N.M. Oil Cons. DIV
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(July 1992)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NMNM 28172

6. IF INDIAN, ALLOTTES OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

1b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

RECEIVED
SEP - 1 2005
OCD-ARTESIA

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: 35072
Adrianne 6 Federal No. 1

2. NAME OF OPERATOR: Gruy Petroleum Management Co. 162683

9. API WELL NO.: 30-015-34319

3. ADDRESS AND TELEPHONE NO.: P.O. Box 140907 Irving TX 75014 972-401-3111

10. FIELD AND POOL, OR WILDCAT: Chosa Draw Morrow

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
per BHunt & SN dated 8/4/05
SUBJECT TO LIKE APPROVAL BY STATE
SHL 200' FNL & ~~1500'~~ 1700' FWL BHL 750' FNL & 1550' FWL Sec 6-25S-26E

11. SEC. T.,R.,M., BLOCK AND SURVEY OR AREA: Sec. 6 T25S R26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 17 miles South of Carlsbad

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
200'	480	320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH	20. ROTARY OR CABLE TOOLS
NA	13000'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3461 ' GR CARLSBAD CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*: 06-30-05

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE,SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2" WITNESS	J-55 13 3/8"	54.5 #	200'	225 sx circulate
12 1/4"	NS-110 9 5/8"	40 #	1900'	600 sx circulate
7 7/8"	N-80/P-110 5 1/2"	17 #	13000'	1920 sx TOC 2700'

From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 - psi BOP system. We are requesting a variance for the 13 3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor, shall be pressure tested to .22 psi per foot or 1500 # whichever is greater, but not to exceed 70% of the manufactures stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not anticipate any pressures greater than 1000 # and are requesting a variance to test the 13 3/8" casing and BOP system to 1000 # psi, and use rig pumps instead of an independent service company.

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Zeno Farris TITLE Mgr. Ops. Admin DATE 06-9-05

(This space for Federal or State office use)

PERMIT No. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ Joe G. Lara TITLE ACTING FIELD MANAGER DATE AUG 30 2005

*See Instructions 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.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Salt 99.5

APPROVAL FOR 1 YEAR

Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NMNM28172

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Adrianne 6 Federal No. 1

2. Name of Operator
Gruy Petroleum Management Co.

9. API Well No.
30-015-

3a. Address
P. O. Box 140907 Irving, TX 75014-0907

3b. Phone No. *(include area code)*
972-401-3111

10. Field and Pool, or Exploratory Area
Cottonwood Draw Wildcat

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SHL: 200' FNL & 1500' FWL Sec. 6-T25S-R6E
BHL: 750' FNL & 1550' FWL Sec. 6-T25S-R6E

11. County or Parish, State
Eddy Co., NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Change SHL to 200' FNL & 1700' FWL

Submit new Directional Survey

Change Penetration Point Strawn to 9850'

(see attached Amended C-102 and Directional Survey)

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Natalie Krueger

Title
Regulatory Technician

Signature
Natalie Krueger

Date
August 4, 2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by
/s/ Joe G. Lara ACTING

Title FIELD MANAGER

Date AUG 30 2005

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office
CARLSBAD FIELD OFFICE

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.

(Instructions on reverse)

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		Undes. Chesa Draw; Morrow

Property Code	Property Name	Well Number
	ADRIANNE 6 FEDERAL	1

OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT COMPANY	3454'

Surface Location

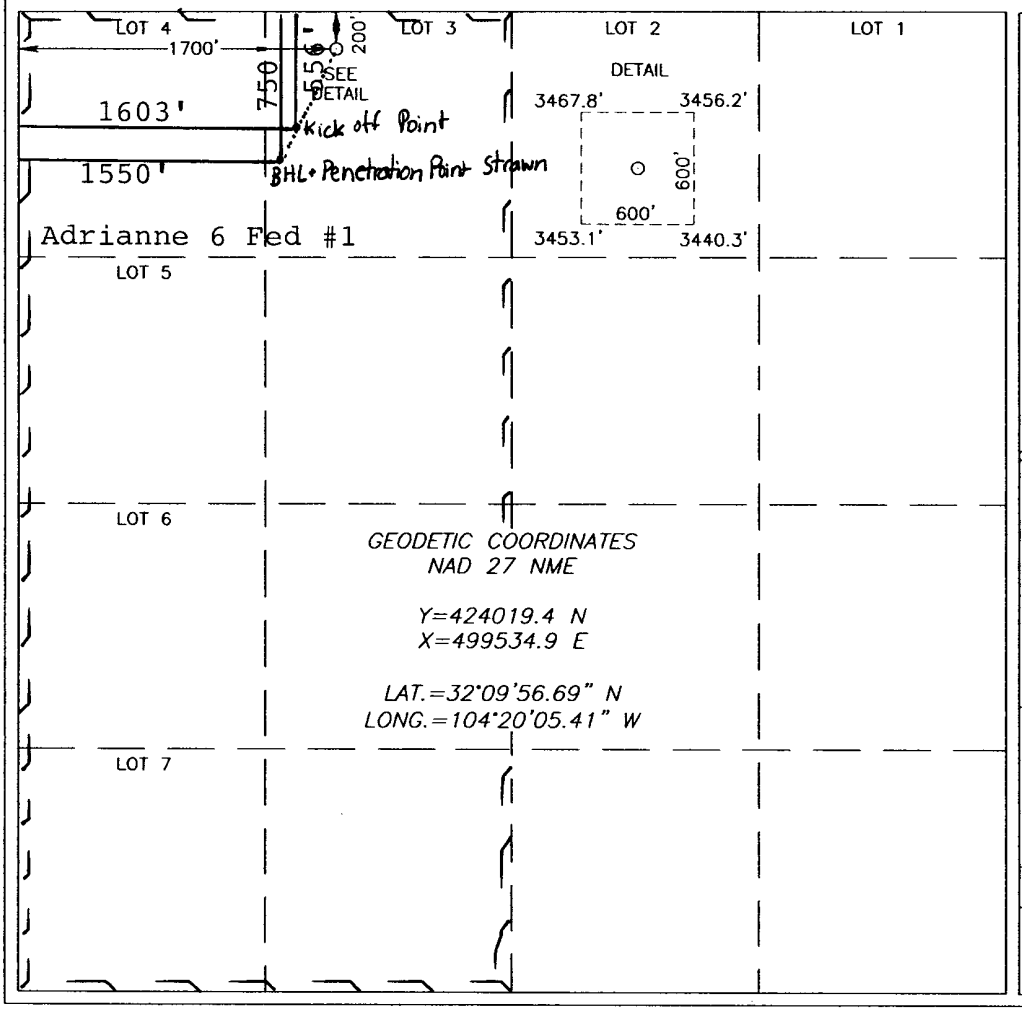
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	6	25-S	26-E		200	NORTH	1700	WEST	EDDY

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
3	6	25-S	26-E		750	NORTH	1550	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



GEODETIC COORDINATES
NAD 27 NME

Y=424019.4 N
X=499534.9 E

LAT.=32°09'56.69" N
LONG.=104°20'05.41" W

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Zeno Farris
Signature

Zeno Farris
Printed Name

Mgr Operations Admin
Title

August 4, 2005
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 supervison, and that the same is true and correct to the best of my belief.

JULY 5, 2005
Date Surveyed JR

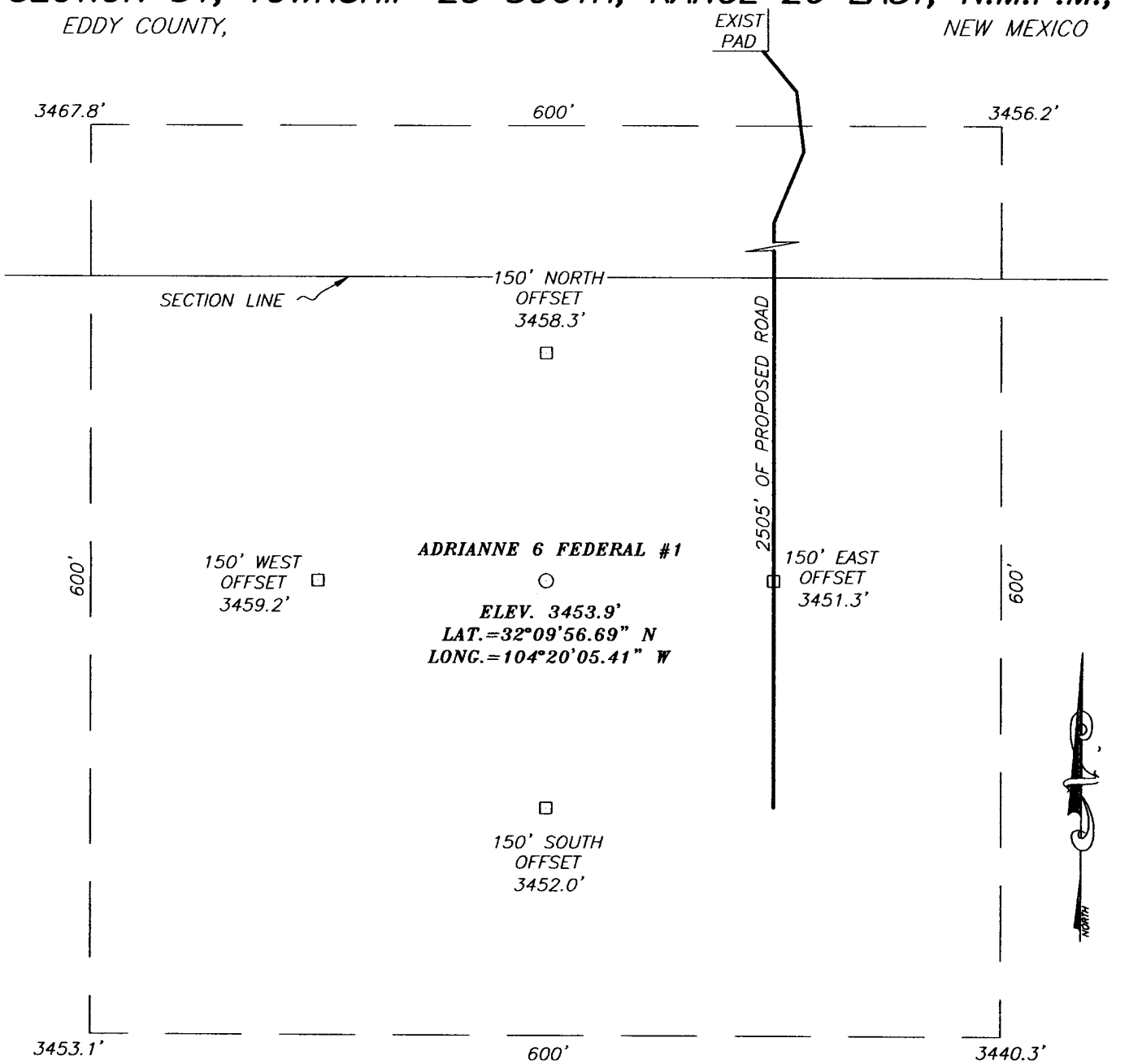
Signature & Seal of Professional Surveyor

GARY L. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR
7/14/05
05.11.1015

Certificate No. GARY EIDSON 12641

SECTION 31, TOWNSHIP 25 SOUTH, RANGE 26 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #62-180 AND CO. RD. #426, GO EAST ON CO. RD. #426 FOR APPROX. 2.1 MILES. TURN RIGHT (SOUTH) AND GO APPROX. 0.5 MILES TO THE WHITE CITY 31 #2 WELL. GO TO THE SEc OF PAD AN FOLLOW PROPOSED ROAD SURVEY SOUTH FOR APPROX. 2505' TO THIS LOCATION.

100 0 100 200 Feet

Scale:1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

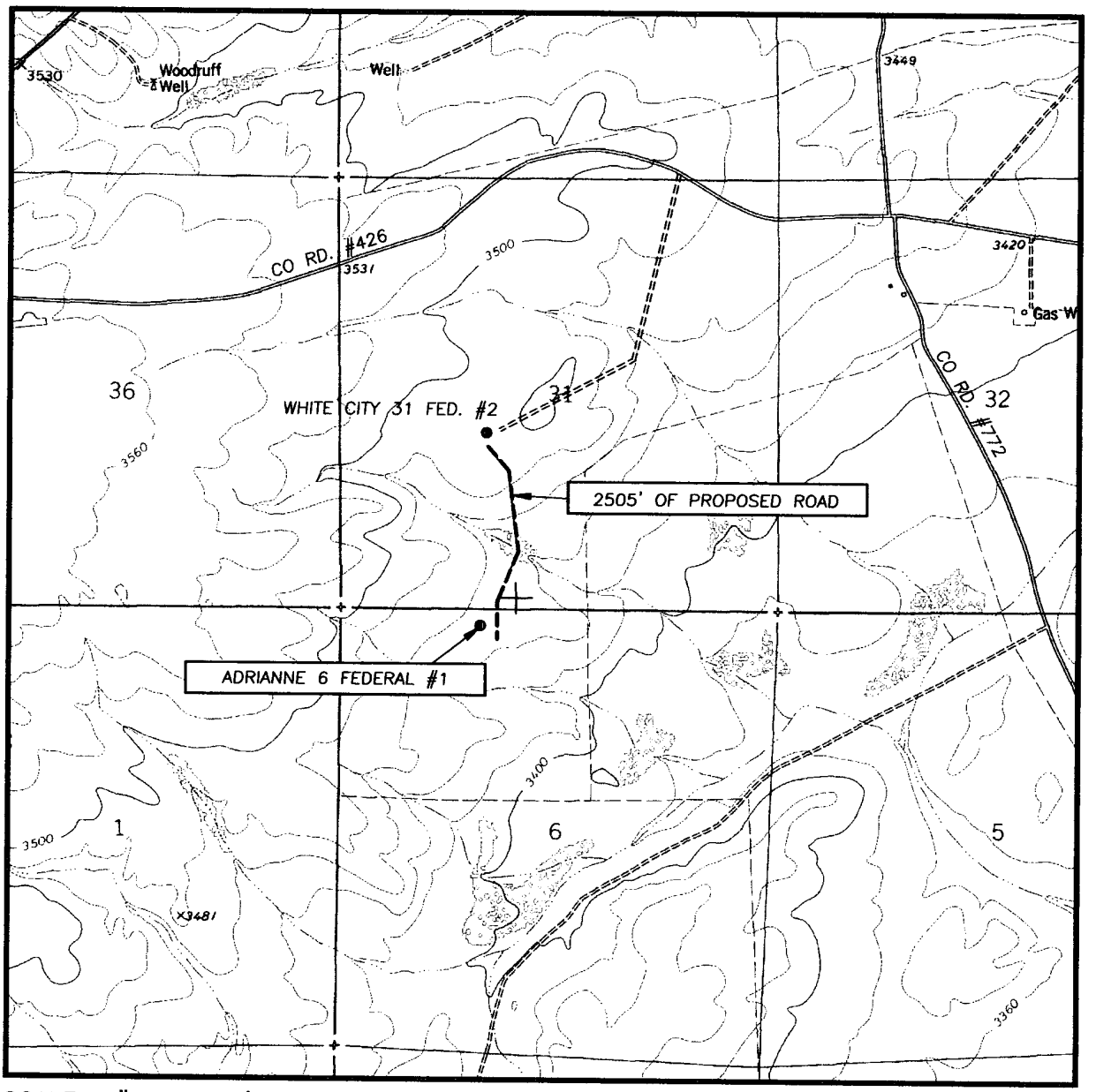
(505) 393-3117

GRUY PETROLEUM MANAGEMENT COMPANY

ADRIANNE 6 FEDERAL #1 WELL
LOCATED 200 FEET FROM THE NORTH LINE
AND 1700 FEET FROM THE WEST LINE OF SECTION 6,
TOWNSHIP 25 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 07/05/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.1015	Dr By: J.R.	Rev 1:N/A	
Date: 07/12/05	Disk: CD#5	05111015	Scale:1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BLACK RIVER VILLAGE, N.M. – 20'

SEC. 6 TWP. 25-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 200' FNL & 1700' FWL

ELEVATION 3454'

OPERATOR GRUY PETROLEUM MANAGEMENT COMPANY

LEASE ADRIANNE 6 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
BLACK RIVER VILLAGE, N.M.

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

CIMAREX

Cimarex Energy Co., Inc.

Eddy Co., New Mexico
Adrianne 6 Federal #1
Adrianne 6 Federal #1
S-Well #1

Plan: Plan #2

Standard Survey Report

03 August, 2005

BLACK VIPER ENERGY SERVICES, LTD.

Black Viper Energy Services

Survey Report

Company:	Cimarex Energy Co., Inc.	**Local Co-ordinate Reference:**	Well Adrianne 6 Federal #1
Project:	Eddy Co., New Mexico	**TVD Reference:**	WELL @ 0.00ft (Original Well Elev)
Site:	Adrianne 6 Federal #1	**MD Reference:**	WELL @ 0.00ft (Original Well Elev)
Well:	Adrianne 6 Federal #1	**North Reference:**	Grid
Wellbore:	S-Well #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	2003.11.0.3 Server Database

Project Eddy Co., New Mexico

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Adrianne 6 Federal #1

Site Position:		**Northing:**	424,019.40 ft	**Latitude:**	32° 09' 56.678" N
From:	Map	**Easting:**	499,534.90 ft	**Longitude:**	104° 20' 05.423" W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.00 °

Well Adrianne 6 Federal #1

Well Position	**+N/-S**	0.00 ft	**Northing:**	424,019.40 ft	**Latitude:**	32° 09' 56.678" N
	+E/-W	0.00 ft	**Easting:**	499,534.90 ft	**Longitude:**	104° 20' 05.423" W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	3,454.00 ft	**Ground Level:**	0.00 ft

Wellbore S-Well #1

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2005-10	8/3/2005	8.61	60.13	49,114

Design Plan #2

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	7,500.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	195.26

Survey Tool Program **Date** 8/3/2005

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	7,500.00	Plan #1 (OH)	MWD	Standard MWD
7,500.00	13,087.17	Plan #2 (S-Well #1)	MWD	Standard MWD

Planned Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Vertical Section (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**
7,500.00	0.00	195.26	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 3/100									
8,220.77	21.62	195.26	8,203.78	-129.66	-35.36	134.40	3.00	3.00	0.00
EOC - Hold 21.6*									
8,856.02	21.62	195.26	8,794.33	-355.51	-96.96	368.49	0.00	0.00	0.00
KOP - Drop 2/100									
9,937.17	0.00	195.26	9,850.00	-550.00	-150.00	570.09	2.00	-2.00	0.00
EOC									
12,087.17	0.00	195.26	12,000.00	-550.00	-150.00	570.09	0.00	0.00	0.00
13,087.17	0.00	195.26	13,000.00	-550.00	-150.00	570.09	0.00	0.00	0.00

Company:	Cimarex Energy Co., Inc.	**Local Co-ordinate Reference:**	Well Adrianne 6 Federal #1
Project:	Eddy Co., New Mexico	**TVD Reference:**	WELL @ 0.00ft (Original Well Elev)
Site:	Adrianne 6 Federal #1	**MD Reference:**	WELL @ 0.00ft (Original Well Elev)
Well:	Adrianne 6 Federal #1	**North Reference:**	Grid
Wellbore:	S-Well #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #2	**Database:**	2003.11.0.3 Server Database

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S ft	+E/-W ft	Northing (ft)	Easting (ft)	Latitude	Longitude
T#1 [A6Fed#1] - plan hits target - Point	0.00	0.00	12,000.00	-550.00	-150.00	423,469.40	499,384.90	32° 09' 51.235" N	104° 20' 07.168" W
PBHL [A6Fed#1] - plan hits target - Point	0.00	0.00	13,000.00	-550.00	-150.00	423,469.40	499,384.90	32° 09' 51.235" N	104° 20' 07.168" W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
10,087.17	10,000.00	Strawn		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,500.00	7,500.00	0.00	0.00	KOP - Build 3/100
8,220.77	8,203.78	-129.66	-35.36	EOC - Hold 21.6*
8,856.02	8,794.33	-355.50	-96.96	KOP - Drop 2/100
9,937.17	9,850.00	-550.00	-150.00	EOC

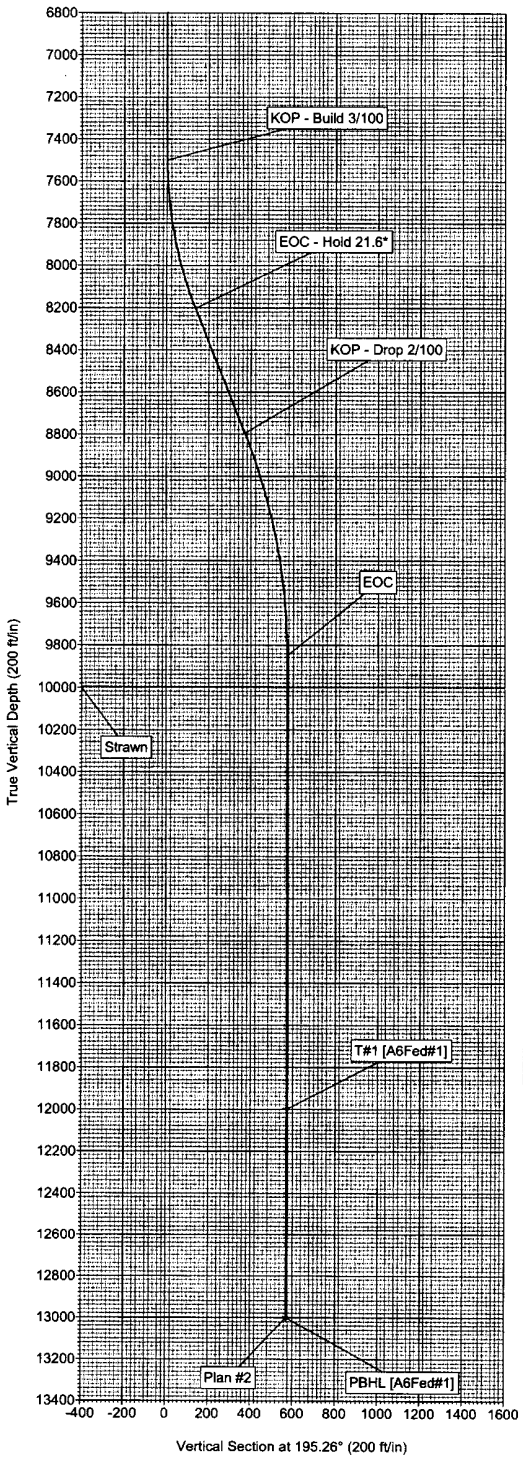
Checked By: _____ Approved By: _____ Date: _____

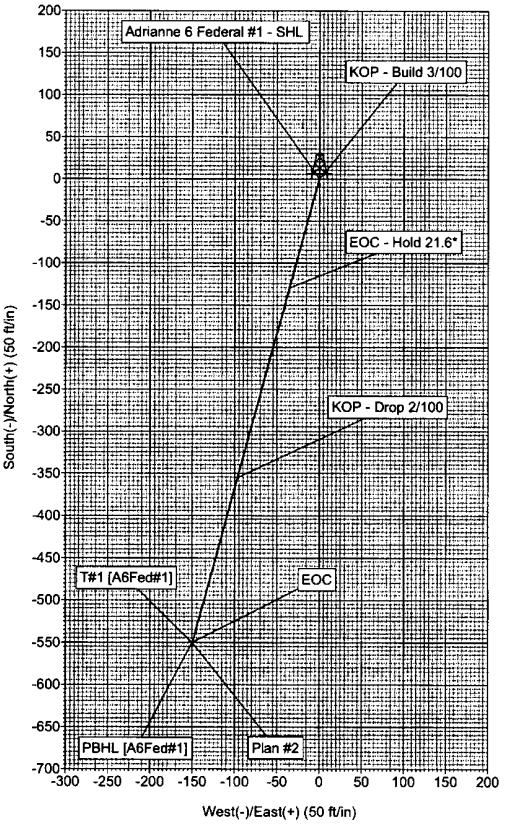
[redacted]

CIMAREX

Project: Eddy Co., New Mexico
Site: Adrianne 6 Federal #1
Well: Adrianne 6 Federal #1
Wellbore: S-Well #1
Plan: Plan #2

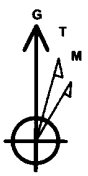
BLACK VIPER ENERGY SERVICES, LTD.





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	7500.00	0.00	195.26	7500.00	0.00	0.00	0.00	0.00	0.00	
2	8220.77	21.62	195.26	8203.78	-129.66	-35.36	3.00	195.26	134.40	
3	8856.02	21.62	195.26	8794.33	-355.51	-96.96	0.00	0.00	368.49	
4	9937.17	0.00	195.26	9850.00	-550.00	-150.00	2.00	180.00	570.09	
5	12087.17	0.00	195.26	12000.00	-550.00	-150.00	0.00	195.26	570.09	T#1 [A6Fed#1]
6	13087.17	0.00	195.26	13000.00	-550.00	-150.00	0.00	195.26	570.09	PBHL [A6Fed#1]



Azimuths to Grid North
True North: 0.00°
Magnetic North: 8.61°

Magnetic Field
Strength: 49114.3nT
Dip Angle: 60.13°
Date: 8/3/2005
Model: IGRF2005-10

ANNOTATIONS

TVD	MD	Annotation
7500.00	7500.00	KOP - Build 3/100
8203.78	8220.77	EOC - Hold 21.6°
8794.33	8856.02	KOP - Drop 2/100
9850.00	9937.17	EOC

Plan: Plan #2 (Adrianne 6 Federal #1/S-Well #1)
Created By: John Hatteberg Date: 08/03/2005

Cimarex Energy Co., Inc.
Adrianne 6 Federal #1 - Plan #2

Eddy Co., New Mexico
Adrianne 6 Federal #1

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
7500.00	0.000	195.255	7500.00	0.00 N	0.00 E	0.00	0.00
7600.00	3.000	195.255	7599.95	2.53 S	0.69 W	2.62	3.00
7700.00	6.000	195.255	7699.63	10.09 S	2.75 W	10.46	3.00
7800.00	9.000	195.255	7798.77	22.68 S	6.19 W	23.51	3.00
7900.00	12.000	195.255	7897.08	40.26 S	10.98 W	41.73	3.00
8000.00	15.000	195.255	7994.31	62.78 S	17.12 W	65.08	3.00
8100.00	18.000	195.255	8090.18	90.18 S	24.59 W	93.47	3.00
8200.00	21.000	195.255	8184.43	122.38 S	33.38 W	126.85	3.00
8220.77	21.623	195.255	8203.78	129.66 S	35.36 W	134.40	3.00
8300.00	21.623	195.255	8277.44	157.83 S	43.05 W	163.60	0.00
8400.00	21.623	195.255	8370.40	193.38 S	52.74 W	200.45	0.00
8500.00	21.623	195.255	8463.36	228.93 S	62.44 W	237.30	0.00
8600.00	21.623	195.255	8556.33	264.49 S	72.13 W	274.15	0.00
8700.00	21.623	195.255	8649.29	300.04 S	81.83 W	311.00	0.00
8800.00	21.623	195.255	8742.25	335.59 S	91.52 W	347.84	0.00
8856.02	21.623	195.255	8794.33	355.51 S	96.96 W	368.49	0.00
8900.00	20.743	195.255	8835.34	370.84 S	101.14 W	384.38	2.00
9000.00	18.743	195.255	8929.45	403.42 S	110.02 W	418.16	2.00
9100.00	16.743	195.255	9024.69	432.82 S	118.04 W	448.63	2.00
9200.00	14.743	195.255	9120.94	459.00 S	125.18 W	475.76	2.00
9300.00	12.743	195.255	9218.07	481.92 S	131.43 W	499.52	2.00
9400.00	10.743	195.255	9315.97	501.55 S	136.79 W	519.87	2.00
9500.00	8.743	195.255	9414.52	517.88 S	141.24 W	536.80	2.00
9600.00	6.743	195.255	9513.60	530.88 S	144.79 W	550.27	2.00
9700.00	4.743	195.255	9613.10	540.53 S	147.42 W	560.28	2.00

9800.00	2.743	195.255	9712.88	546.83 S	149.14 W	566.80
2.00						
9900.00	0.743	195.255	9812.83	549.77 S	149.94 W	569.85
2.00						
9937.17	0.000	195.255	9850.00	550.00 S	150.00 W	570.09
2.00						
10000.00	0.000	195.255	9912.83	550.00 S	150.00 W	570.09
0.00						
10100.00	0.000	195.255	10012.83	550.00 S	150.00 W	570.09
0.00						
10200.00	0.000	195.255	10112.83	550.00 S	150.00 W	570.09
0.00						
10300.00	0.000	195.255	10212.83	550.00 S	150.00 W	570.09
0.00						
10400.00	0.000	195.255	10312.83	550.00 S	150.00 W	570.09
0.00						
10500.00	0.000	195.255	10412.83	550.00 S	150.00 W	570.09
0.00						
10600.00	0.000	195.255	10512.83	550.00 S	150.00 W	570.09
0.00						
10700.00	0.000	195.255	10612.83	550.00 S	150.00 W	570.09
0.00						
10800.00	0.000	195.255	10712.83	550.00 S	150.00 W	570.09
0.00						
10900.00	0.000	195.255	10812.83	550.00 S	150.00 W	570.09
0.00						
11000.00	0.000	195.255	10912.83	550.00 S	150.00 W	570.09
0.00						
11100.00	0.000	195.255	11012.83	550.00 S	150.00 W	570.09
0.00						
11200.00	0.000	195.255	11112.83	550.00 S	150.00 W	570.09
0.00						
11300.00	0.000	195.255	11212.83	550.00 S	150.00 W	570.09
0.00						
11400.00	0.000	195.255	11312.83	550.00 S	150.00 W	570.09
0.00						
11500.00	0.000	195.255	11412.83	550.00 S	150.00 W	570.09
0.00						
11600.00	0.000	195.255	11512.83	550.00 S	150.00 W	570.09
0.00						
11700.00	0.000	195.255	11612.83	550.00 S	150.00 W	570.09
0.00						
11800.00	0.000	195.255	11712.83	550.00 S	150.00 W	570.09
0.00						
11900.00	0.000	195.255	11812.83	550.00 S	150.00 W	570.09
0.00						
12000.00	0.000	195.255	11912.83	550.00 S	150.00 W	570.09
0.00						
12087.17	0.000	195.255	12000.00	550.00 S	150.00 W	570.09
0.00						
12100.00	0.000	195.255	12012.83	550.00 S	150.00 W	570.09
0.00						
12200.00	0.000	195.255	12112.83	550.00 S	150.00 W	570.09
0.00						
12300.00	0.000	195.255	12212.83	550.00 S	150.00 W	570.09
0.00						
12400.00	0.000	195.255	12312.83	550.00 S	150.00 W	570.09
0.00						
12500.00	0.000	195.255	12412.83	550.00 S	150.00 W	570.09
0.00						
12600.00	0.000	195.255	12512.83	550.00 S	150.00 W	570.09
0.00						
12700.00	0.000	195.255	12612.83	550.00 S	150.00 W	570.09

0.00						
12800.00	0.000	195.255	12712.83	550.00 S	150.00 W	570.09
0.00						
12900.00	0.000	195.255	12812.83	550.00 S	150.00 W	570.09
0.00						
13000.00	0.000	195.255	12912.83	550.00 S	150.00 W	570.09
0.00						
13087.17	0.000	195.255	13000.00	550.00 S	150.00 W	570.09
0.00						

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 195.255° (Grid).

Coordinate System is NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution), New Mexico East 3001.
Central meridian is -104.333°.
Grid Convergence at Surface is -0.001°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 13087.17ft., the Bottom Hole Displacement is 570.09ft., in the Direction of 195.255° (Grid).

Application to Drill

Gruy Petroleum Management Co.
Adrianne 6 Federal No. 1
Unit Letter C Section 6
T25S - R26E Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1 Location: SHL 200' FNL & 1500' FWL Sec. 6- 25S 26E
BHL 750' FNL & 1550' FWL Sec. 6 25S 26E

2 Elevation above sea level: GR 3461'

3 Geologic name of surface formation: Quaternery Alluvium Deposits

4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 13000'

6 Estimated tops of geological markers:

T/Salt	200'	Cisco Canyon	9928
B/Salt	800'	Strawn	10078
Delaware	1500	Atoka	10388
Bone Spring	6168	Morrow	11,158
Wolfcamp	8098	Barnett	11,768

7 Possible mineral bearing formation:

Strawn	Gas
Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
17 1/2"	0-200'	13 3/8"	54.5	8-R	ST&C	J-55
12 1/4"	0-1900'	9 5/8"	40	8-R	ST&C	NS-110
7 7/8"	0-13000'	5 1/2"	17	8-R	ST&C	N-80 / S-95

Application to Drill

Gruy Petroleum Management Co.
Adrianne 6 Federal No. 1
Unit Letter C Section 6
T25S - R26E Eddy County, NM

9 Cementing & Setting Depth:

13 3/8"	Surface	Set 200' of 13 3/8" J-55 54.5 ST&C casing. Cement with 225 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 1900' of 9 5/8" NS-110 40# ST&C casing or casing sufficient to reach the base of the reef complex. Cement in two stages, first stage cement with 400 Sx. Of Class POZ/C Cement + additives, second stage cement with 200 Sx. Of Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 13000' of 5 1/2" NP-80 / S-95 17# ST&C casing. Cement in two stages, first stage cement with 870 Sx. of Class POZ/C Cement + additives. Second stage cement with 1050 Sx of Class "C" Estimated top of cement 2700'.

10 Pressure control Equipment: Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nippled up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 200'	8.4 - 8.6	30 - 32	May lose circ.	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
200' - 1900'	9.7 - 10.0	28 - 29	May lose circ	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
1900' - 8300'	8.4 - 9.9	28 - 29	NC	Fresh water. Paper for seepage. Lime for pH (9 - 9.5)
8300' - 10000'	8.45 - 8.9	28 - 29	NC	Cut brine. Caustic for pH control.
10000' - 13000'	8.9 - 9.7	29 - 45	NC	XCD Polymer mud system.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Application to Drill

Gruy Petroleum Management Co.
Adrianne 6 Federal No. 1
Unit Letter C Section 6
T25S - R26E Eddy County, NM

12 Testing, Logging and Coring Program:

A. Mud logging program: One-man unit from 8000' to TD

B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR

C. No DST's, or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures or H2S gas are expected. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, estimated BHT 190 .

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35 - 45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Strawn / Morrow / Atoka pay will be perforated and stimulated. The well will be tested and potentialed as a gas well.

Hydrogen Sulfide Drilling Operations Plan

1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:

A. Characteristics of H2S
B. Physical effects and hazards
C. Proper use of safety equipment and life support systems.
D. Principle and operation of H2S detectors, warning system and briefing
E. Evacuation procedure, routes and first aid.
F. Proper use of 30 minute pressure demand air pack.

2 H2S Detection and Alarm Systems

A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.

3 Windsock and/or wind streamers

A. Windsock at mudpit area should be high enough to be visible.
B. Windsock at briefing area should be high enough to be visible.

4 Condition Flags and Signs

A. Warning sign on access road to location.
B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location

5 Well control equipment

A. See exhibit "E"

6 Communication

A. While working under masks chalkboards will be used for communication.
B. Hand signals will be used where chalk board is inappropriate.
C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing Not Anticipated

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H2S scavengers if

Surface Use Plan

Gruy Petroleum Management Co.
Adrianne 6 Federal No. 1
Unit Letter C Section 6
T25S - R26E Eddy County, NM

1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

A. Exhibit "A" shows the proposed well site as staked.

B. From the intersection of Hwy 62-180 and Eddy County road # 426 (Cresote Rd.) Go east on Co. Rd. 426 for 2.1. Turn right, south and go 0.5 miles. Turn left, west and go 0.2 miles to the White City 31 Federal No. 2. Follow proposed road SE coner of pad 2525' to this location.

2 PLANNED ACCESS ROADS: 2525' of access road will be constructed.

3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells - None Know

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A"

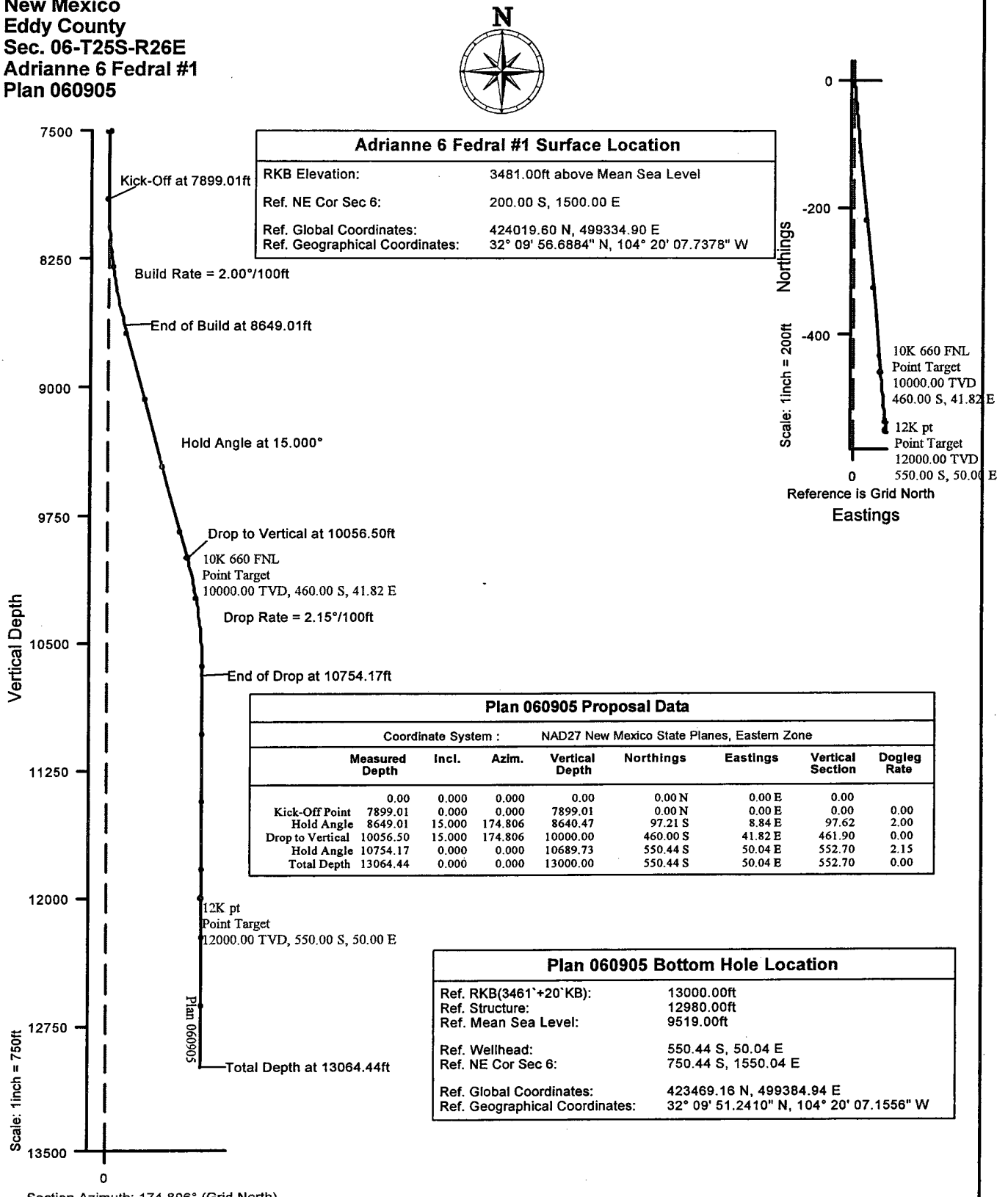
E. Abandoned wells - As shown on Exhibit "A"

HALLIBURTON
Sperry Drilling Services

Gruy Petroleum Management Co.

DrillQuest
Sperry-Sun

New Mexico
Eddy County
Sec. 06-T25S-R26E
Adrianne 6 Fedral #1
Plan 060905



Adrianne 6 Fedral #1 Surface Location

RKB Elevation:	3481.00ft above Mean Sea Level
Ref. NE Cor Sec 6:	200.00 S, 1500.00 E
Ref. Global Coordinates:	424019.60 N, 499334.90 E
Ref. Geographical Coordinates:	32° 09' 56.6884" N, 104° 20' 07.7378" W

Plan 060905 Proposal Data

Coordinate System : NAD27 New Mexico State Planes, Eastern Zone

	Measured Depth	Incl.	Azim.	Vertical Depth	Northings	Eastings	Vertical Section	Dogleg Rate
	0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
Kick-Off Point	7899.01	0.000	0.000	7899.01	0.00 N	0.00 E	0.00	0.00
Hold Angle	8649.01	15.000	174.806	8640.47	97.21 S	8.84 E	97.62	2.00
Drop to Vertical	10056.50	15.000	174.806	10000.00	460.00 S	41.82 E	461.90	0.00
Hold Angle	10754.17	0.000	0.000	10689.73	550.44 S	50.04 E	552.70	2.15
Total Depth	13064.44	0.000	0.000	13000.00	550.44 S	50.04 E	552.70	0.00

Plan 060905 Bottom Hole Location

Ref. RKB(3461`+20`KB):	13000.00ft
Ref. Structure:	12980.00ft
Ref. Mean Sea Level:	9519.00ft
Ref. Wellhead:	550.44 S, 50.04 E
Ref. NE Cor Sec 6:	750.44 S, 1550.04 E
Ref. Global Coordinates:	423469.16 N, 499384.94 E
Ref. Geographical Coordinates:	32° 09' 51.2410" N, 104° 20' 07.1556" W

Prepared by:	Date/Time:	Checked:	Approved:
Dennis Cook	9 June, 2005 - 12:41		

DrillQuest 3.03.06.011

Gruy Petroleum Management Co.
New Mexico
Eddy County
Sec. 06-T25S-R26E
Adrianne 6 Fedral #1 - Plan 060905

Revised: 9 June, 2005

Halliburton Sperry-Drilling Proposal Report

9 June, 2005

Data Source: Mr. Tom Strother
Surface Coordinates: 424019.60 N, 499334.90 E (32° 09' 56.6884" N, 104° 20' 07.7378" W)
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone

Surface Coordinates relative to Center of County: 121593.16 S, 665.10 W (Grid)
Surface Coordinates relative to NE Cor Sec 6: 200.00 S, 1500.00 E (Grid)
Kelly Bushing Elevation: 3481.00ft above Mean Sea Level
Kelly Bushing Elevation: 20.00ft above Structure

Proposal Ref: pro8566

HALLIBURTON
Sperry Drilling Services

Proposal Report for Sec. 06-T25S-R26E - Adrianne 6 Fedral #1 - Plan 060905
Data Source: Mr. Tom Strother
Revised: 9 June, 2005

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	Local Coordinates E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	Lease Calls FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Global Coordinates Grid X (ft)
0.00	0.000	0.000	0.00	0.00	0.00 N	0.00 E		200.00 FNL	1500.00 FWL	424019.60 N	499334.90 E
Kick-Off at 7899.01ft											
7899.01	0.000	0.000	7899.01	0.00	0.00 N	0.00 E	0.00	200.00 FNL	1500.00 FWL	424019.60 N	499334.90 E
7900.00	0.020	174.806	7900.00	0.00	0.00 N	0.00 E	2.00	200.00 FNL	1500.00 FWL	424019.60 N	499334.90 E
8000.00	2.020	174.806	7999.98	1.78	1.77 S	0.16 E	2.00	201.77 FNL	1500.16 FWL	424017.83 N	499335.06 E
8100.00	4.020	174.806	8099.84	7.05	7.02 S	0.64 E	2.00	207.02 FNL	1500.64 FWL	424012.58 N	499335.54 E
8200.00	6.020	174.806	8199.45	15.80	15.73 S	1.43 E	2.00	215.73 FNL	1501.43 FWL	424003.87 N	499336.33 E
8300.00	8.020	174.806	8298.69	28.02	27.90 S	2.54 E	2.00	227.90 FNL	1502.54 FWL	423991.70 N	499337.44 E
8400.00	10.020	174.806	8397.45	43.69	43.52 S	3.96 E	2.00	243.52 FNL	1503.96 FWL	423976.08 N	499338.86 E
8500.00	12.020	174.806	8495.60	62.81	62.55 S	5.69 E	2.00	262.55 FNL	1505.69 FWL	423957.05 N	499340.59 E
8600.00	14.020	174.806	8593.03	85.34	84.99 S	7.73 E	2.00	284.99 FNL	1507.73 FWL	423934.61 N	499342.63 E
End of Build at 8649.01ft											
8649.01	15.000	174.806	8640.47	97.62	97.21 S	8.84 E	2.00	297.21 FNL	1508.84 FWL	423922.39 N	499343.74 E
8700.00	15.000	174.806	8689.72	110.81	110.36 S	10.03 E	0.00	310.36 FNL	1510.03 FWL	423909.24 N	499344.93 E
8800.00	15.000	174.806	8786.32	136.69	136.13 S	12.37 E	0.00	336.13 FNL	1512.37 FWL	423883.47 N	499347.27 E
8900.00	15.000	174.806	8882.91	162.58	161.91 S	14.72 E	0.00	361.91 FNL	1514.72 FWL	423857.69 N	499349.62 E
9000.00	15.000	174.806	8979.50	188.46	187.68 S	17.06 E	0.00	387.68 FNL	1517.06 FWL	423831.92 N	499351.96 E
9100.00	15.000	174.806	9076.09	214.34	213.46 S	19.40 E	0.00	413.46 FNL	1519.40 FWL	423806.14 N	499354.30 E
9200.00	15.000	174.806	9172.69	240.22	239.24 S	21.75 E	0.00	439.24 FNL	1521.75 FWL	423780.36 N	499356.65 E
9300.00	15.000	174.806	9269.28	266.10	265.01 S	24.09 E	0.00	465.01 FNL	1524.09 FWL	423754.59 N	499358.99 E
9400.00	15.000	174.806	9365.87	291.99	290.79 S	26.43 E	0.00	490.79 FNL	1526.43 FWL	423728.81 N	499361.33 E
9500.00	15.000	174.806	9462.47	317.87	316.56 S	28.78 E	0.00	516.56 FNL	1528.78 FWL	423703.04 N	499363.68 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	Local Coordinates E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	Lease Calls FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Global Coordinates Grid X (ft)
9600.00	15.000	174.806	9559.06	343.75	342.34 S	31.12 E	0.00	542.34 FNL	1531.12 FWL	423677.26 N	499366.02 E
9700.00	15.000	174.806	9655.65	369.63	368.11 S	33.46 E	0.00	568.11 FNL	1533.46 FWL	423651.49 N	499368.36 E
9800.00	15.000	174.806	9752.24	395.51	393.89 S	35.81 E	0.00	593.89 FNL	1535.81 FWL	423625.71 N	499370.71 E
9900.00	15.000	174.806	9848.84	421.40	419.67 S	38.15 E	0.00	619.67 FNL	1538.15 FWL	423599.93 N	499373.05 E
10000.00	15.000	174.806	9945.43	447.28	445.44 S	40.49 E	0.00	645.44 FNL	1540.49 FWL	423574.16 N	499375.39 E
Drop to Vertical at 10056.50ft, Target - 10K 660 FNL, Current Target											
10056.50	15.000	174.806	10000.00	461.90	460.00 S	41.82 E	0.00	660.00 FNL	1541.82 FWL	423559.60 N	499376.72 E
10100.00	14.065	174.806	10042.11	472.82	470.87 S	42.80 E	2.15	670.87 FNL	1542.80 FWL	423548.73 N	499377.70 E
10200.00	11.915	174.806	10139.55	495.29	493.26 S	44.84 E	2.15	693.26 FNL	1544.84 FWL	423526.34 N	499379.74 E
10300.00	9.765	174.806	10237.76	514.10	511.99 S	46.54 E	2.15	711.99 FNL	1546.54 FWL	423507.61 N	499381.44 E
10400.00	7.615	174.806	10336.60	529.20	527.03 S	47.91 E	2.15	727.03 FNL	1547.91 FWL	423492.57 N	499382.81 E
10500.00	5.465	174.806	10435.95	540.59	538.37 S	48.94 E	2.15	738.37 FNL	1548.94 FWL	423481.23 N	499383.84 E
10600.00	3.315	174.806	10535.65	548.25	546.00 S	49.63 E	2.15	746.00 FNL	1549.63 FWL	423473.60 N	499384.53 E
10700.00	1.165	174.806	10635.56	552.15	549.89 S	49.99 E	2.15	749.89 FNL	1549.99 FWL	423469.71 N	499384.89 E
End of Drop at 10754.17ft											
10754.17	0.000	0.000	10689.73	552.70	550.44 S	50.04 E	2.15	750.44 FNL	1550.04 FWL	423469.16 N	499384.94 E
Total Depth at 13064.44ft											
13064.44	0.000	0.000	13000.00	552.70	550.44 S	50.04 E	0.00	750.44 FNL	1550.04 FWL	423469.16 N	499384.94 E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB(3461`+20`KB). Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 13064.44ft.,
The Bottom Hole Displacement is 552.70ft., in the Direction of 174.806° (Grid).

Proposal Report for Sec. 06-T25S-R26E - Adrianne 6 Fedral #1 - Plan 060905
Data Source: Mr. Tom Strother
Revised: 9 June, 2005

Comments

Measured Depth (ft)	Station Coordinates TVD (ft)	Northings (ft)	Eastings (ft)	Comment
7899.01	7899.01	0.00 N	0.00 E	Kick-Off at 7899.01ft
8649.01	8640.47	97.21 S	8.84 E	End of Build at 8649.01ft
10056.50	10000.00	460.00 S	41.82 E	Drop to Vertical at 10056.50ft
10754.17	10689.73	550.44 S	50.04 E	End of Drop at 10754.17ft
13064.44	13000.00	550.44 S	50.04 E	Total Depth at 13064.44ft

Targets associated with this wellpath

Target Name		Target Entry Coordinates TVD (ft)	Northings (ft)	Eastings (ft)	Target Shape	Target Type
10K 660 FNL		10000.00	460.00 S	41.82 E	Point	Current Target
	Mean Sea Level/Global Coordinates:	6519.00	423559.60 N	499376.72 E		
	Geographical Coordinates:		32° 09' 52.1360" N	104° 20' 07.2512" W		
12K pt		12000.00	550.00 S	50.00 E	Point	Current Target
	Mean Sea Level/Global Coordinates:	8519.00	423469.60 N	499384.90 E		
	Geographical Coordinates:		32° 09' 51.2453" N	104° 20' 07.1560" W		

North Reference Sheet for Sec. 06-T25S-R26E - Adrianne 6 Fedral #1

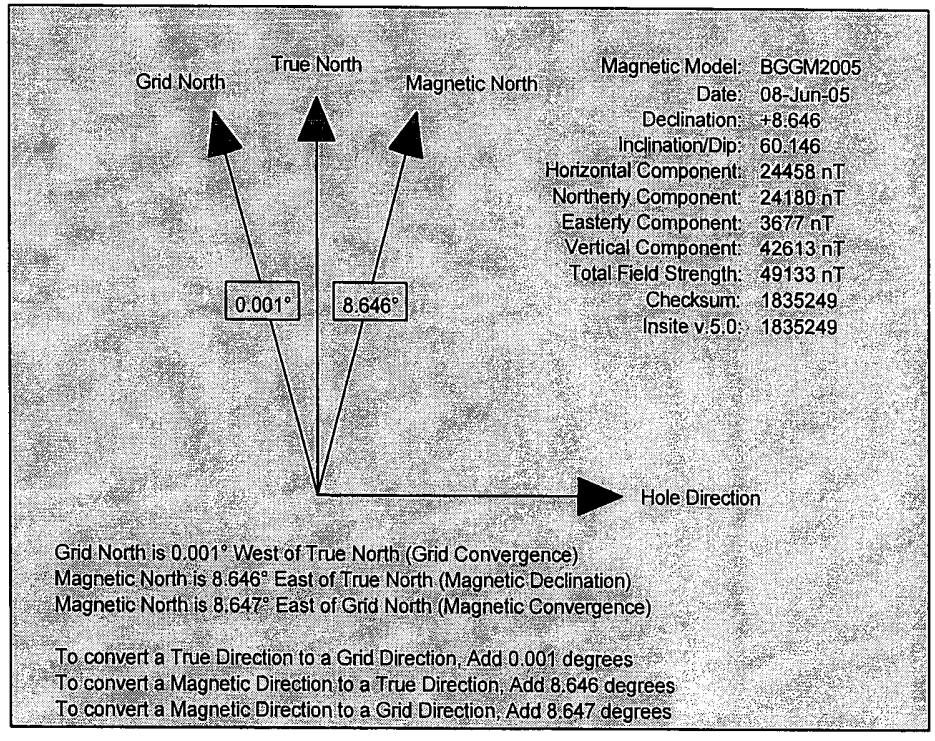
Coordinate System is NAD27 New Mexico State Planes, Eastern Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

Datum is North American Datum of 1927 (US48, AK, HI, and Canada)

Spheroid is Clarke - 1866
Equatorial Radius: 6378206.400m.
Polar Radius: 6356583.800m.
Inverse Flattening: 294.978698213901

Projection method is Transverse Mercator or Gauss Kruger Projection
Central Meridian is -104.333°
Longitude Origin: 0.000°
Latitude Origin: 31.000°
False Easting: 152400.00m
False Northing: 0.00m
Scale Reduction: 0.99990909

Grid Coordinates of Well: 424019.60 N, 499334.90 E
Geographical Coordinates of Well: 32° 09' 56.6884" N, 104° 20' 07.7378" W
Surface Elevation of Well: 3481.00ft
Grid Convergence at Surface is -0.001°
Magnetic Convergence at Surface is -8.647° (8 June, 2005)



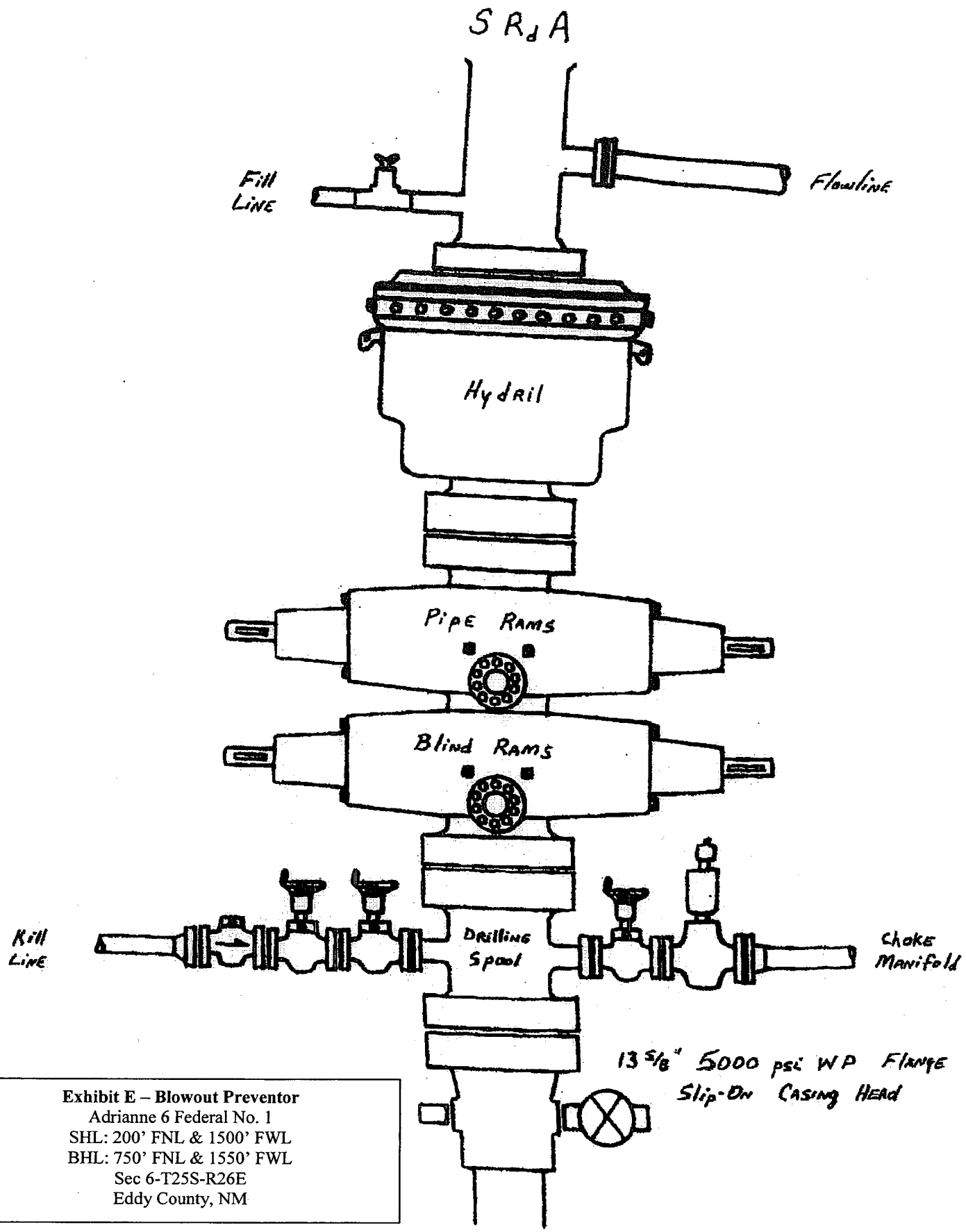


Exhibit E – Blowout Preventor
Adrianne 6 Federal No. 1
SHL: 200' FNL & 1500' FWL
BHL: 750' FNL & 1550' FWL
Sec 6-T25S-R26E
Eddy County, NM

DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE

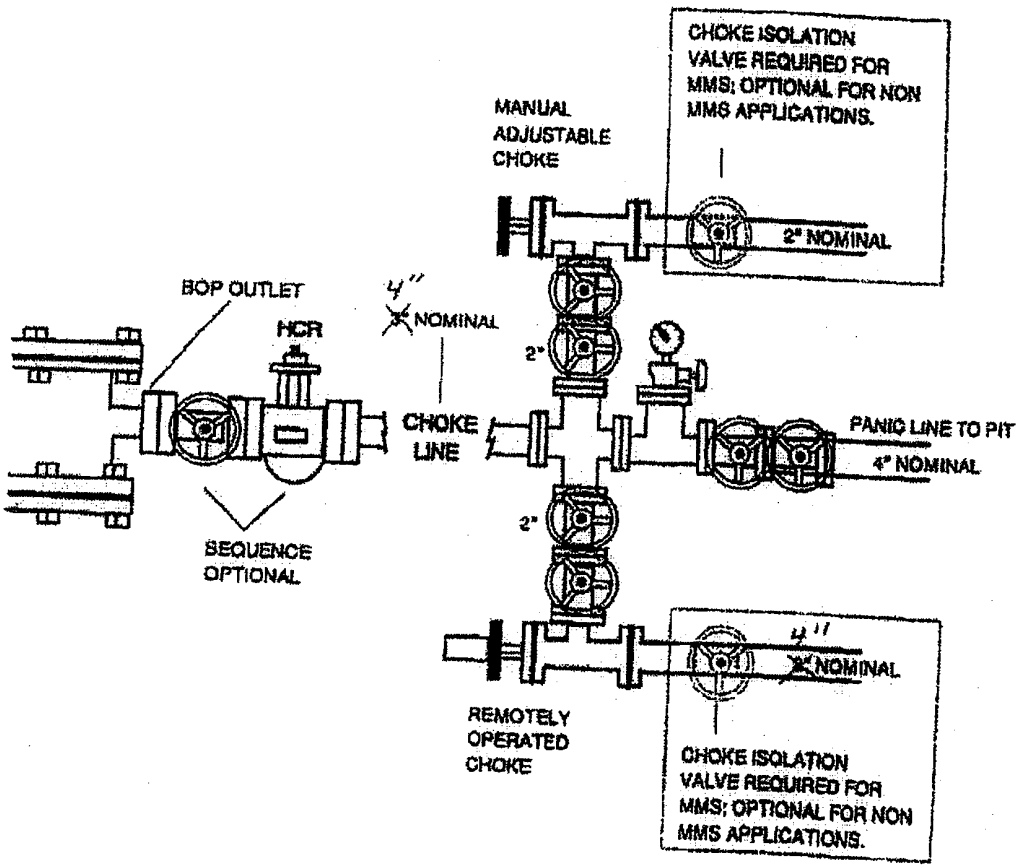


Exhibit E1 – Choke Manifold Diagram
Adrianne 6 Federal No. 1
SHL: 200' FNL & 1500' FWL
BHL: 750' FNL & 1550' FWL
Sec 6-T25S-R26E
Eddy County, NM

Conditions of Approval
Cave and Karst
For
Gruy Petroleum
1700 Adrianne 6 Fed #1
Surface Hole: 200 FNL & 1500 FWL – Bottom Hole: 750 FNL & 1550 FWL
Section 6, T. 25 S., R. 26 E.
Lease#: NM-28172

Cave / Karst Surface Mitigation
The following stipulations will be applied to minimize impacts during construction, drilling and production.

1. Any tank batteries will be bermed large enough to contain any spills that may occur and lined with a permanent 6 mil plastic liner.

2. A 70X100 foot cuttings pit will be utilized for this location. The cuttings pit will be lined with 4 oz. felt and two layers of 12 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and hauled off for proper disposal. The pit will be allowed to dry for 10 months and then reclaimed in accordance with the attached requirements.

3. A closed mud system or steel tanks will be utilized to drill the well. All fluids will be hauled off site to be disposed off.

4 All surface structures will be Less than 8 'high and painted Flat Juniper Green

Cave and Karst Resources: Subsurface Mitigation
The following stipulations will be applied to protect cave/karst and ground water concerns:

1. Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. ***Sixteen (16) ounces of Florescene dye will be added to the drilling fluid during the drilling of the first 1,550 feet of the well.*** Below those zones, the operator may use whatever drilling fluid is approved in the drilling plan.

2. **Kick off for directional drilling will occur below 1,650 feet.**

3. All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

4. A cave protection casing will be required. The cave-protection casing string would be set at the base of the reef and where present at set it in the Lamar Limestone. (See Attached Diagram as an example of the Cave Protection String)

5. **All casing strings will be cemented to the surface.**

6. **Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will**

be notified by the Operator. In the event that such an incident occurs contact Jim Goodbar at 505 234-5929 or 505 236-1016 after hours and Jim Amos at (505) 234-5909 or 706-2775. The BLM will assess the consequences of the situation and work with Operator on corrective actions to resolve the problem. If corrective actions fail, the well will be plugged.

Any corrective actions proposed to resolve problems related to bit drops or lost circulation will require BLM concurrence prior to implementation. A decision on how to proceed will be reached within 24 hours of notification.

7. Any blasting will be a phased and time delayed.

8. Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Monitoring Production Operations

1. Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Record Keeping

1. The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.
2. The BLM may review data held by companies on wells drilled in cave or karst areas, to gain information about impacts to caves and karst. This information will be used to categorize lost-circulation zones on the basis of depth, relative volume, and severity, and to evaluate and compare the relative success or failure of different remedies attempted to combat lost-circulation problems while drilling and cementing casing in these zones. This information also will be used to update information about the occurrence of cave and karst features. Information concerning cave resources gathered during drilling will be submitted and be retained by the BLM.

WELLBORE SCHEMATIC

"CAVE PROTECTION"

NO VOID **VOID**

1. Set conductor casing.

2. Set surface casing, cement and circulate.

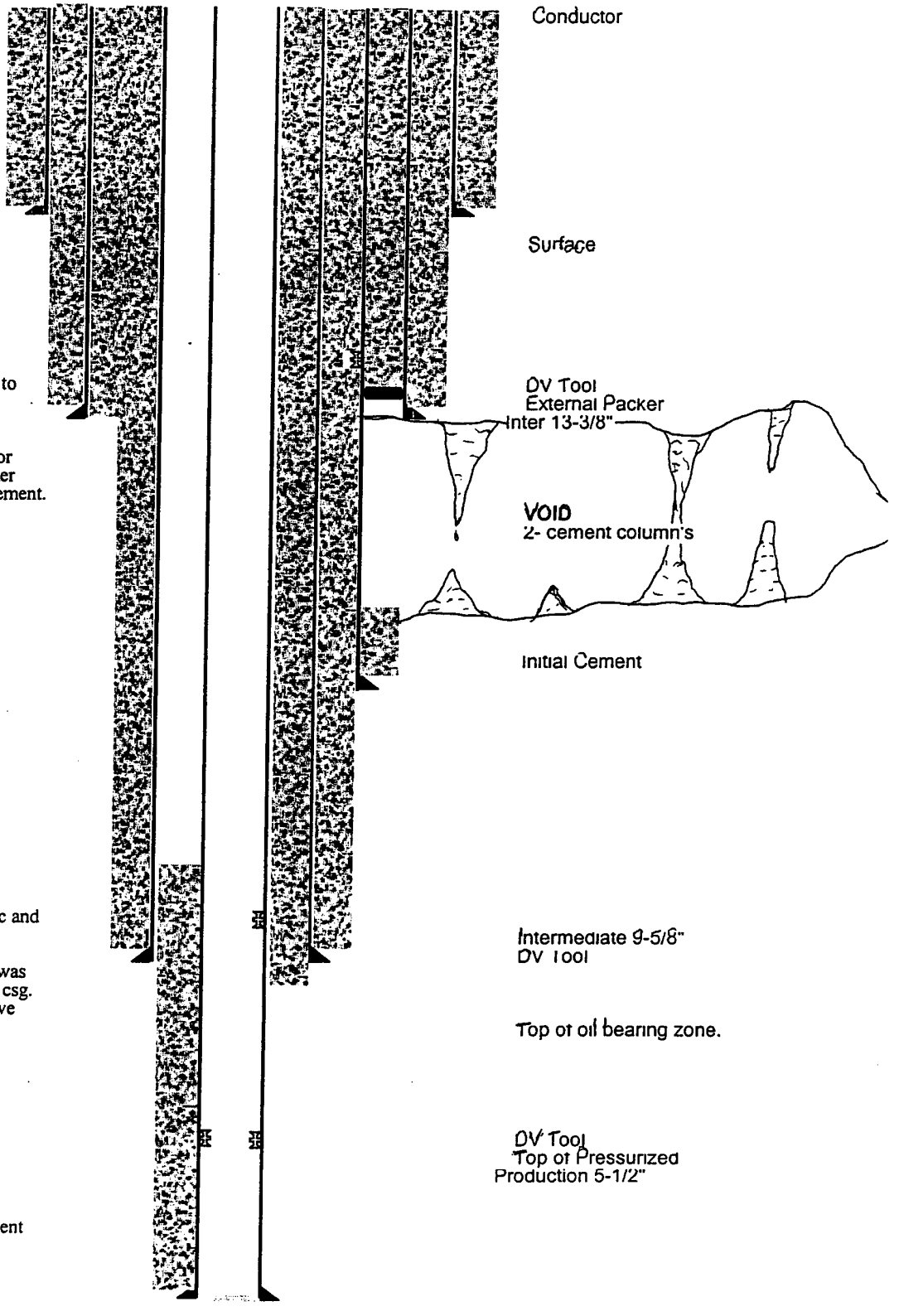
3. Drill inter hole. If no void, drill to depth and cement to surface.

4. If void encountered, ream hole for 13-3/8" casing. Place external packer above void. DV tool above pkr. Cement. Open DV tool, circ cement.

5. Drill inter hole to depth, case, circ and cement

6. Drill prod hole to depth. If void was encountered during drilling 1st Inter csg. Cmt, circulate or tie-back 200 ft above DV tool on 1st Inter csg.

7. If no void, prod csg to depth, cement and tie-back 200 ft into Inter csg.



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**GRUY PETROLEUM MANAGEMENT CO.**
Well Name & No.	**1 – ADRIANNE 6 FEDERAL** Per B Hunt & SN dated 8/4/05
Location:	**200' FNL & ~~1560~~ 1208' FWL – SEC 6 – T25S – R26E – EDDY COUNTY (SHL)**
	750' FNL & 1550' FWL – SEC 6 – T25S – R26E – EDDY COUNTY (BHL)
Lease:	**NM-28172**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **13-3/8** inch **9-5/8** inch **5-1/2** inch

C. BOP tests

2. A Hydrogen Sulfide (H2S) Drilling Plan will be in effect although no H2S has been reported in Sec 6, T25S, R26E. A copy of the plan will be posted at the drilling site.

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The **13-3/8** inch surface casing shall be set at **200 feet**, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch salt protection casing is **circulate cement to the surface.**

Circulate to surface

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall ~~extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.~~**

JL

(ORIG. SGD.) LES BABYAK

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **13-3/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9-5/8** inch casing shall be **5000** psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the **13-3/8 inch casing and BOP system** to the reduced pressure of **1000** psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the **Wolfcamp** Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.