' 500' 500' 500' 500' 1109' 1335' 1492' 1882' 1650' 1400' Exxon Fed Com 2080 No. 1 GEODETIC COORDINATES NAD 27 NME Y= 444978.2 N X= 508010.9 E LAT.= 32°13'24.09"N LONG.= 104°18'26.74"W BHL Penetration Point Morrow RECEIVED FEB 10 2004 OCD-ARTESIA	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Zeno Farris</i> Signature Zeno Farris Printed Name Manager, Operations Admin Title February 3, 2004 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. June 24, 2003 Date Surveyed Signature of Professional Surveyor AWB Professional Surveyor NEW MEXICO 03.11.0843 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12841
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OPERATOR: GRUY PETROLEUM
WELL/LEASE: EXXON FED. COM. 3
COUNTY: EDDY

080-0018

STATE OF NEW MEXICO
DEVIATION REPORT

209	1/2	7,003	1
410	2	7,500	3
640	2 1/4	7,670	4 1/4
964	3		
1,056	3		
1,153	2 3/4		
1,216	3		
1,349	3		
1,400	2 3/4		
1,526	2 1/2		
1,615	2 1/2		
1,711	2 3/4		
1,813	3 1/4		
1,938	2 1/2		
2,171	3		
2,398	2 1/4		
2,584	2		
2,775	1 3/4		
2,990	1 1/2		
3,281	3/4		
3,542	1		
3,848	1/2		
4,166	3/4		
4,611	1 1/4		
4,900	1 1/4		
5,304	2 1/2		
5,539	2 1/2		
5,882	1		
6,226	1 1/2		
6,517	1		

RECEIVED

FEB 10 2004

OCD-ARTESIA

By:



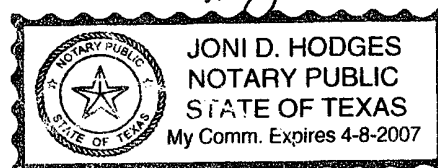
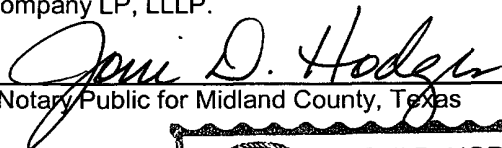
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 26th day of September, 2003, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

My Commission Expires: 4/08/2007

Notary Public for Midland County, Texas





**Gruy Petroleum Management Co.
New Mexico
Eddy County
Exxon Fed Com # 3 A - MWD Surveys**

Sperry-Sun

Survey Report

8 September, 2003

Data Source: Information from Location

Survey Ref: svy6880

RECEIVED

FEB 10 2004

OCD-ARTESIA



HALLIBURTON

Survey Report for Exxon Fed Com # 3 A

Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
Gyro Surveys								
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00		
100.00	0.380	45.090	100.00	0.23 N	0.23 E	-0.31	0.38	
200.00	0.620	314.240	200.00	0.85 N	0.08 E	-0.45	0.73	
300.00	1.280	308.290	299.98	1.92 N	1.18 W	0.20	0.67	
400.00	2.080	305.300	399.94	3.66 N	3.54 W	1.53	0.80	
500.00	2.250	305.290	499.87	5.84 N	6.62 W	3.31	0.17	
600.00	2.290	303.320	599.79	8.07 N	9.90 W	5.24	0.09	
700.00	2.650	303.640	699.70	10.45 N	13.49 W	7.39	0.36	
800.00	3.000	300.490	799.57	13.06 N	17.67 W	9.96	0.38	
900.00	3.040	298.880	899.44	15.67 N	22.25 W	12.89	0.09	
1000.00	3.170	299.620	999.29	18.31 N	26.97 W	15.93	0.14	
1100.00	2.850	297.040	1099.15	20.81 N	31.59 W	18.95	0.35	
1200.00	3.030	296.360	1199.02	23.11 N	36.17 W	22.01	0.18	
1300.00	2.810	297.830	1298.89	25.43 N	40.71 W	25.03	0.23	
1400.00	2.810	297.990	1398.77	27.73 N	45.04 W	27.88	0.01	
1500.00	2.520	200.480	1498.70	26.82 N	47.97 W	30.91	4.01	
1600.00	2.540	300.210	1598.64	25.87 N	50.66 W	33.74	3.87	
1700.00	2.610	298.760	1698.54	28.08 N	54.57 W	36.25	0.10	
1800.00	2.830	297.540	1798.43	30.32 N	58.76 W	38.99	0.23	
1900.00	3.010	296.560	1898.30	32.63 N	63.29 W	42.01	0.19	
2000.00	2.840	297.500	1998.17	34.95 N	67.84 W	45.04	0.18	
2100.00	2.670	297.050	2098.05	37.15 N	72.11 W	47.88	0.17	
2200.00	2.530	296.520	2197.95	39.20 N	76.16 W	50.58	0.14	
2300.00	2.360	296.680	2297.86	41.11 N	79.97 W	53.14	0.17	
2400.00	2.200	293.900	2397.78	42.81 N	83.57 W	55.59	0.19	
2500.00	2.040	294.240	2497.71	44.32 N	86.95 W	57.94	0.16	
2600.00	1.800	291.360	2597.65	45.62 N	90.03 W	60.12	0.26	
2700.00	1.860	287.610	2697.60	46.69 N	93.04 W	62.33	0.13	
2800.00	1.680	291.090	2797.56	47.70 N	95.96 W	64.48	0.21	
2900.00	1.650	287.640	2897.51	48.67 N	98.70 W	66.50	0.10	
3000.00	1.500	291.940	2997.48	49.59 N	101.28 W	68.40	0.19	
3100.00	1.480	287.950	3097.44	50.48 N	103.72 W	70.19	0.11	
3200.00	0.980	297.310	3197.42	51.27 N	105.71 W	71.62	0.54	
3300.00	1.050	291.040	3297.40	51.99 N	107.33 W	72.74	0.13	
3400.00	0.780	291.980	3397.39	52.58 N	108.81 W	73.81	0.27	
3500.00	0.790	279.980	3497.38	52.95 N	110.12 W	74.81	0.16	
3600.00	0.670	279.670	3597.37	53.17 N	111.38 W	75.84	0.12	
3700.00	0.770	265.790	3697.36	53.22 N	112.63 W	76.93	0.20	
3800.00	0.640	270.900	3797.36	53.18 N	113.85 W	78.05	0.14	
3900.00	0.710	256.820	3897.35	53.04 N	115.02 W	79.14	0.18	

Survey Report for Exxon Fed Com # 3 A
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
4000.00	0.640	251.470	3997.34	52.72 N	116.15 W	80.30	0.09	
4100.00	0.490	224.460	4097.34	52.24 N	116.98 W	81.26	0.30	
4200.00	0.610	223.790	4197.33	51.55 N	117.65 W	82.16	0.12	
4300.00	0.660	201.680	4297.33	50.63 N	118.23 W	83.09	0.25	
4400.00	0.790	205.970	4397.32	49.48 N	118.74 W	84.07	0.14	
4500.00	0.890	210.900	4497.31	48.19 N	119.44 W	85.27	0.12	
4600.00	1.030	203.860	4597.29	46.70 N	120.20 W	86.62	0.18	
4700.00	1.140	191.120	4697.28	44.91 N	120.76 W	87.92	0.26	
4800.00	1.080	180.690	4797.26	42.99 N	120.96 W	88.96	0.21	
4900.00	1.360	174.470	4897.24	40.86 N	120.86 W	89.82	0.31	
5000.00	1.510	175.670	4997.20	38.37 N	120.65 W	90.74	0.15	
5100.00	1.700	172.620	5097.17	35.58 N	120.36 W	91.73	0.21	
5200.00	1.960	175.400	5197.11	32.41 N	120.03 W	92.86	0.27	
5300.00	2.190	174.090	5297.05	28.80 N	119.69 W	94.17	0.23	
5400.00	2.420	179.270	5396.97	24.79 N	119.47 W	95.76	0.31	
5500.00	2.520	181.590	5496.87	20.48 N	119.51 W	97.72	0.14	
5600.00	2.120	178.700	5596.79	16.44 N	119.52 W	99.55	0.42	
5700.00	2.130	179.550	5696.72	12.73 N	119.47 W	101.16	0.03	
5800.00	1.790	161.820	5796.67	9.39 N	118.97 W	102.20	0.69	
5900.00	1.090	128.220	5896.64	7.31 N	117.73 W	102.03	1.07	
6000.00	1.210	104.530	5996.62	6.46 N	115.96 W	100.83	0.49	
6100.00	1.330	97.140	6096.59	6.05 N	113.79 W	99.06	0.20	
6200.00	1.390	82.130	6196.56	6.07 N	111.44 W	96.95	0.36	
6300.00	1.390	84.700	6296.53	6.35 N	109.03 W	94.67	0.06	
6400.00	1.410	89.820	6396.50	6.47 N	106.59 W	92.44	0.13	
6500.00	1.140	85.020	6496.48	6.56 N	104.37 W	90.41	0.29	
6600.00	0.940	69.470	6596.46	6.93 N	102.61 W	88.67	0.34	
6700.00	1.070	120.590	6696.45	6.74 N	101.04 W	87.35	0.88	
6800.00	1.020	134.030	6796.43	5.65 N	99.59 W	86.55	0.25	
6900.00	0.980	147.500	6896.42	4.31 N	98.49 W	86.16	0.24	
7000.00	1.190	148.770	6996.40	2.70 N	97.49 W	85.99	0.21	
7100.00	1.420	160.780	7096.37	0.64 N	96.55 W	86.06	0.36	
7200.00	1.950	170.090	7196.33	2.20 S	95.85 W	86.71	0.59	
7300.00	2.590	174.810	7296.25	6.13 S	95.35 W	88.02	0.67	
7400.00	3.030	163.120	7396.13	10.91 S	94.38 W	89.29	0.72	
7500.00	3.080	163.250	7495.99	16.01 S	92.84 W	90.19	0.05	
7600.00	3.540	169.320	7595.82	21.62 S	91.49 W	91.50	0.58	
7700.00	4.370	164.780	7695.58	28.33 S	89.92 W	93.09	0.89	Last Gyro Survey @ 7700' md

MWD Surveys

7733.00	4.660	161.230	7728.48	30.81 S	89.16 W	93.52	1.22	1st MWD Survey @ 7733' md
7765.00	4.700	165.100	7760.38	33.31 S	88.40 W	93.96	0.99	
7796.00	4.610	174.070	7791.27	35.77 S	87.95 W	94.66	2.36	
7828.00	4.890	185.920	7823.16	38.41 S	87.95 W	95.84	3.18	
7860.00	4.790	196.190	7855.05	41.05 S	88.47 W	97.48	2.72	

Survey Report for Exxon Fed Com # 3 A
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
7892.00	4.790	199.800	7886.94	43.59 S	89.29 W	99.36	0.94	
7923.00	4.480	192.500	7917.84	45.99 S	89.99 W	101.06	2.15	
7955.00	4.490	195.580	7949.74	48.41 S	90.60 W	102.69	0.75	
7987.00	4.310	195.170	7981.65	50.78 S	91.25 W	104.33	0.57	
8018.00	4.510	209.400	8012.56	52.97 S	92.15 W	106.11	3.58	
8050.00	4.650	214.120	8044.45	55.14 S	93.50 W	108.29	1.26	
8082.00	4.610	225.440	8076.35	57.11 S	95.14 W	110.64	2.85	
8114.00	4.890	228.610	8108.24	58.92 S	97.08 W	113.18	1.20	
8145.00	5.110	232.920	8139.12	60.62 S	99.18 W	115.82	1.40	
8177.00	5.850	235.050	8170.98	62.42 S	101.65 W	118.83	2.40	
8209.00	5.810	235.200	8202.81	64.28 S	104.32 W	122.05	0.13	
8241.00	5.880	231.820	8234.64	66.21 S	106.93 W	125.26	1.10	
8272.00	6.290	236.230	8265.47	68.14 S	109.59 W	128.50	2.00	
8304.00	6.750	237.380	8297.26	70.13 S	112.64 W	132.11	1.49	
8335.00	7.430	241.450	8328.02	72.07 S	115.93 W	135.92	2.73	
8367.00	8.040	243.060	8359.73	74.07 S	119.74 W	140.23	2.02	
8399.00	8.970	244.750	8391.38	76.15 S	123.99 W	144.96	3.01	
8430.00	9.750	244.350	8421.97	78.32 S	128.55 W	150.00	2.52	
8462.00	10.490	246.120	8453.47	80.67 S	133.65 W	155.62	2.51	
8494.00	11.000	246.990	8484.91	83.04 S	139.13 W	161.58	1.67	
8526.00	11.590	246.980	8516.29	85.49 S	144.90 W	167.83	1.84	
8558.00	12.080	245.900	8547.61	88.12 S	150.91 W	174.39	1.68	
8590.00	12.870	247.120	8578.85	90.87 S	157.25 W	181.29	2.60	
8621.00	13.600	246.350	8609.03	93.67 S	163.77 W	188.37	2.42	
8653.00	13.880	243.780	8640.11	96.88 S	170.66 W	195.97	2.10	
8685.00	14.330	241.770	8671.15	100.45 S	177.59 W	203.77	2.08	
8717.00	15.100	243.660	8702.10	104.17 S	184.82 W	211.89	2.84	
8749.00	15.510	244.320	8732.96	107.87 S	192.41 W	220.34	1.39	
8780.00	15.390	245.820	8762.84	111.35 S	199.90 W	228.59	1.35	
8812.00	15.420	245.650	8793.70	114.85 S	207.65 W	237.09	0.17	
8844.00	16.140	247.790	8824.49	118.28 S	215.64 W	245.77	2.89	
8875.00	16.450	247.820	8854.24	121.57 S	223.69 W	254.44	1.00	
8907.00	16.600	249.120	8884.92	124.91 S	232.16 W	263.51	1.25	
8939.00	16.490	248.750	8915.60	128.18 S	240.66 W	272.58	0.48	
8971.00	16.740	250.140	8946.26	131.40 S	249.23 W	281.68	1.47	
9003.00	16.530	250.260	8976.92	134.50 S	257.85 W	290.78	0.66	
9034.00	16.740	250.400	9006.62	137.49 S	266.21 W	299.59	0.69	
9066.00	17.340	250.080	9037.22	140.66 S	275.03 W	308.90	1.90	
9098.00	17.540	247.420	9067.75	144.13 S	283.97 W	318.45	2.57	
9130.00	19.080	246.710	9098.13	148.05 S	293.22 W	328.48	4.86	
9161.00	19.870	245.190	9127.35	152.27 S	302.66 W	338.80	3.03	
9193.00	20.200	244.110	9157.42	156.96 S	312.57 W	349.76	1.55	
9225.00	19.830	243.420	9187.49	161.80 S	322.39 W	360.71	1.37	
9257.00	20.480	243.700	9217.53	166.71 S	332.26 W	371.74	2.05	
9289.00	21.120	242.870	9247.44	171.82 S	342.41 W	383.10	2.20	

Survey Report for Exxon Fed Com # 3 A
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
9321.00	21.720	242.610	9277.23	177.17 S	352.80 W	394.79	1.90	
9353.00	21.760	242.110	9306.95	182.67 S	363.30 W	406.64	0.59	
9384.00	21.640	242.570	9335.76	187.99 S	373.45 W	418.10	0.67	
9416.00	21.290	242.630	9365.54	193.38 S	383.85 W	429.81	1.10	
9448.00	20.700	241.670	9395.41	198.74 S	393.99 W	441.27	2.13	
9480.00	20.540	242.380	9425.36	204.02 S	403.94 W	452.54	0.93	
9512.00	20.180	242.590	9455.36	209.17 S	413.81 W	463.67	1.15	
9543.00	19.760	242.680	9484.50	214.03 S	423.22 W	474.25	1.36	
9575.00	19.720	243.040	9514.62	218.96 S	432.83 W	485.06	0.40	
9609.00	19.940	242.620	9546.60	224.23 S	443.09 W	496.59	0.77	
9641.00	20.120	241.810	9576.67	229.34 S	452.79 W	507.55	1.03	
9673.00	19.730	242.580	9606.75	234.43 S	462.44 W	518.45	1.47	
9705.00	19.210	245.130	9636.92	239.13 S	472.01 W	529.12	3.11	
9736.00	18.680	245.660	9666.24	243.32 S	481.16 W	539.18	1.80	
9768.00	18.890	245.870	9696.54	247.55 S	490.55 W	549.47	0.69	
9800.00	18.840	245.080	9726.82	251.84 S	499.97 W	559.81	0.81	
9832.00	19.500	244.960	9757.04	256.28 S	509.49 W	570.32	2.07	
9864.00	20.150	244.560	9787.15	260.91 S	519.31 W	581.17	2.08	
9896.00	21.030	244.180	9817.10	265.78 S	529.45 W	592.42	2.78	
9927.00	20.910	244.770	9846.05	270.56 S	539.47 W	603.51	0.78	
9959.00	19.620	244.400	9876.07	275.31 S	549.48 W	614.59	4.05	
9991.00	18.750	245.220	9906.29	279.79 S	558.99 W	625.10	2.85	
10023.00	17.630	243.870	9936.69	284.08 S	568.01 W	635.09	3.74	
10055.00	18.210	242.990	9967.14	288.49 S	576.82 W	644.94	2.00	
10087.00	19.170	241.940	9997.45	293.23 S	585.91 W	655.19	3.18	
10118.00	20.350	240.330	10026.63	298.29 S	595.08 W	665.66	4.19	
10150.00	20.810	241.130	10056.58	303.79 S	604.90 W	676.89	1.68	
10182.00	21.320	241.950	10086.45	309.27 S	615.01 W	688.39	1.84	
10214.00	21.550	242.780	10116.23	314.69 S	625.37 W	700.08	1.19	
10245.00	20.860	242.280	10145.13	319.87 S	635.32 W	711.29	2.30	
10277.00	21.050	242.160	10175.02	325.20 S	645.44 W	722.74	0.61	
10308.00	21.000	241.540	10203.95	330.45 S	655.25 W	733.85	0.74	
10340.00	21.640	242.810	10233.76	335.87 S	665.54 W	745.48	2.47	
10372.00	20.910	242.020	10263.58	341.25 S	675.83 W	757.09	2.45	
10404.00	21.560	240.550	10293.41	346.82 S	685.99 W	768.67	2.63	
10435.00	22.750	241.640	10322.12	352.47 S	696.23 W	780.35	4.06	
10467.00	23.900	241.770	10351.50	358.47 S	707.38 W	793.02	3.60	
10498.00	24.400	243.120	10379.79	364.34 S	718.63 W	805.70	2.40	
10530.00	23.950	244.940	10408.99	370.08 S	730.41 W	818.80	2.72	
10562.00	22.890	246.030	10438.35	375.36 S	741.98 W	831.51	3.58	
10594.00	22.430	247.240	10467.88	380.25 S	753.29 W	843.82	2.05	
10625.00	22.170	247.200	10496.56	384.80 S	764.14 W	855.56	0.84	
10657.00	22.780	245.050	10526.13	389.76 S	775.32 W	867.77	3.20	
10689.00	23.830	245.500	10555.52	395.05 S	786.82 W	880.43	3.33	
10720.00	24.070	245.280	10583.85	400.29 S	798.26 W	893.00	0.83	

Survey Report for Exxon Fed Com # 3 A
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
10752.00	23.900	244.790	10613.09	405.78 S	810.06 W	906.01	0.82	
10784.00	23.630	243.830	10642.37	411.37 S	821.68 W	918.90	1.47	
10816.00	23.300	242.730	10671.73	417.10 S	833.06 W	931.64	1.71	
10848.00	22.660	240.620	10701.19	423.02 S	844.06 W	944.13	3.26	
10879.00	22.080	239.310	10729.86	428.93 S	854.27 W	955.90	2.47	
10911.00	22.700	238.170	10759.44	435.25 S	864.69 W	968.05	2.37	
10943.00	23.020	238.590	10788.93	441.77 S	875.27 W	980.43	1.12	
10975.00	22.870	238.560	10818.40	448.27 S	885.92 W	992.86	0.47	
11007.00	23.550	238.530	10847.81	454.85 S	896.68 W	1005.43	2.13	
11038.00	23.760	238.390	10876.20	461.36 S	907.28 W	1017.82	0.70	
11070.00	23.400	238.570	10905.53	468.05 S	918.19 W	1030.57	1.15	
11102.00	22.560	238.410	10934.99	474.58 S	928.84 W	1043.02	2.63	
11134.00	21.860	238.710	10964.62	480.89 S	939.16 W	1055.07	2.22	
11166.00	21.610	238.850	10994.34	487.03 S	949.29 W	1066.88	0.80	
11197.00	21.280	238.850	11023.20	492.90 S	958.99 W	1078.18	1.06	
11229.00	20.770	238.470	11053.06	498.87 S	968.80 W	1089.62	1.65	
11261.00	20.480	238.750	11083.01	504.74 S	978.42 W	1100.86	0.96	
11293.00	19.750	238.280	11113.06	510.49 S	987.81 W	1111.82	2.34	
11324.00	19.450	239.850	11142.27	515.83 S	996.73 W	1122.19	1.96	
11356.00	19.420	242.640	11172.44	520.95 S	1006.06 W	1132.82	2.90	
11388.00	19.170	244.710	11202.65	525.64 S	1015.53 W	1143.40	2.28	
11420.00	19.600	244.730	11232.83	530.18 S	1025.14 W	1154.02	1.34	
11451.00	19.860	245.610	11262.01	534.57 S	1034.63 W	1164.48	1.27	
11483.00	20.210	245.850	11292.08	539.08 S	1044.63 W	1175.43	1.12	
11515.00	20.310	246.200	11322.10	543.58 S	1054.75 W	1186.50	0.49	
11547.00	20.210	246.450	11352.12	548.03 S	1064.90 W	1197.57	0.41	
11579.00	19.840	246.380	11382.18	552.42 S	1074.94 W	1208.51	1.16	
11610.00	19.220	247.500	11411.40	556.48 S	1084.48 W	1218.85	2.34	
11642.00	18.370	248.540	11441.69	560.34 S	1094.04 W	1229.13	2.86	
11674.00	18.370	250.410	11472.06	563.87 S	1103.48 W	1239.16	1.84	
11706.00	18.290	251.140	11502.44	567.19 S	1112.98 W	1249.14	0.76	
11738.00	18.540	248.340	11532.80	570.69 S	1122.46 W	1259.18	2.87	
11769.00	19.060	248.540	11562.15	574.36 S	1131.76 W	1269.13	1.69	
11801.00	19.340	248.700	11592.37	578.19 S	1141.55 W	1279.61	0.89	
11833.00	18.990	248.700	11622.59	582.01 S	1151.34 W	1290.08	1.09	
11865.00	18.460	250.880	11652.90	585.56 S	1160.98 W	1300.28	2.74	
11897.00	17.930	253.160	11683.30	588.65 S	1170.48 W	1310.16	2.77	Last MWD Survey @ 11897' md
11954.00	17.930	253.160	11737.53	593.73 S	1187.28 W	1327.46	0.00	Projection to TD @ 11954' md

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to Grid North. Vertical depths are relative to RKB. Northings and Eastings are relative to Wellhead.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Wellhead and calculated along an Azimuth of 243.430° (Grid).

Coordinate System is NAD27 New Mexico State Planes, Eastern Zone.
Grid Convergence at Surface is 0.014°. Magnetic Convergence at Surface is -8.819° (08-Sep-03)

Survey Report for Exxon Fed Com # 3 A
Data Source: Information from Location

Based upon Minimum Curvature type calculations, at a Measured Depth of 11954.00ft.,
The Bottom Hole Displacement is 1327.46ft., in the Direction of 243.431° (Grid).

Comments

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
7700.00	7695.58	28.33 S	89.92 W	Last Gyro Survey @ 7700' md
7733.00	7728.48	30.81 S	89.16 W	1st MWD Survey @ 7733' md
11897.00	11683.30	588.65 S	1170.48 W	Last MWD Survey @ 11897' md
11954.00	11737.53	593.73 S	1187.28 W	Projection to TD @ 11954' md

New Mexico
Eddy County
Sec. 17-T24S-R26E
Exxon Fed Com # 3 A

Scale: 1 inch = 500ft

Eastings

-1500

-1000

-500

0

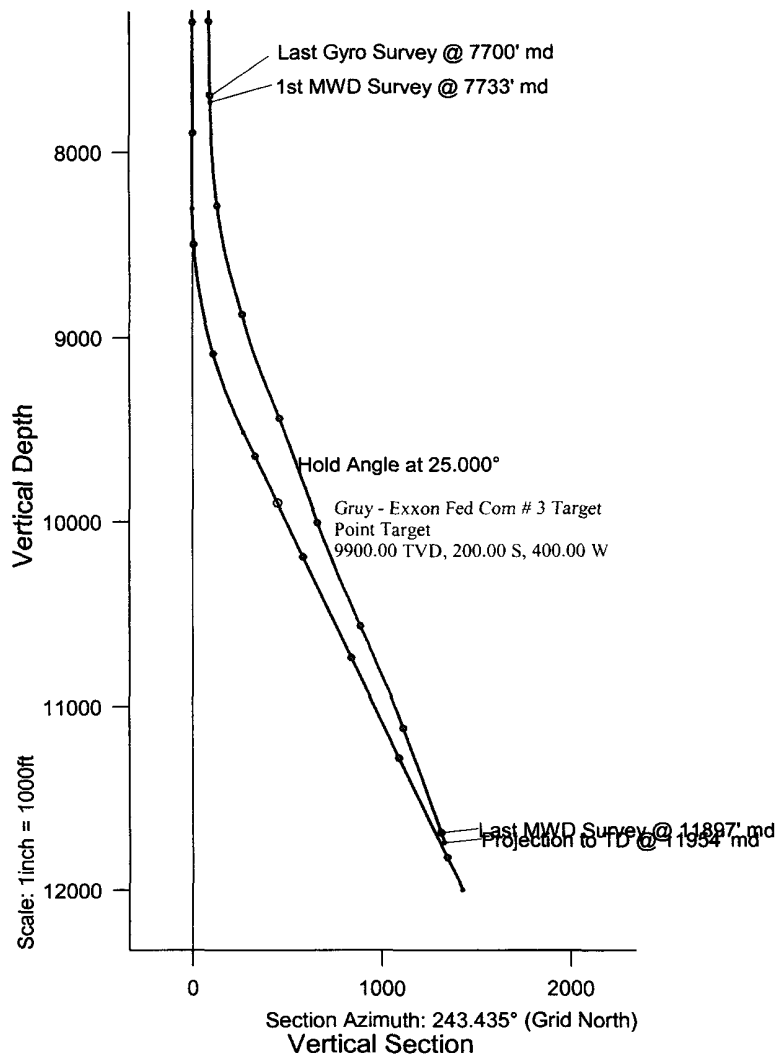
Last Gyro Survey @ 7700' md
1st MWD Survey @ 7733' md

Gruy - Exxon Fed Com # 3 Target
9900.00 TVD, 200.00 S, 400.00 W

Last MWD Survey @ 11897' md
Projection to TD @ 11954' md



Northings
Scale: 1 inch = 500ft



Prepared by:
Admin

Date/Time:
8 September, 2003 - 14:08

Checked:

Approved: