

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

5. LEASE DESIGNATION AND SERIAL NO.
NM 15295

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

RECEIVED

FEB 27 2004

CD-ARTESIA

7. UNIT AGREEMENT NAME

C K Federal 4

9. API WELL NO.

30-015- 33 279

10. FIELD AND POOL, OR WILDCAT

White City; Penn (Gas)

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

OR AREA

Sec. 17 T24S R26E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

1b. TYPE OF WELL

OIL ☐

GAS ☒

SINGLE ☐

MULTIPLE ☐

WELL

WELL

OTHER

ZONE

ZONE

2. NAME OF OPERATOR

Gruy Petroleum Management Co.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 140907 Irving TX 75014 972-401-3111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

SUBJECT TO LIKE
APPROVAL BY STATE

SHL 2540' FNL & 180' FWL BHL 1000' FSL & 1300' FWL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

17 miles South of Carlsbad

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, T.O.

(Also to nearest drlg. unit line, if any)

180'

16. NO. OF ACRES IN LEASE

1833.3

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2429'

19. PROPOSED DEPTH

13000'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3721' GR

CARLSBAD CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*
12-15-03

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 #	425' 400' 9/25/03	490 sx circulate
12 1/4"	J-55 9 5/8"	40 #	3200' 1900'	1200 sx circulate
7 7/8"	N-80/P-110 5 1/2"	17 #	13000'	1620 sx TOC 2700'

The proposed well will be drilled to a depth of 13000' and completed as a White City Penn; producer.

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 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. Per onshore order 2 the 13 3/8" 54.5 # J-55 casing should be tested at 70% of its maximum internal yield of 2730 # or 1911 #. During the running of the surface pipe we do not anticipate any pressures greater than 500 #, and are requesting a variance to test the 13 3/8" casing to 500 #

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 09-10-03

(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 land or 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

25 FEB 2004

*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

APPROVAL FOR 1 YEAR

Additional Operator Remarks

Gruy Petroleum Management Co.
C K Federal 4
Unit Letter E Section 8
T24S - R26E Eddy County, NM

- 1 Master Drilling and Surface Use Plan on file at the BLM Roswell office which includes:
 - A. Lease Responsibility Statement and bonding information.
 - B. Anticipated starting date and duration of operations.
- 2 Included in this attachment are:
 - A. Well Location and acreage dedication plat.
 - B. Supplemental Surface Use Plan. (Exhibits A, B, and C)
 - C. Supplemental Drilling Data. (Exhibits D and E)

Surface Use Plan

Gruy Petroleum Management Co.
C K Federal 4
Unit Letter E Section 8
T24S - 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. Go South of Carlsbad on Highway 62-180 for approximately 14 miles to mile marker 22. Turn right onto access rd for about 1 mile then left into location.
- 2 PLANNED ACCESS ROADS: No access road is planned. Existing access road is within the well pad.
- 4 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"
 - A. Water wells - None known
 - 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"

Surface Use Plan

Gruy Petroleum Management Co.
C K Federal 4
Unit Letter E Section 8
T24S - R26E Eddy County, NM

4 OTHER INFORMATION:

- A. Topography consists of a sloping plane with loose tan sands, and a few eroded areas. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by The United States Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.
- D. There are no known dwellings within 1 1/2 miles of this location.

5 OPERATORS REPRESENTATIVE:

Gruy Petroleum Management Company
P.O. Box 14097
Irving, TX 75014
Office Phone: (972) 443-6489
Zeno Farris

- 6 CERTIFICATION: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Gruy Petroleum Management Company contractors/subcontractors in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME:

Zeno Farris

DATE:

9/10/03

TITLE:

Manager, Operations Administration

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		White City; Penn (gas)
Property Code	Property Name	Well Number
	CK Federal	4
OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT CO.	3721'

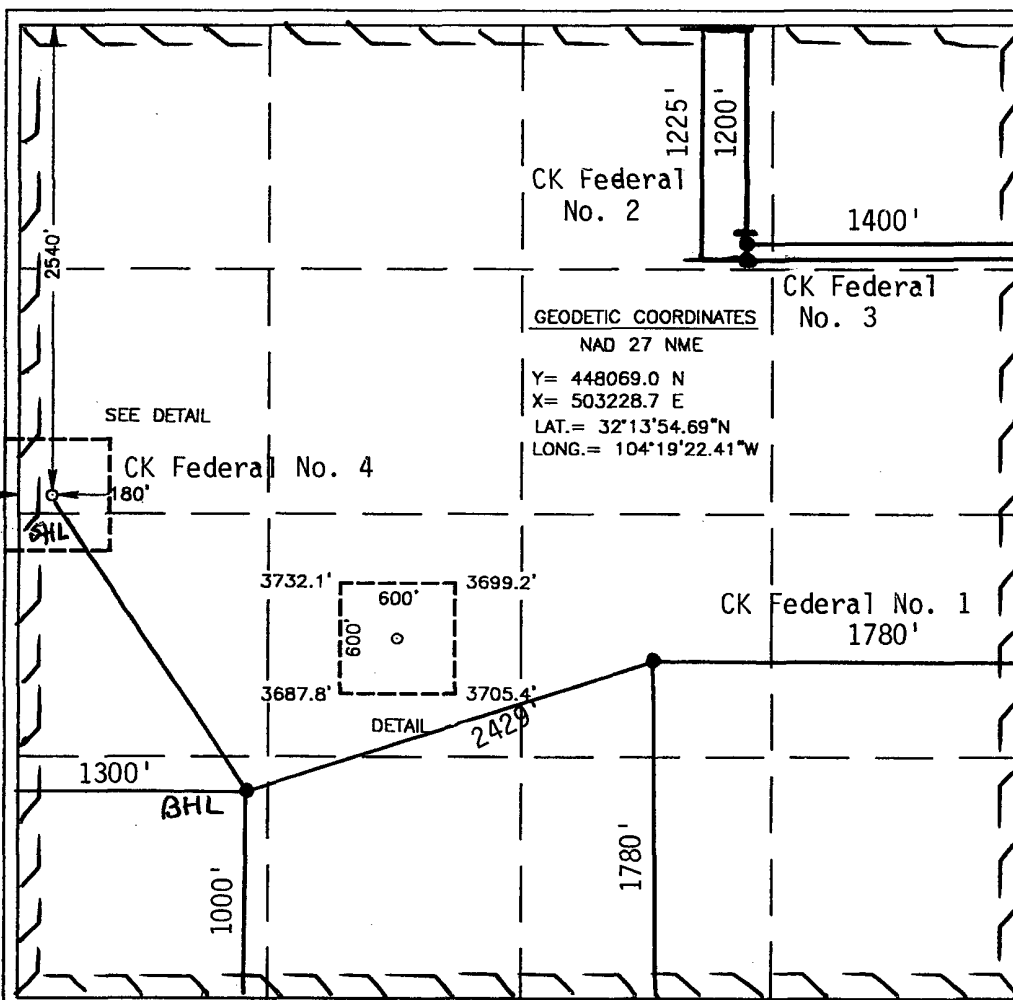
Surface Location

UL or 1st No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	8	24-S	26-E		2540'	NORTH	180'	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
M	8	24-S	26-E		1000'	SOUTH	1300'	WEST	EDDY
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
640	Y								

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



OPERATOR CERTIFICATION

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

Zeno Farris

Signature

Zeno Farris

Printed Name

Manager Operations Admin

Title

Sept. 16, 2003

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

August 29, 2003

Date Surveyed

AWB

Signature & Seal
Professional Surveyor

Gary Edson
NEW MEXICO
03.11.0937

Certificate No. GARY EDSON

12841

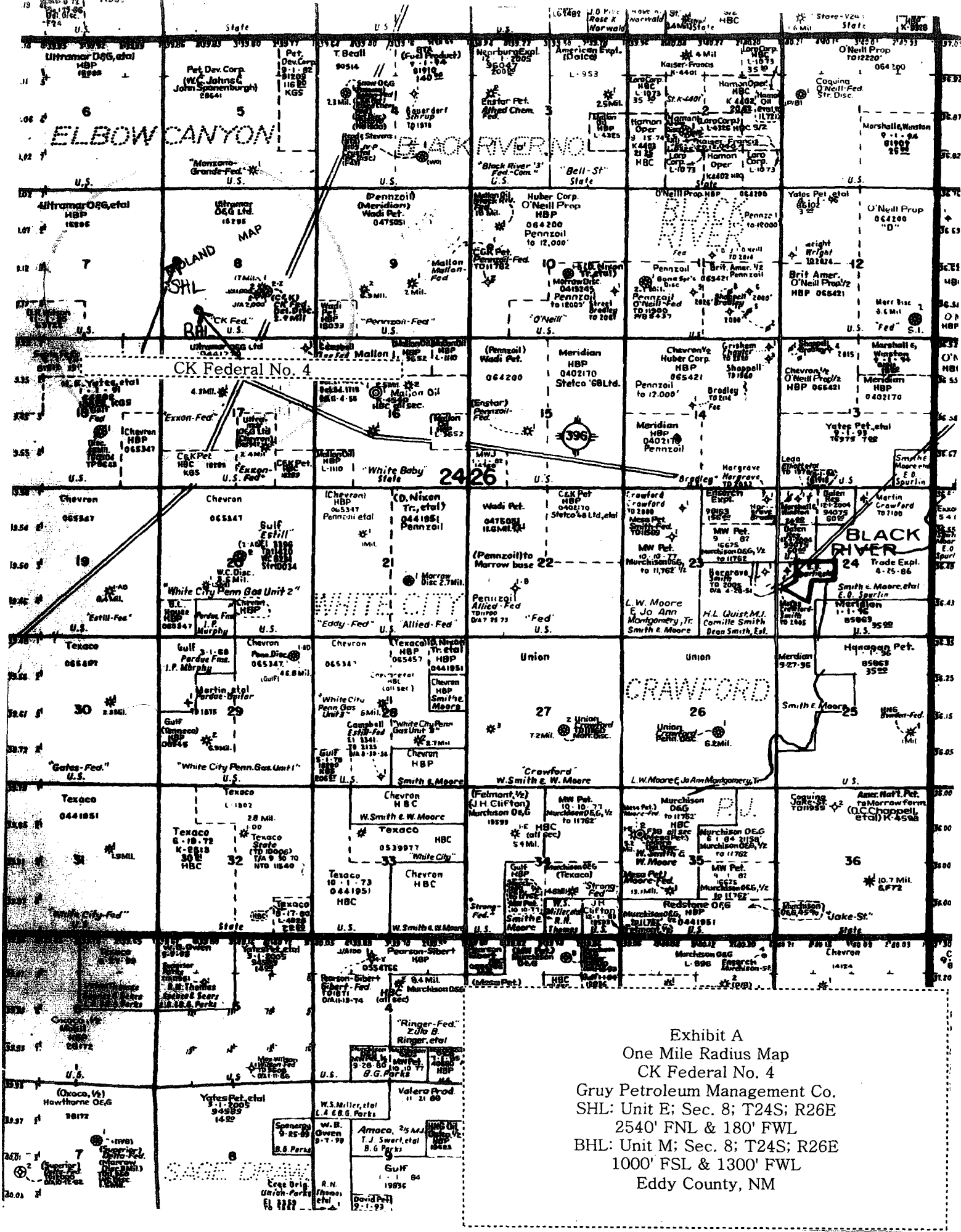
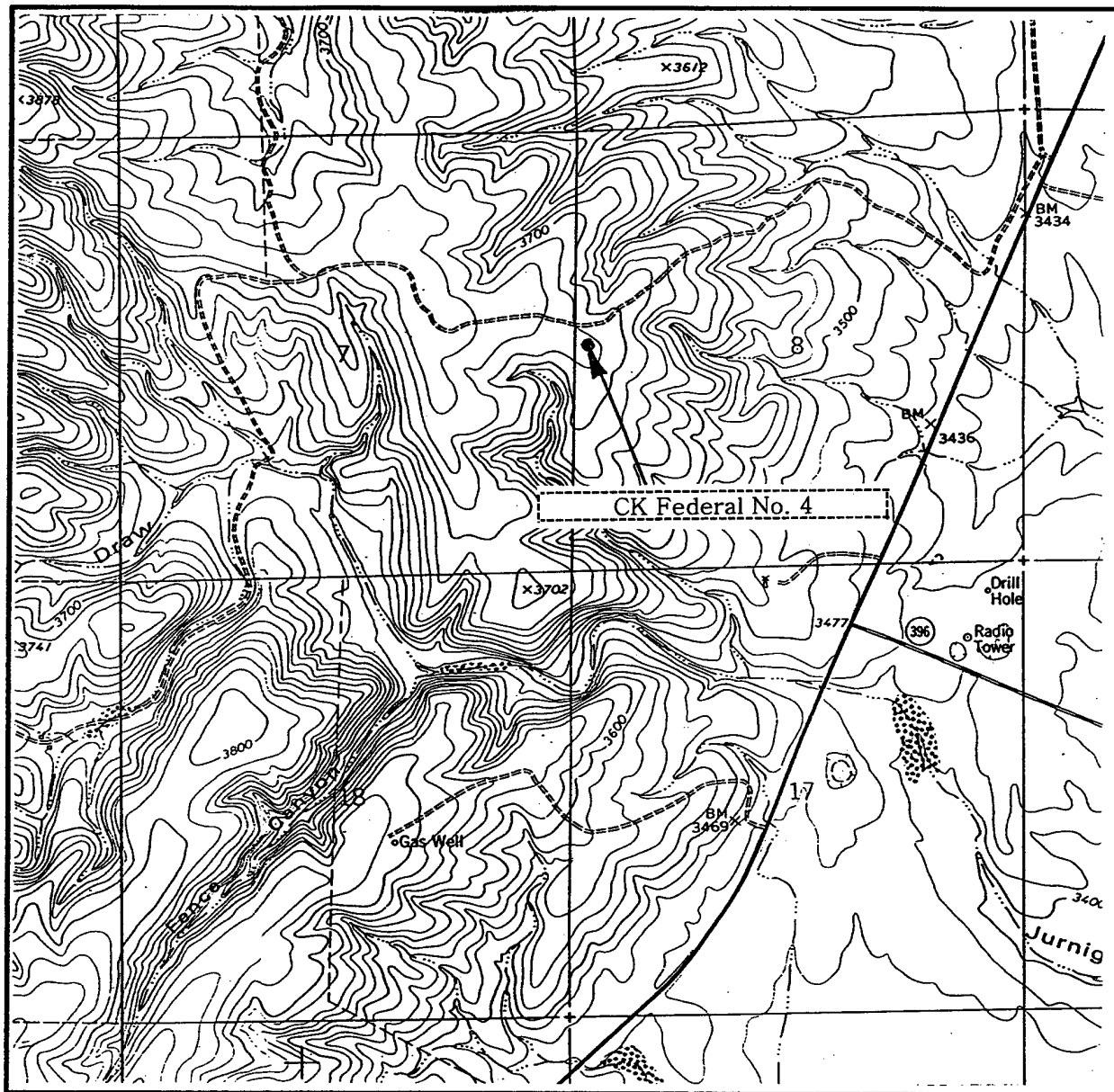


Exhibit A
One Mile Radius Map
CK Federal No. 4
Gruy Petroleum Management Co.
SHL: Unit E; Sec. 8; T24S; R26E
2540' FNL & 180' FWL
BHL: Unit M; Sec. 8; T24S; R26E
1000' FSL & 1300' FWL
Eddy County, NM



SCALE: 1" = 2000'

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

SEC. 8 TWP. 24-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2540' FNL & 180' FWL

ELEVATION 3721'

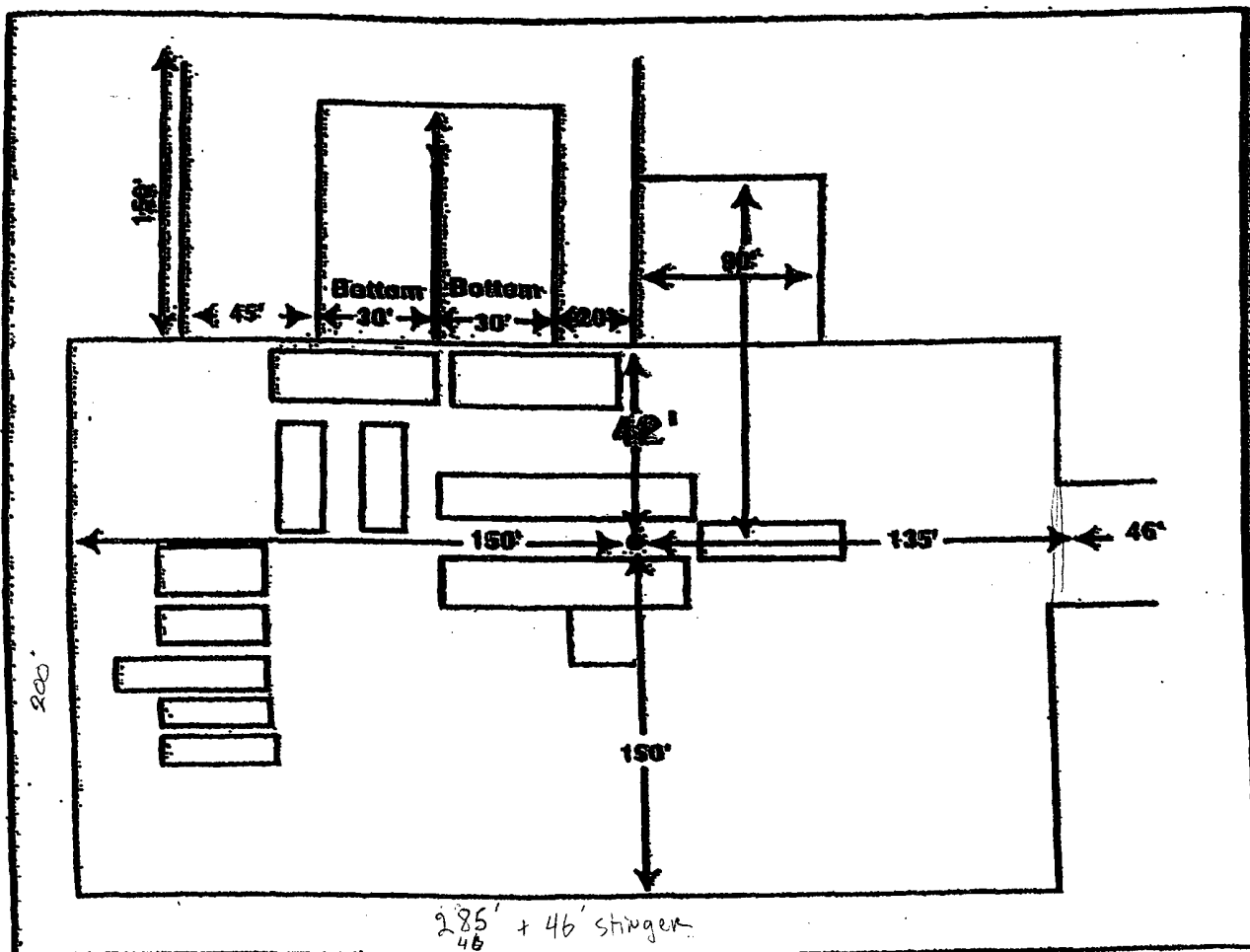
OPERATOR GRUY PETROLEUM MANAGEMENT CO.

LEASE CK

Exhibit "C"

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

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117



Rig 75

Exhibit D

Rig Layout Plan
CK Federal No. 4

Gruy Petroleum Management Co.
SHL: Unit E; Sec. 8; T24S; R26E
2540' FNL & 180' FWL
BHL: Unit M; Sec. 8; T24S; R26E
1000' FSL & 1300' FWL
Eddy County, NM

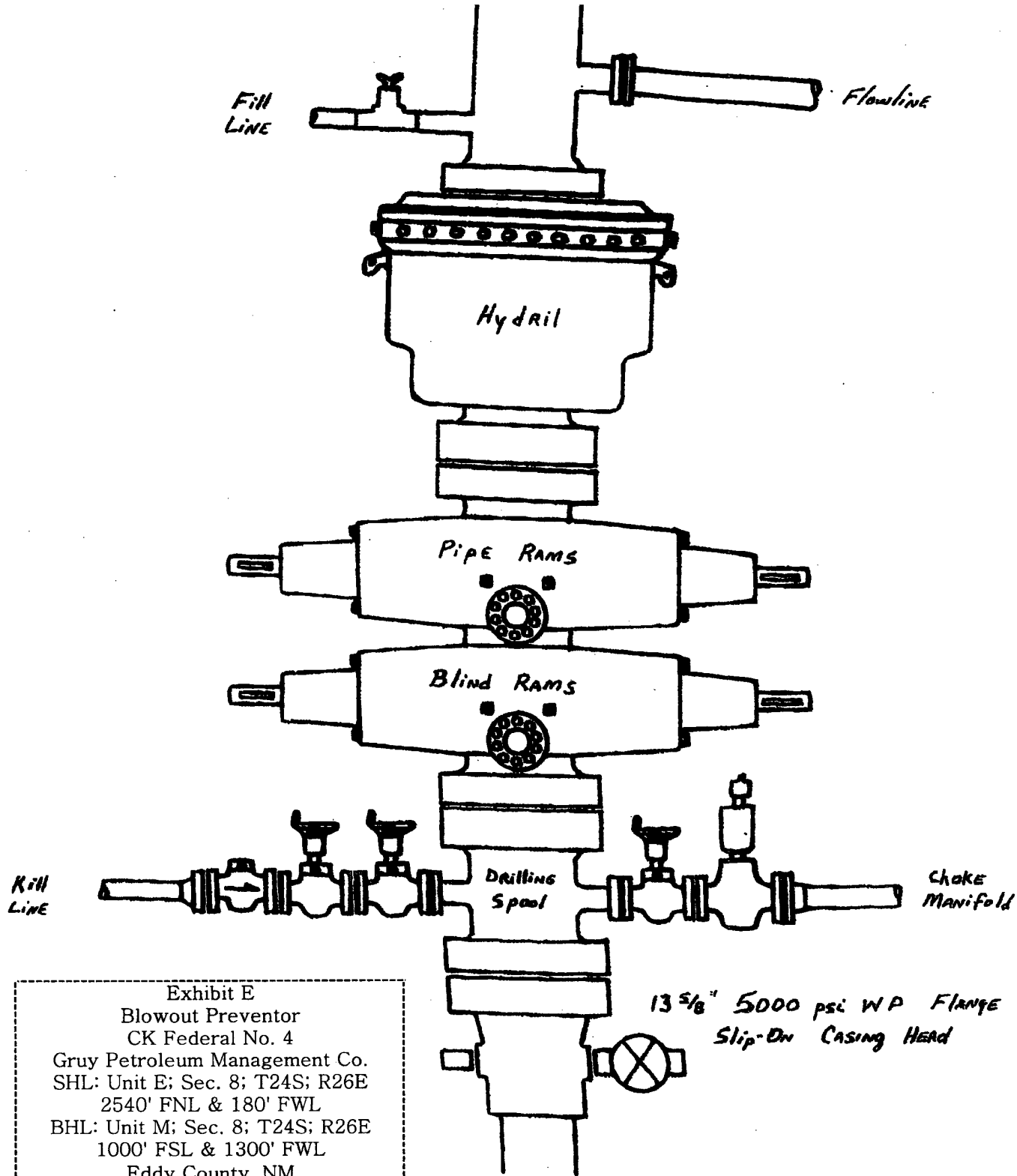


Exhibit E
 Blowout Preventor
 CK Federal No. 4
 Gruy Petroleum Management Co.
 SHL: Unit E; Sec. 8; T24S; R26E
 2540' FNL & 180' FWL
 BHL: Unit M; Sec. 8; T24S; R26E
 1000' FSL & 1300' FWL
 Eddy County, NM

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

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

2. Name of Operator
Gruy Petroleum Management Co.

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

3b. Phone No. (include area code)
972.401.3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL 2540' FNL & 180' FWL Sec 8E 24S-26E
BHL 1300' FSL & 1000' FWL Sec 8M 24S 26E

5. Lease Serial No.
NM-15295

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
C K Federal No. 4

9. API Well No.

10. Field and Pool, or Exploratory Area
White City; Undesignated

11. County or Parish, State
Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Well Pad</u>
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Modification</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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.)

Attached is a new Well Pad Diagram for Patterson Rig No. 80 for the C K Federal No 4 well. The Well Pad Diagram sent with the original APD is not of sufficient size for the Rig 80.

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

Zeno Farris

Signature

Zeno Farris

Title

Manager, Operations Administration

Date

October 13, 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Joe G. Lara

ACTING

Title FIELD MANAGER

Date

25 FEB 2004

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

CFO

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)

Application to Drill

Gruy Petroleum Management Co.
C K Federal 4
Unit Letter E Section 8
T24S - 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 Morrow / Atoka pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

HALLIBURTON

Gruy Petroleum Management Co.

DrillQuest™

Sperry-Sun

New Mexico
Eddy County
Sec. 08-T24S-R26E
CK Federal # 4
Plan 03/03/04

Scale: 1 inch = 500ft

Eastings

0

500

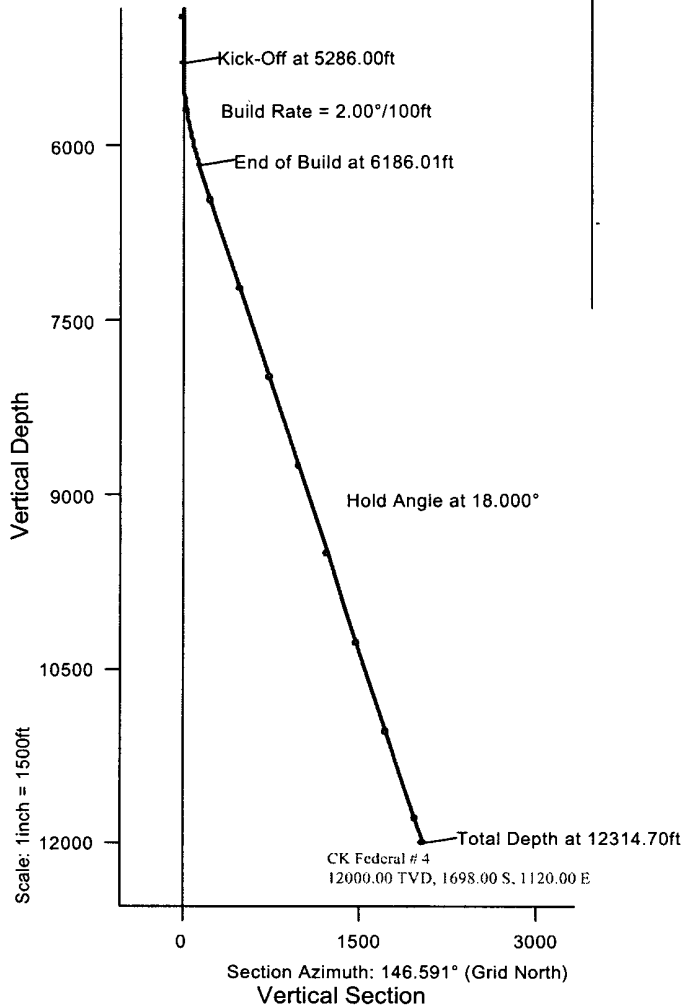
1000

Kick-Off at 5286.00ft
Build Rate = 2.00°/100ft
End of Build at 6186.01ft



Hold Angle at 18.000°

Total Depth at 12314.70ft
CK Federal # 4
12000.00 TVD
1698.00 S, 1120.00 E



Northings

Scale: 1 inch = 500ft

Prepared by:
Terry Herndon

Date/Time:
3 March, 2004 - 9:11

Checked:

Approved:



**Gruy Petroleum Management Co.
New Mexico
Eddy County
Sec. 08-T24S-R26E
CK Federal # 4 - Plan 03/03/04**

Sperry-Sun

Proposal Report

3 March, 2004

Data Source: Information from Wade Wiley

Proposal Ref: pro7398

Prepared by: Terry Hemdon
Checked by:
Approved by:

HALLIBURTON

**Proposal Report for Sec. 08-T24S-R26E - CK Federal # 4 - Plan
03/03/04****Data Source: Information from Wade Wiley**

Measured Depth (ft)	Incl. (Deg)	Grid Azim. (Deg)	Station Coordinates			Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
TVD (ft)	Northings (ft)	Easting (ft)						
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00		
5286.00	0.000	0.000	5286.00	0.00 N	0.00 E	0.00	0.00	Kick-Off at 5286.00ft
5300.00	0.280	146.591	5300.00	0.03 S	0.02 E	0.03	2.00	
5400.00	2.280	146.591	5399.97	1.89 S	1.25 E	2.27	2.00	
5500.00	4.280	146.591	5499.80	6.67 S	4.40 E	7.99	2.00	
5600.00	6.280	146.591	5599.37	14.35 S	9.47 E	17.19	2.00	
5700.00	8.280	146.591	5698.56	24.93 S	16.44 E	29.86	2.00	
5736.01	9.000	146.591	5734.16	29.44 S	19.42 E	35.27	2.00	Build Rate = 2.00°/100ft
5800.00	10.280	146.591	5797.25	38.39 S	25.32 E	45.99	2.00	
5900.00	12.280	146.591	5895.31	54.72 S	36.09 E	65.55	2.00	
6000.00	14.280	146.591	5992.63	73.89 S	48.74 E	88.52	2.00	
6100.00	16.280	146.591	6089.09	95.89 S	63.25 E	114.87	2.00	
6186.01	18.000	146.591	6171.28	117.05 S	77.20 E	140.22	2.00	End of Build at 6186.01ft
6200.00	18.000	146.591	6184.58	120.66 S	79.58 E	144.54	0.00	
6300.00	18.000	146.591	6279.69	146.45 S	96.60 E	175.44	0.00	
6400.00	18.000	146.591	6374.79	172.25 S	113.61 E	206.34	0.00	
6500.00	18.000	146.591	6469.90	198.04 S	130.63 E	237.25	0.00	
6600.00	18.000	146.591	6565.01	223.84 S	147.64 E	268.15	0.00	
6700.00	18.000	146.591	6660.11	249.64 S	164.66 E	299.05	0.00	
6800.00	18.000	146.591	6755.22	275.43 S	181.67 E	329.95	0.00	
6900.00	18.000	146.591	6850.32	301.23 S	198.69 E	360.85	0.00	
7000.00	18.000	146.591	6945.43	327.02 S	215.70 E	391.76	0.00	
7100.00	18.000	146.591	7040.53	352.82 S	232.72 E	422.66	0.00	
7200.00	18.000	146.591	7135.64	378.62 S	249.73 E	453.56	0.00	
7300.00	18.000	146.591	7230.74	404.41 S	266.75 E	484.46	0.00	
7400.00	18.000	146.591	7325.85	430.21 S	283.76 E	515.36	0.00	
7500.00	18.000	146.591	7420.95	456.00 S	300.78 E	546.27	0.00	
7600.00	18.000	146.591	7516.06	481.80 S	317.79 E	577.17	0.00	
7700.00	18.000	146.591	7611.17	507.59 S	334.81 E	608.07	0.00	
7800.00	18.000	146.591	7706.27	533.39 S	351.82 E	638.97	0.00	
7900.00	18.000	146.591	7801.38	559.19 S	368.84 E	669.87	0.00	
8000.00	18.000	146.591	7896.48	584.98 S	385.85 E	700.78	0.00	
8100.00	18.000	146.591	7991.59	610.78 S	402.87 E	731.68	0.00	
8200.00	18.000	146.591	8086.69	636.57 S	419.88 E	762.58	0.00	
8300.00	18.000	146.591	8181.80	662.37 S	436.90 E	793.48	0.00	
8400.00	18.000	146.591	8276.90	688.17 S	453.91 E	824.39	0.00	
8500.00	18.000	146.591	8372.01	713.96 S	470.93 E	855.29	0.00	
8600.00	18.000	146.591	8467.12	739.76 S	487.94 E	886.19	0.00	
8700.00	18.000	146.591	8562.22	765.55 S	504.96 E	917.09	0.00	
8800.00	18.000	146.591	8657.33	791.35 S	521.97 E	947.99	0.00	
8900.00	18.000	146.591	8752.43	817.15 S	538.99 E	978.90	0.00	
9000.00	18.000	146.591	8847.54	842.94 S	556.00 E	1009.80	0.00	
9100.00	18.000	146.591	8942.64	868.74 S	573.02 E	1040.70	0.00	
9200.00	18.000	146.591	9037.75	894.53 S	590.03 E	1071.60	0.00	
9250.36	18.000	146.591	9085.64	907.52 S	598.60 E	1087.16	0.00	Hold Angle at 18.000°

**Proposal Report for Sec. 08-T24S-R26E - CK Federal # 4 - Plan
03/03/04****Data Source: Information from Wade Wiley**

Measured Depth (ft)	Incl. (Deg)	Grid Azim. (Deg)	Station Coordinates			Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
			TVD (ft)	Northings (ft)	Eastings (ft)			
9300.00	18.000	146.591	9132.85	920.33 S	607.05 E	1102.50	0.00	
9400.00	18.000	146.591	9227.96	946.13 S	624.06 E	1133.41	0.00	
9500.00	18.000	146.591	9323.07	971.92 S	641.08 E	1164.31	0.00	
9600.00	18.000	146.591	9418.17	997.72 S	658.09 E	1195.21	0.00	
9700.00	18.000	146.591	9513.28	1023.51 S	675.11 E	1226.11	0.00	
9800.00	18.000	146.591	9608.38	1049.31 S	692.12 E	1257.01	0.00	
9900.00	18.000	146.591	9703.49	1075.11 S	709.14 E	1287.92	0.00	
10000.00	18.000	146.591	9798.59	1100.90 S	726.15 E	1318.82	0.00	
10100.00	18.000	146.591	9893.70	1126.70 S	743.17 E	1349.72	0.00	
10200.00	18.000	146.591	9988.80	1152.49 S	760.18 E	1380.62	0.00	
10300.00	18.000	146.591	10083.91	1178.29 S	777.20 E	1411.53	0.00	
10400.00	18.000	146.591	10179.02	1204.09 S	794.21 E	1442.43	0.00	
10500.00	18.000	146.591	10274.12	1229.88 S	811.23 E	1473.33	0.00	
10600.00	18.000	146.591	10369.23	1255.68 S	828.24 E	1504.23	0.00	
10700.00	18.000	146.591	10464.33	1281.47 S	845.26 E	1535.13	0.00	
10800.00	18.000	146.591	10559.44	1307.27 S	862.27 E	1566.04	0.00	
10900.00	18.000	146.591	10654.54	1333.06 S	879.29 E	1596.94	0.00	
11000.00	18.000	146.591	10749.65	1358.86 S	896.30 E	1627.84	0.00	
11100.00	18.000	146.591	10844.75	1384.66 S	913.32 E	1658.74	0.00	
11200.00	18.000	146.591	10939.86	1410.45 S	930.33 E	1689.64	0.00	
11300.00	18.000	146.591	11034.96	1436.25 S	947.35 E	1720.55	0.00	
11400.00	18.000	146.591	11130.07	1462.04 S	964.36 E	1751.45	0.00	
11500.00	18.000	146.591	11225.18	1487.84 S	981.38 E	1782.35	0.00	
11600.00	18.000	146.591	11320.28	1513.64 S	998.39 E	1813.25	0.00	
11700.00	18.000	146.591	11415.39	1539.43 S	1015.41 E	1844.15	0.00	
11800.00	18.000	146.591	11510.49	1565.23 S	1032.42 E	1875.06	0.00	
11900.00	18.000	146.591	11605.60	1591.02 S	1049.44 E	1905.96	0.00	
12000.00	18.000	146.591	11700.70	1616.82 S	1066.45 E	1936.86	0.00	
12100.00	18.000	146.591	11795.81	1642.62 S	1083.47 E	1967.76	0.00	
12200.00	18.000	146.591	11890.91	1668.41 S	1100.48 E	1998.67	0.00	
12300.00	18.000	146.591	11986.02	1694.21 S	1117.50 E	2029.57	0.00	
12314.70	18.000	146.591	12000.00	1698.00 S	1120.00 E	2034.11	0.00	Total Depth at 12314.70ft Target - CK Federal # 4, Current Target

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 146.591° (Grid).

Coordinate System is NAD27 New Mexico State Planes, Eastern Zone.
Grid Convergence at Surface is -0.009°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 12314.70ft.,
The Bottom Hole Displacement is 2034.11ft., in the Direction of 146.591° (Grid).

**Proposal Report for Sec. 08-T24S-R26E - CK Federal # 4 - Plan
03/03/04****Data Source: Information from Wade Wiley**

Comments

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
5286.00	5286.00	0.00 N	0.00 E	Kick-Off at 5286.00ft
5736.01	5734.16	29.44 S	19.42 E	Build Rate = 2.00°/100ft
6186.01	6171.28	117.05 S	77.20 E	End of Build at 6186.01ft
9250.36	9085.64	907.52 S	598.60 E	Hold Angle at 18.000°
12314.70	12000.00	1698.00 S	1120.00 E	Total Depth at 12314.70ft

Targets associated with this wellpath

Target Name	Target Entry Coordinates			Target Shape	Target Type
	TVD (ft)	Northings (ft)	Eastings (ft)		
CK Federal # 4	12000.00	1698.00 S	1120.00 E	Point	Current Target