

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.
SUBJECT TO LIKE
APPROVAL BY STATE

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.)
Undes. Carlsbad; Morrow, South

SHL 433' FSL & 1260' FEL BHL 1700' FSL & 660' FEL

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) 433'

16. NO. OF ACRES IN LEASE
1833.3

17. NO. OF ACRES ASSIGNED
TO THIS WELL
319.49

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.
NA

19. PROPOSED DEPTH
13000'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3739 GR CARLSBAD CONTROLLED WATER BASIN

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

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	H-40 13 3/8"	48 #	425' 400' 9/25/03	490 sx circulate
12 1/4" WITNESS	J-55 9 5/8"	36 # WITNESS	3200' 1900'	1200 sx circulate
7 7/8"	N-80/S-95 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" 48 # H-40 casing should be tested at 70% of its maximum internal yield of 1730 # or 1211 #. 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 Joe G. Lara 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 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 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 6 Federal 1
Unit Letter P Section 6
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 6 Federal 1
Unit Letter P Section 6
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 1/2 miles then right 2065' to location.

- 2 PLANNED ACCESS ROADS: 2065' of access road will be constructed..

- 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 6 Federal 1
Unit Letter P Section 6
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

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, 1984
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
		White City; Penn (undesignated)
Property Code	Property Name	Well Number
	CK 6 Federal	1
OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT CO.	3739'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	6	24-S	26-E		433'	SOUTH	1260'	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
I	6	24-S	26-E		1700'	SOUTH	660'	EAST	Eddy

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
319.49	N		

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

LOT 4	LOT 3	LOT 2	LOT 1
LOT 5			
LOT			
LOT 7			

GEODETIC COORDINATES
NAD 27 NME
Y= 451009.7 N
X= 501784.6 E
LAT.= 32°14'23.79"N
LONG.= 104°19'39.22"W

CK 6 Federal No. 1

660'

1700'

3726.9'

3721.1'

600'

3716.2'

3710.9'

1260'

SHL

SHL

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.

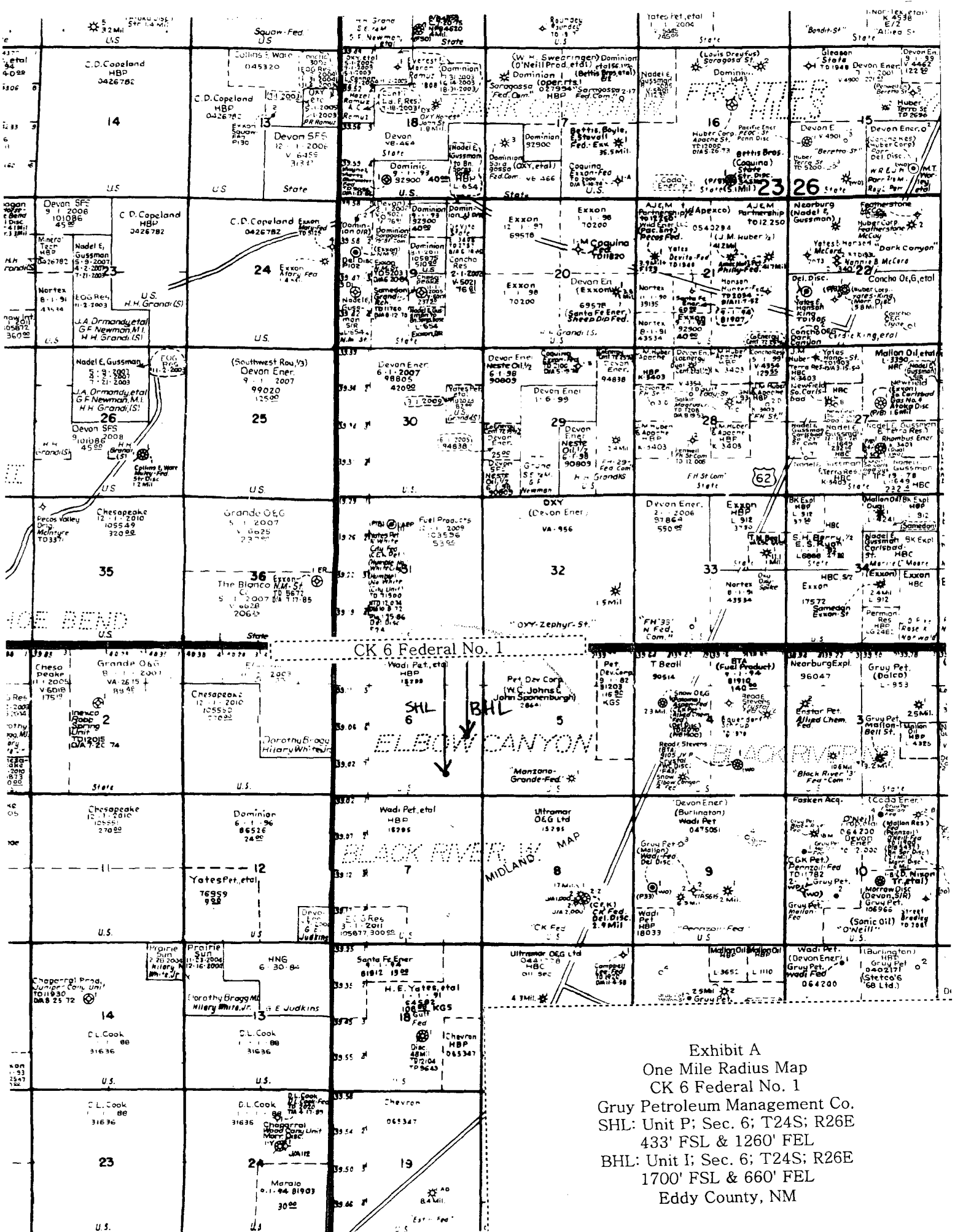
September 02, 2003

Date Surveyed

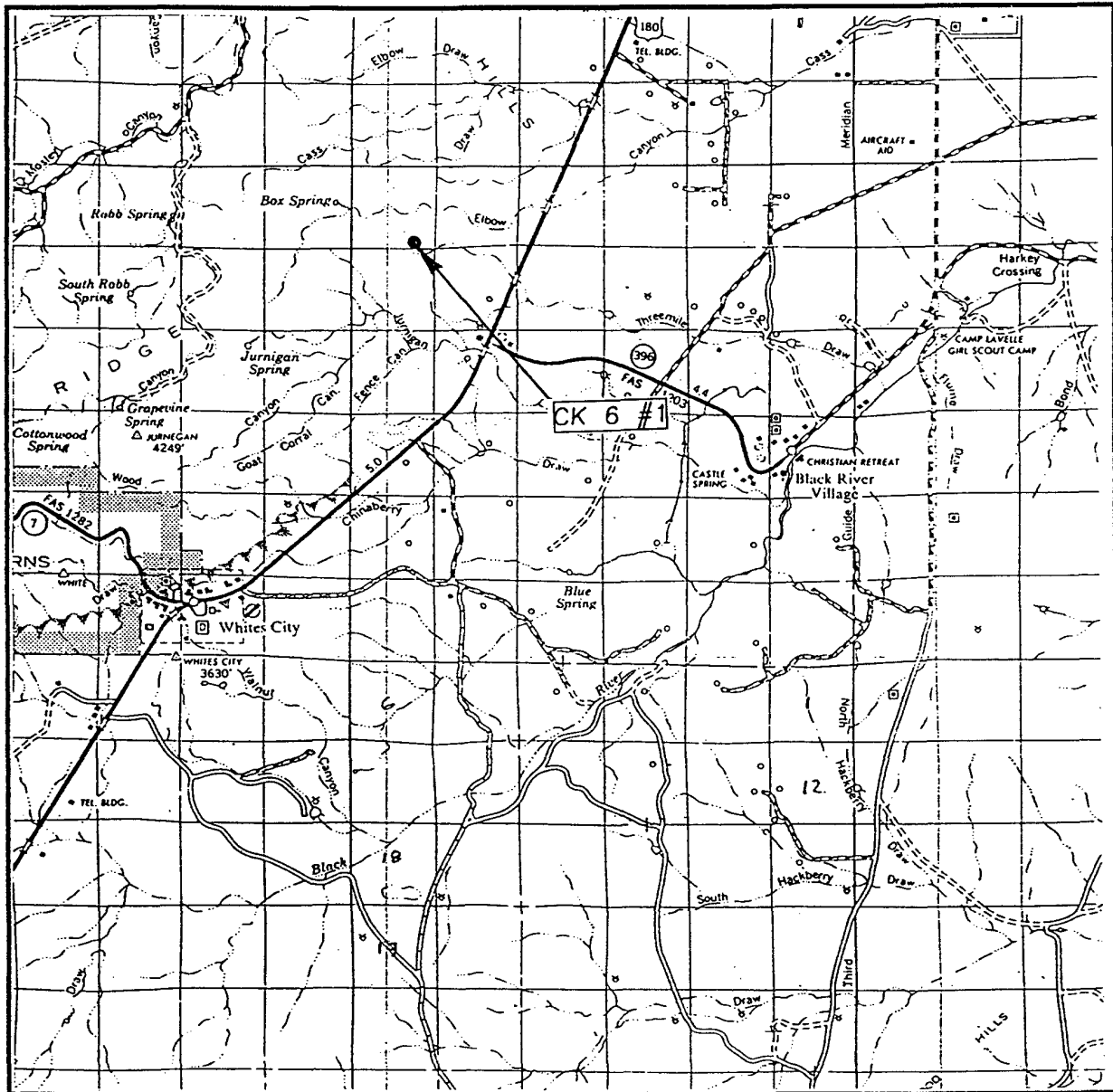
Signature & Seal of
Professional Surveyor

Gary E. Edson 9/4/03
03.11.0934

Certificate No. GARY EDSON 12641



VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 6 TWP. 24-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 433' FSL & 1260' FEL

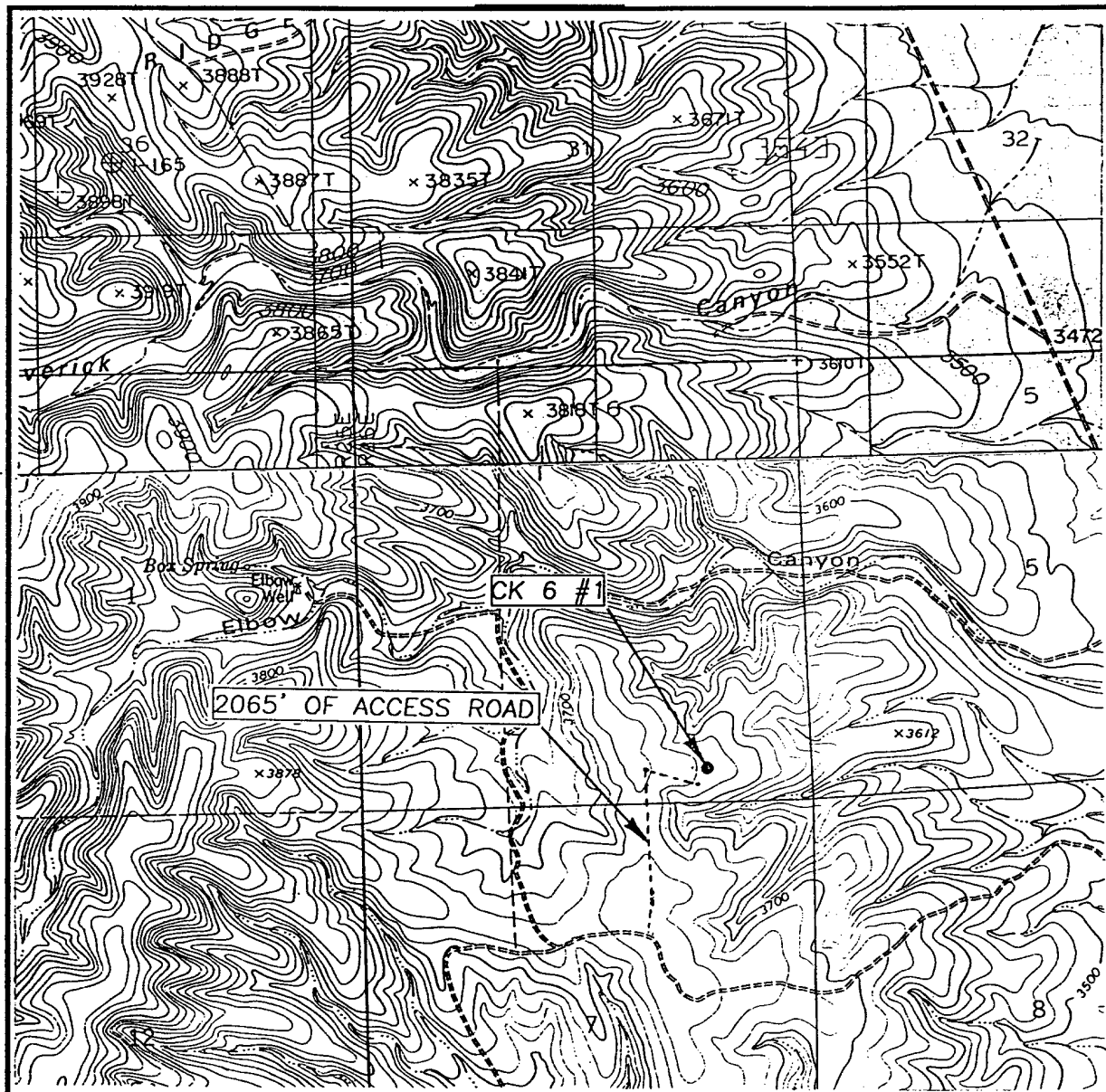
ELEVATION 3739'

OPERATOR GRUY PETROLEUM MANAGEMENT CO.

LEASE CK 6 Exhibit "B"

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'
BLACK RIVER VILLAGE, N.M.
KITCHEN COVE, N.M. SUP: 10'

SEC. 6 TWP. 24-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 433' FSL & 1260' FEL

ELEVATION 3739'

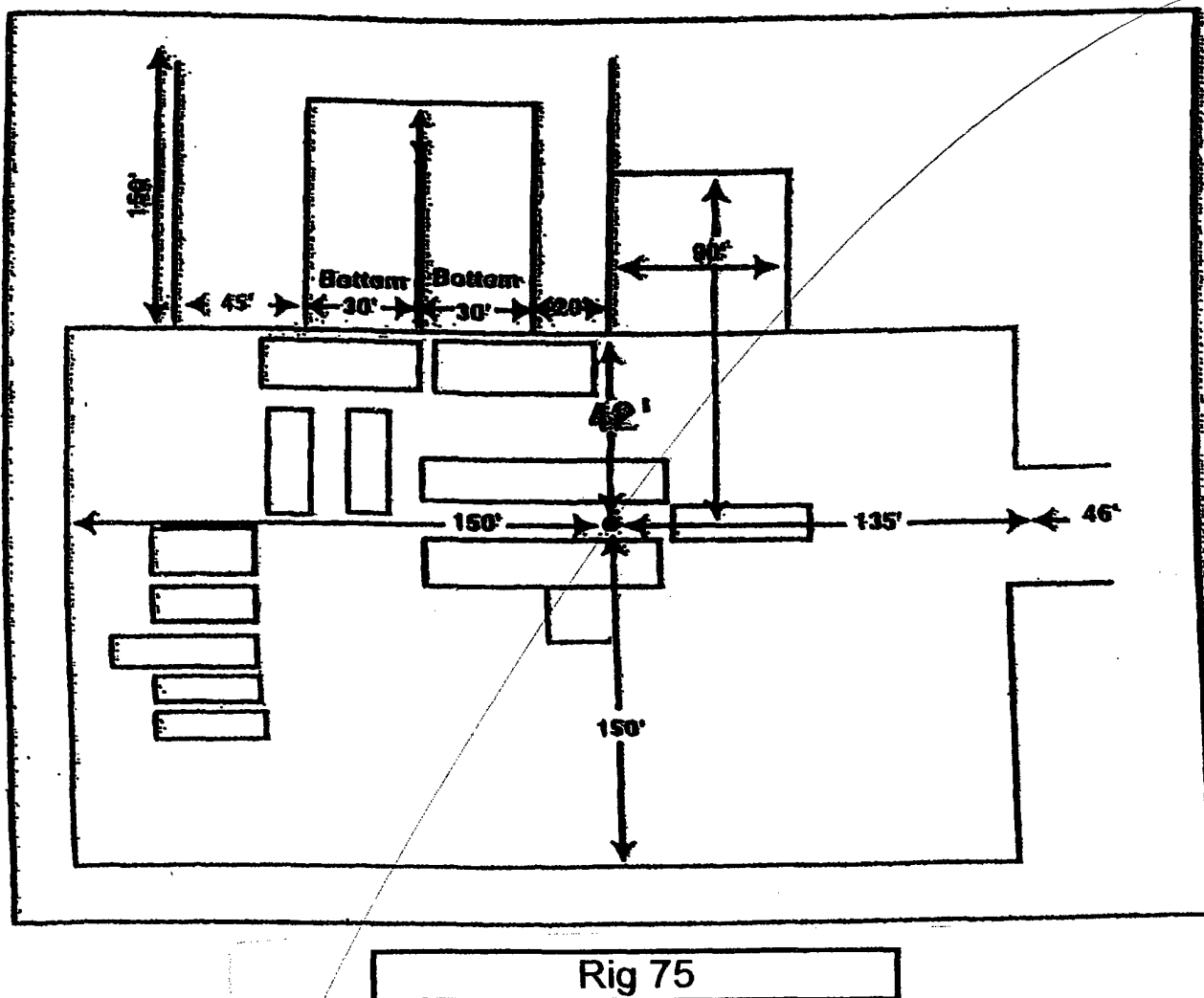
OPERATOR GRUY PETROLEUM MANAGEMENT CO.

LEASE CK 6

Exhibit "C"

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

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



Rig 75

Exhibit D
 Rig Layout Plan
 CK 6 Federal No. 1
 Gruy Petroleum Management Co.
 SHL: Unit P; Sec. 6; T24S; R26E
 433' FSL & 1260' FEL
 BHL: Unit I; Sec. 6; T24S; R26E
 1700' FSL & 660' FEL
 Eddy County, NM

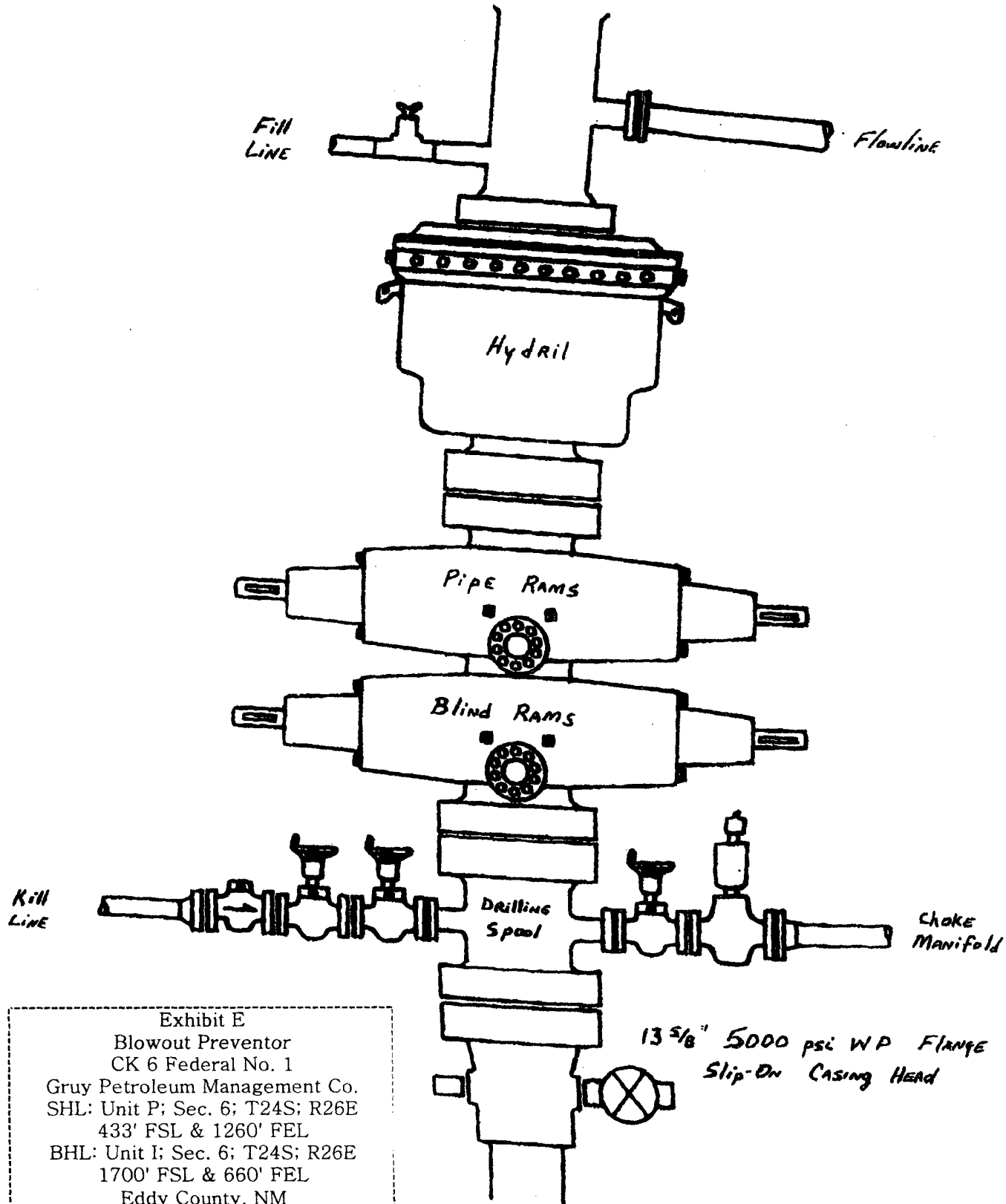


Exhibit E
 Blowout Preventor
 CK 6 Federal No. 1
 Gruy Petroleum Management Co.
 SHL: Unit P; Sec. 6; T24S; R26E
 433' FSL & 1260' FEL
 BHL: Unit I; Sec. 6; T24S; R26E
 1700' FSL & 660' FEL
 Eddy County, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

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

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 6 Federal No. 1
9. API Well No.	
10. Field and Pool, or Exploratory Area	White City; Undesignated
11. County or Parish, State	Eddy, NM

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 433' FSL & 1260' FEL Sec 7P 24S-26E BHL 1700' FSL & 660' FEL Sec 7I 24S-26E	

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 Well Pad Modification
	☒ 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 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 6 Federal No 1 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

Title

Manager, Operations Administration

Signature

Zeno Farris

Date

October 13, 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Joe G. Lara

ACTING

FIELD MANAGER

Date

25 FEB 2004

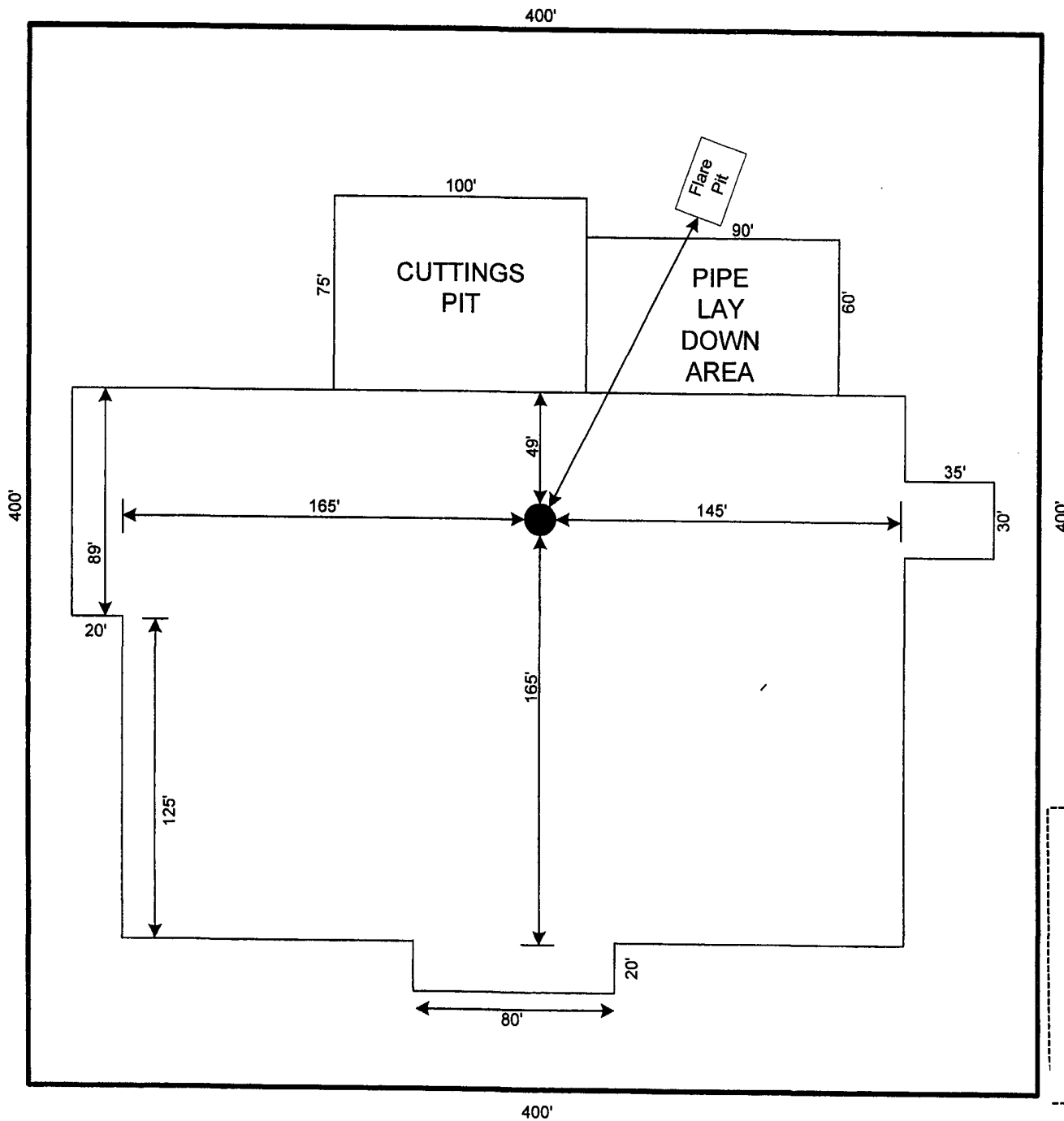
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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)



RIG # 80

**GRUY PETROLEUM
MANAGEMENT COMPANY
IRVING TEXAS**

SCALE 1"=60'

Exhibit "D"
Rig Layout Plan
Gruy Petroleum Management Co.
CK 6 Federal No. 1
SHL: Sec. 7P; T24S; R26E
433' FSL & 1260' FEL
BHL: Sec. 7I; T24S; R26E
1700' FSL & 660' FEL
Eddy County, NM

Application to Drill

Gruy Petroleum Management Co.
C K 6 Federal 1
Unit Letter P Section 6
T24S - R26E Eddy County, NM

RECEIVED
OCT 30 2003
OCD-ARTESIA

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.

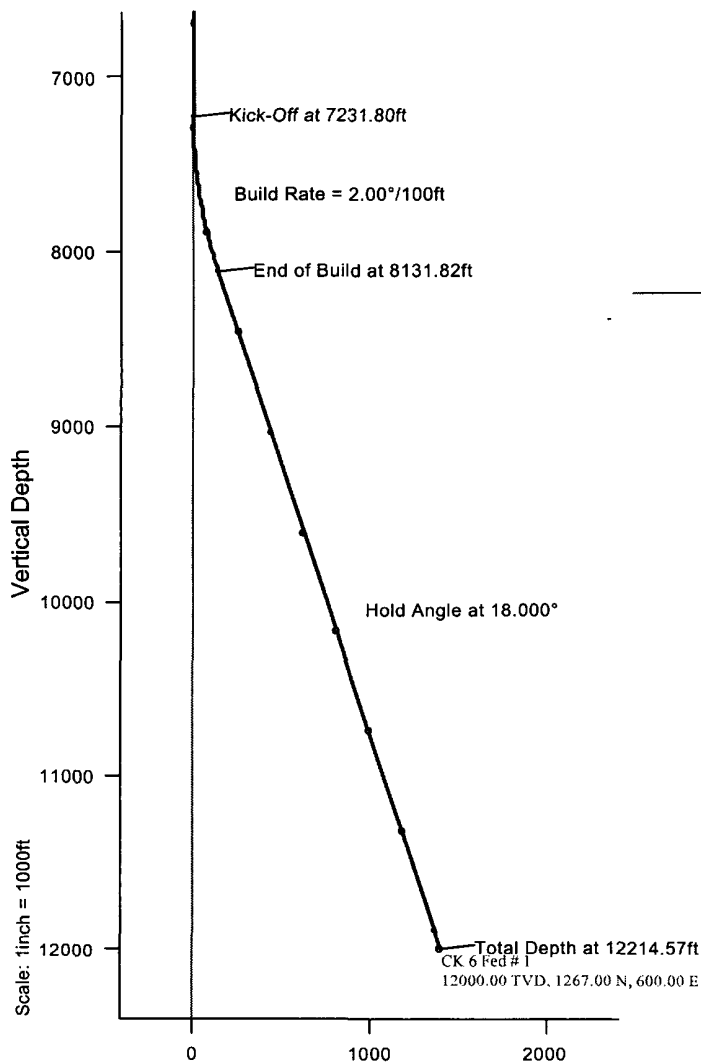
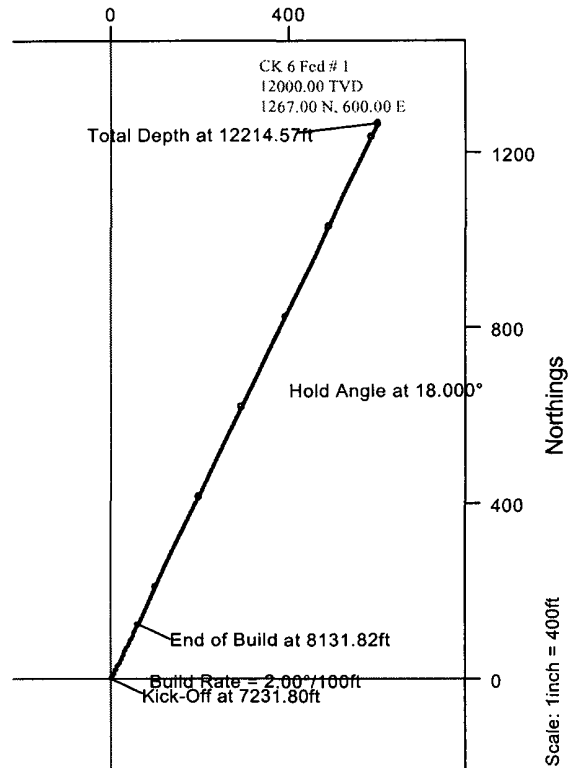
DrillQuest™

Sperry-Sun

New Mexico
Eddy County
Sec. 06-T24S-R26E
CK # 6 Federal # 1
Plan 03/02/04



Eastings
Scale: 1 inch = 400ft



Section Azimuth: 25.340° (Grid North)
Vertical Section

Prepared by:
Terry Herndon

Date/Time:
2 March, 2004 - 16:31

Checked:

Approved:



**Gruy Petroleum Management Co.
New Mexico
Eddy County
Sec. 06-T24S-R26E
CK # 6 Federal # 1 - Plan 03/02/04**

Sperry-Sun

Proposal Report

2 March, 2004

Data Source: Information from Wade Wiley

Proposal Ref: pro7394

Prepared by: Terry Herndon
Checked by:
Approved by:

HALLIBURTON

**Proposal Report for Sec. 06-T24S-R26E - CK # 6 Federal # 1 - Plan
03/02/04****Data Source: Information from Wade Wiley**

Measured Depth (ft)	Incl. (Deg)	Grid Azim. (Deg)	Station TVD (ft)	Coordinates Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00		
7231.80	0.000	0.000	7231.80	0.00 N	0.00 E	0.00	0.00	Kick-Off at 7231.80ft
7300.00	1.364	25.340	7299.99	0.73 N	0.35 E	0.81	2.00	
7400.00	3.364	25.340	7399.90	4.46 N	2.11 E	4.94	2.00	
7500.00	5.364	25.340	7499.61	11.34 N	5.37 E	12.55	2.00	
7600.00	7.364	25.340	7598.99	21.36 N	10.11 E	23.63	2.00	
7681.81	9.000	25.340	7679.96	31.88 N	15.10 E	35.27	2.00	Build Rate = 2.00°/100ft
7700.00	9.364	25.340	7697.92	34.50 N	16.34 E	38.17	2.00	
7800.00	11.364	25.340	7796.28	50.76 N	24.04 E	56.16	2.00	
7900.00	13.364	25.340	7893.96	70.11 N	33.20 E	77.57	2.00	
8000.00	15.364	25.340	7990.83	92.53 N	43.82 E	102.38	2.00	
8100.00	17.364	25.340	8086.77	117.99 N	55.88 E	130.55	2.00	
8131.82	18.000	25.340	8117.09	126.73 N	60.01 E	140.22	2.00	End of Build at 8131.82ft
8200.00	18.000	25.340	8181.93	145.77 N	69.03 E	161.29	0.00	
8300.00	18.000	25.340	8277.04	173.70 N	82.26 E	192.19	0.00	
8400.00	18.000	25.340	8372.14	201.63 N	95.48 E	223.09	0.00	
8500.00	18.000	25.340	8467.25	229.56 N	108.71 E	254.00	0.00	
8600.00	18.000	25.340	8562.35	257.49 N	121.93 E	284.90	0.00	
8700.00	18.000	25.340	8657.46	285.41 N	135.16 E	315.80	0.00	
8800.00	18.000	25.340	8752.56	313.34 N	148.39 E	346.70	0.00	
8900.00	18.000	25.340	8847.67	341.27 N	161.61 E	377.61	0.00	
9000.00	18.000	25.340	8942.77	369.20 N	174.84 E	408.51	0.00	
9100.00	18.000	25.340	9037.88	397.13 N	188.07 E	439.41	0.00	
9200.00	18.000	25.340	9132.98	425.06 N	201.29 E	470.31	0.00	
9300.00	18.000	25.340	9228.09	452.99 N	214.52 E	501.22	0.00	
9400.00	18.000	25.340	9323.20	480.92 N	227.74 E	532.12	0.00	
9500.00	18.000	25.340	9418.30	508.85 N	240.97 E	563.02	0.00	
9600.00	18.000	25.340	9513.41	536.78 N	254.20 E	593.92	0.00	
9700.00	18.000	25.340	9608.51	564.71 N	267.42 E	624.83	0.00	
9800.00	18.000	25.340	9703.62	592.63 N	280.65 E	655.73	0.00	
9900.00	18.000	25.340	9798.72	620.56 N	293.87 E	686.63	0.00	
10000.00	18.000	25.340	9893.83	648.49 N	307.10 E	717.53	0.00	
10100.00	18.000	25.340	9988.93	676.42 N	320.33 E	748.43	0.00	
10173.19	18.000	25.340	10058.55	696.86 N	330.01 E	771.05	0.00	Hold Angle at 18.000°
10200.00	18.000	25.340	10084.04	704.35 N	333.55 E	779.34	0.00	
10300.00	18.000	25.340	10179.14	732.28 N	346.78 E	810.24	0.00	
10400.00	18.000	25.340	10274.25	760.21 N	360.00 E	841.14	0.00	
10500.00	18.000	25.340	10369.35	788.14 N	373.23 E	872.04	0.00	
10600.00	18.000	25.340	10464.46	816.07 N	386.46 E	902.95	0.00	
10700.00	18.000	25.340	10559.57	844.00 N	399.68 E	933.85	0.00	
10800.00	18.000	25.340	10654.67	871.92 N	412.91 E	964.75	0.00	
10900.00	18.000	25.340	10749.78	899.85 N	426.13 E	995.65	0.00	
11000.00	18.000	25.340	10844.88	927.78 N	439.36 E	1026.56	0.00	
11100.00	18.000	25.340	10939.99	955.71 N	452.59 E	1057.46	0.00	
11200.00	18.000	25.340	11035.09	983.64 N	465.81 E	1088.36	0.00	

**Proposal Report for Sec. 06-T24S-R26E - CK # 6 Federal # 1 - Plan
03/02/04****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)						
11300.00	18.000	25.340	11130.20	1011.57 N	479.04 E	1119.26	0.00	
11400.00	18.000	25.340	11225.30	1039.50 N	492.26 E	1150.17	0.00	
11500.00	18.000	25.340	11320.41	1067.43 N	505.49 E	1181.07	0.00	
11600.00	18.000	25.340	11415.51	1095.36 N	518.72 E	1211.97	0.00	
11700.00	18.000	25.340	11510.62	1123.29 N	531.94 E	1242.87	0.00	
11800.00	18.000	25.340	11605.73	1151.22 N	545.17 E	1273.78	0.00	
11900.00	18.000	25.340	11700.83	1179.14 N	558.40 E	1304.68	0.00	
12000.00	18.000	25.340	11795.94	1207.07 N	571.62 E	1335.58	0.00	
12100.00	18.000	25.340	11891.04	1235.00 N	584.85 E	1366.48	0.00	
12200.00	18.000	25.340	11986.15	1262.93 N	598.07 E	1397.39	0.00	
12214.57	18.000	25.340	12000.00	1267.00 N	600.00 E	1401.89	0.00	Total Depth at 12214.57ft Target - CK 6 Fed # 1, 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 25.340° (Grid).

Coordinate System is NAD27 New Mexico State Planes, Eastern Zone.
Grid Convergence at Surface is -0.002°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 12214.57ft.,
The Bottom Hole Displacement is 1401.89ft., in the Direction of 25.340° (Grid).

Comments

Measured Depth (ft)	Station Coordinates			Comment
TVD (ft)	Northings (ft)	Eastings (ft)		
7231.80	7231.80	0.00 N	0.00 E	Kick-Off at 7231.80ft
7681.81	7679.96	31.88 N	15.10 E	Build Rate = 2.00°/100ft
8131.82	8117.09	126.73 N	60.01 E	End of Build at 8131.82ft
10173.19	10058.55	696.86 N	330.01 E	Hold Angle at 18.000°
12214.57	12000.00	1267.00 N	600.00 E	Total Depth at 12214.57ft

HALLIBURTON

Gruy Petroleum Management Co.
New Mexico
Eddy County

**Proposal Report for Sec. 06-T24S-R26E - CK # 6 Federal # 1 - Plan
03/02/04**

Data Source: Information from Wade Wiley

Targets associated with this wellpath

Target Name	Target Entry Coordinates			Target Shape	Target Type
	TVD (ft)	Northings (ft)	Eastings (ft)		
CK 6 Fed # 1	12000.00	1267.00 N	600.00 E	Point	Current Target