0426 Barry

N.M. Oil Cons. DIV-Dist. 2
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.: LC 065457

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

7. UNIT AGREEMENT NAME: N/A

2. NAME OF OPERATOR: Gruy Petroleum Management Co.

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MAR 29 2005
OCD-ARTESIA

8. FARM OR LEASE NAME, WELL NO.: J M Gates Federal NCT-1 No. 3

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

9. API WELL NO.: 30-015-34030

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

SUBJECT TO LIKE APPROVAL BY STATE

SHL 1350' FSL & 2050' FWL BHL 1350' FSL & 1650' FWL Sec 30-24S-26E

10. FIELD AND POOL, OR WILDCAT: White City; Penn

11. SEC. T.,R.,M., BLOCK AND SURVEY OR AREA: Sec. 30 T24S 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): 1350'

16. NO. OF ACRES IN LEASE: 800

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.: 2224'

19. PROPOSED DEPTH: 13000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3465' GR

22. APPROX. DATE WORK WILL START*: 03-15-05

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE,SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	J-55 13 3/8"	54.5 #	200' WITNESS	490 sx circulate
12 1/4"	NS-110 9 5/8"	40 #	1550'	1200 sx circulate
7 7/8"	N-80/P-110 5 1/2"	17 #	13000'	1620 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.

CARLSBAD CONTROLLED WATER BASIN

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 02-01-05

(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/ Tony J. Herrell TITLE FIELD MANAGER DATE MAR 27 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

APPROVAL FOR 1 YEAR

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Gruy Petroleum Management Co. Telephone: 972-443-6489 e-mail address: zfarris@magnumhunter.com
Address: P.O. Box 140907, Irving, Tx 75014-0907
Facility or well name: J M Gates NCT-1 Federal No. 3 API #: 30-015-34030 U/L or Qtr/Qtr K Sec 30 T 24S R 26E
County: Eddy Latitude 430870.2N Longitude 499870.9E NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet (100 feet or more)	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (No)	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet (1000 feet or more)	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	-0-

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FEB 07 2005
OCD-ARTESIA

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and en date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: February 3, 2005
Printed Name/Title Zeno Farris Manager Operations Administration Signature Zeno Farris

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: FEB 7 2005
Printed Name/Title_____ Signature_____

Application to Drill

Gruy Petroleum Management Co.
J M Gates Federal NCT-1 No. 3
Unit Letter K Section 30
T24S - 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 1350' FSL & 2050' FWL Sec. 30- 24S 26E
BHL 1350' FSL & 1650' FWL Sec. 30-24S-26E

2 Elevation above sea level: GR 3465'

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"	0-1550'	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.
J M Gates Federal NCT-1 No. 3
Unit Letter C Section 30
T24S - 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 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 1550' 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 1000 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 1020 Sx. of Class POZ/C Cement + additives. Second stage cement with 600 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 - 350'	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.
350' - 1530'	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.
1530' - 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.
J M Gates Federal NCT-1 No. 3
Unit Letter C Section 30
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 Strawn / Morrow / Atoka pay will be perforated and stimulated. The well will be tested and potentialed as a gas well.

Surface Use Plan

Gruy Petroleum Management Co.
J M Gates Federal NCT-1 No. 3
Unit Letter C Section 30
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. From the intersection of Hwy 62-180 and Eddy County road # 722. Go south on Co. Rd. 722 for 1.48 miles to a caliche road on the right. Follow road 1.2 miles to proposed access road turn south to location.

2 PLANNED ACCESS ROADS: 411' of access road will be constructed.

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

A. Water wells - Well 20054 and Woodruff well.

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"

Gruy Petroleum Management Co.
600 East Las Colinas Blvd. • Suite 1100 • Irving, TX 75039 • (972) 401-3111 • Fax (972) 443-6450
Mailing Address: P.O. Box 140907 • Irving, TX 75014-0907

A wholly-owned subsidiary of Magnum Hunter Resources, Inc., a NYSE company MHR

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management
2909 West 2nd Street
Roswell New Mexico 88201-2019
Attn: Ms. Linda Askwig

Gruy Petroleum Management Co. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease No.: LC - 065457

Legal Description: All Sec 30, T24S-R26E
Containing 640 acres, Eddy County New Mexico

Formation (S): Morrow/Pennsylvanian

Bond Coverage: Nationwide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature: Zeno Farris

Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 02/01/05

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
		White City; Penn (Gas)

Property Code	Property Name	Well Number
	J.M. GATES FEDERAL NCT-1	3

OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT COMPANY	3465'

Surface Location

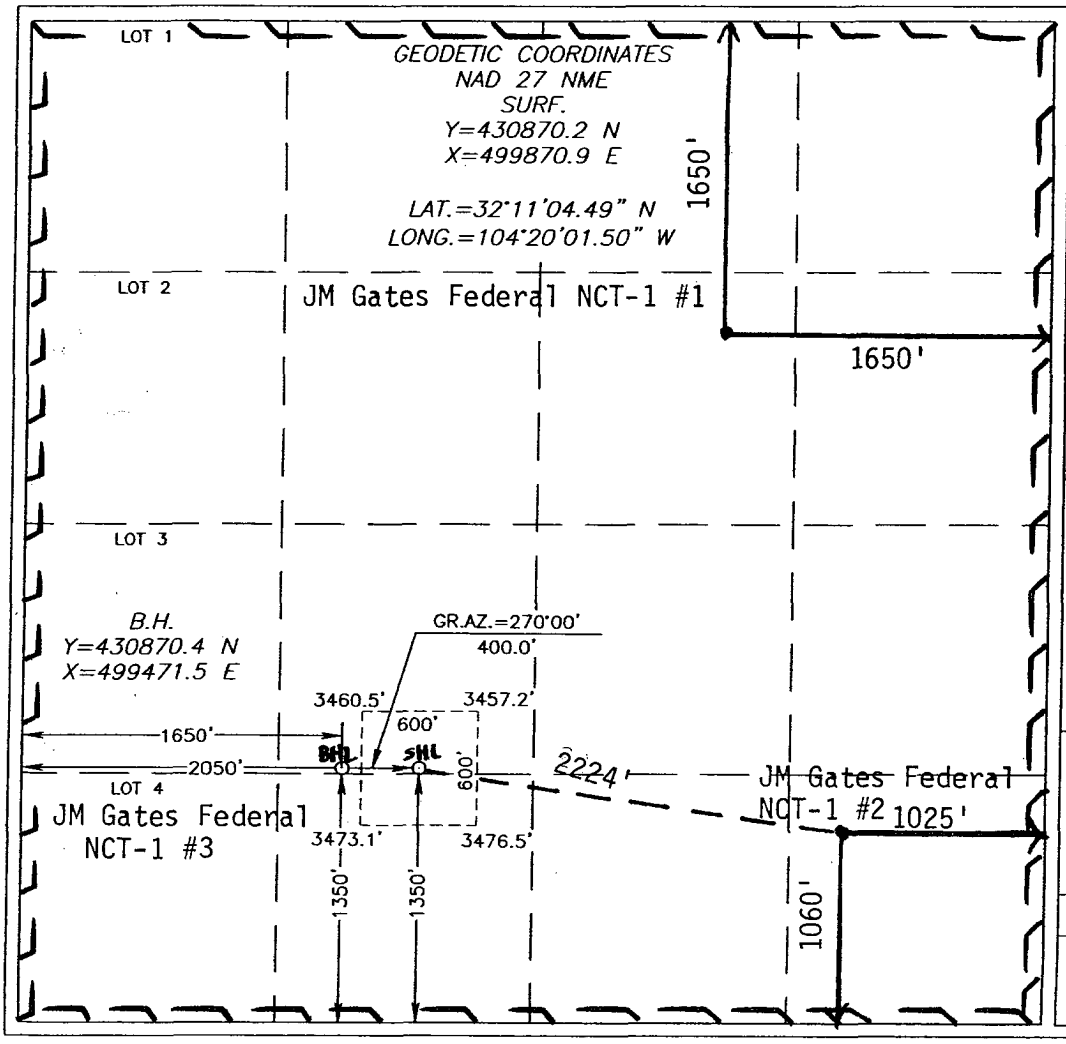
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	30	24-S	26-E		1350	SOUTH	2050	WEST	EDDY

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
K	30	24-S	26-E		1350	SOUTH	1650	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640	Y	C	

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



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

February 3, 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.

JANUARY 19, 2005
Date Surveyed JR

Signature & Seal of Professional Surveyor

GARY EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR

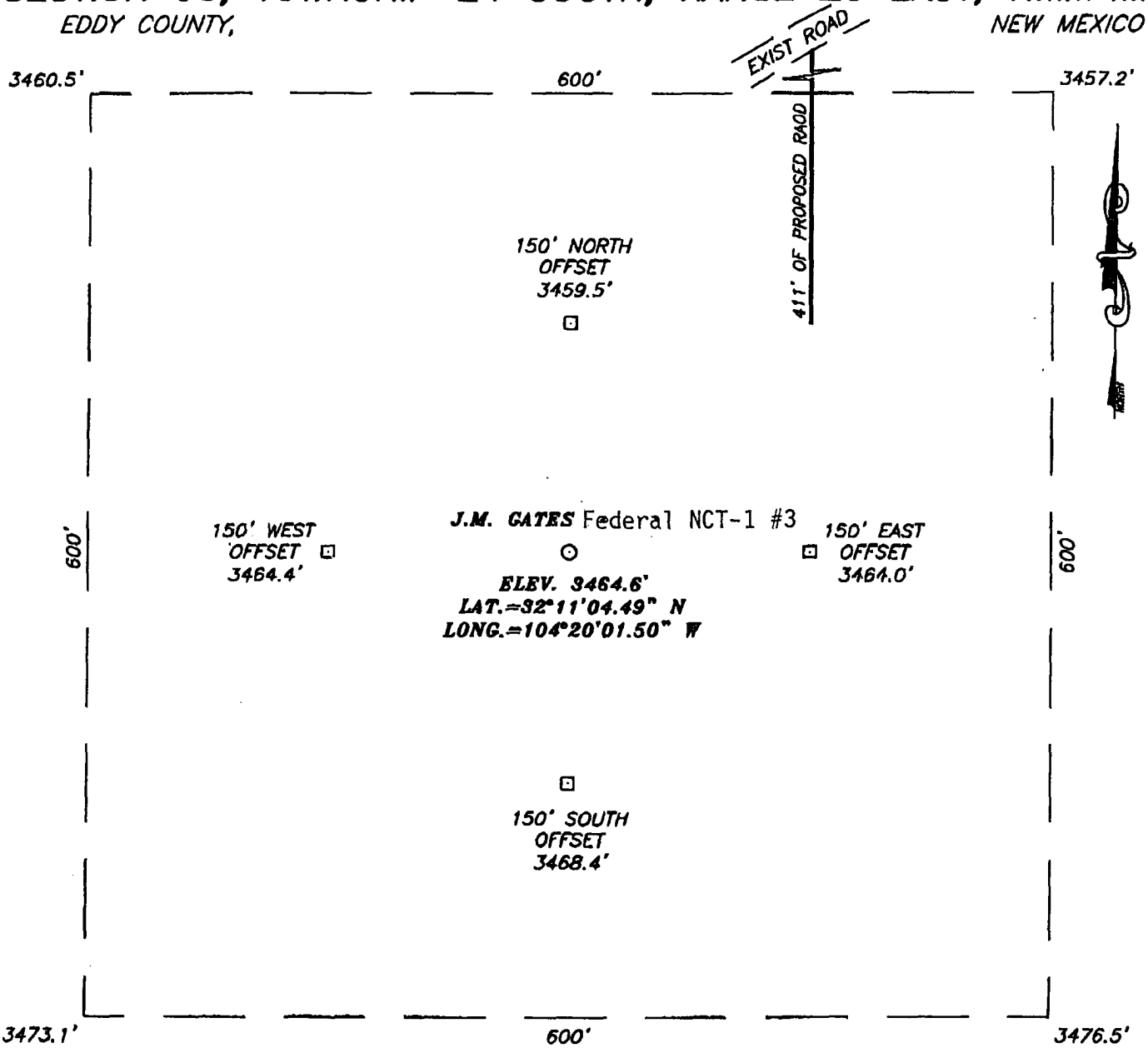
Gary B. Eidson 1/25/05

05.11.0073

Certificate No. GARY EIDSON 12641

SECTION 30, TOWNSHIP 24 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. #772 (MEANS RD.) GO SOUTH ON CO. RD. #772 FOR APPROX. 1.48 MILES TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT (BEFORE E-W FENCE LINE) AND GO APPROX. 0.6 MILES. FOLLOW ROAD NORTH FOR APPROX. 0.3 MILES. TURN LEFT (W/SW) AND GO APPROX. 0.3 MILES. PROPOSED LOCATION IS APPROX. 550' SOUTH ACROSS PASTURE.

100 0 100 200 Feet

Scale:1"=100'

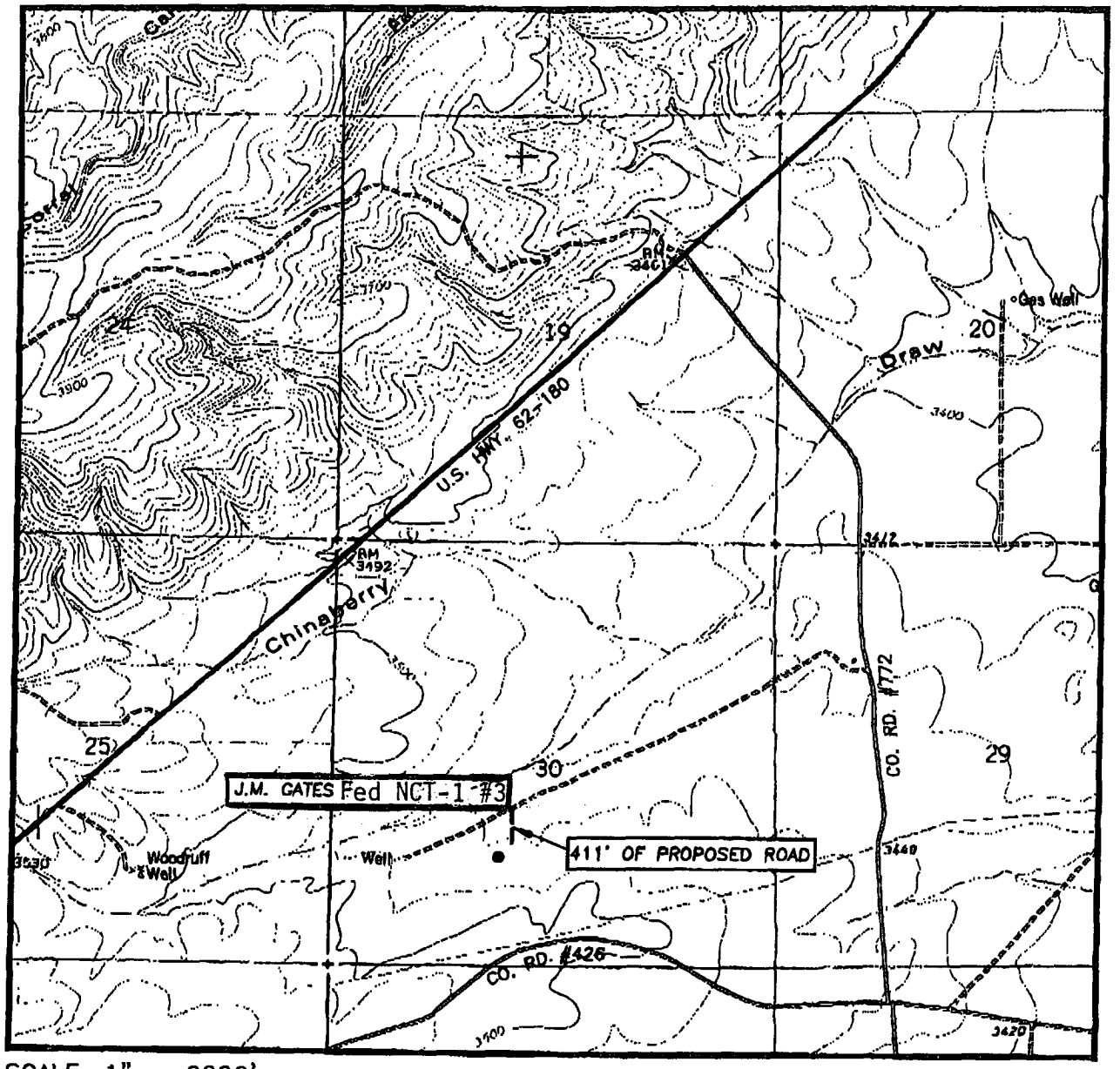
PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

GRUY PETROLEUM MANAGEMENT COMPANY

JM Gates Fed NCT-1 #3 Well
LOCATED 1350 FEET FROM THE SOUTH LINE
AND 2050 FEET FROM THE WEST LINE OF SECTION 30,
TOWNSHIP 24 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 1/19/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0073	Dr By: J.R.	Rev 1:N/A	
Date: 1/20/05	Disk: CD#5	05110073	Scale:1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 30 TWP. 24-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1350' FSL & 2050' FWL

ELEVATION 3465'

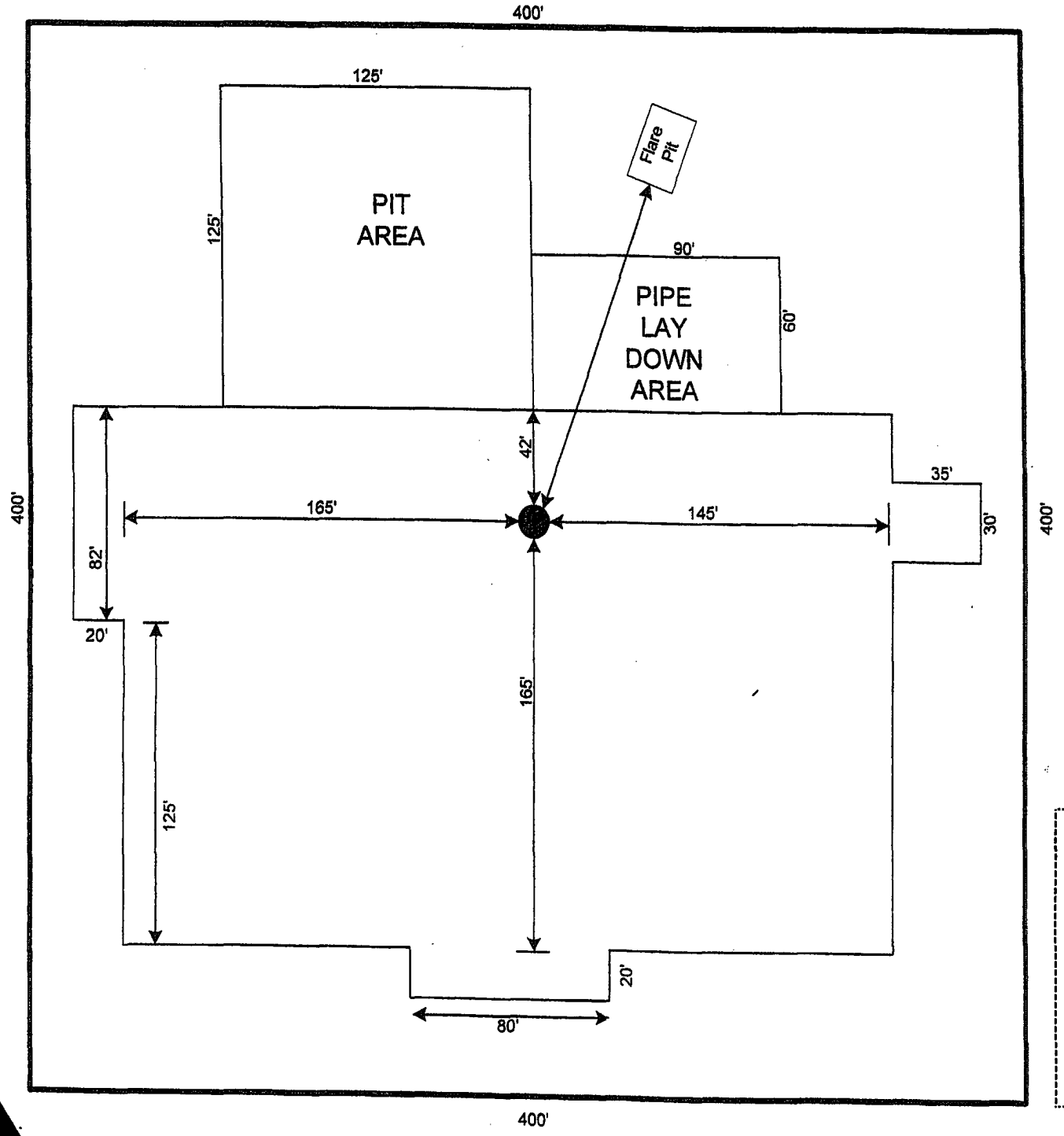
OPERATOR GRUY PETROLEUM MANAGEMENT COMPANY

LEASE J.M. GATES Fed NCT-1 #3

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

Exhibit "B"



RIG # 80

GRUY PETROLEUM
MANAGEMENT COMPANY
IRVING TEXAS

SCALE 1"=60'

Exhibit D
Rig Layout Plan
JM Gates Federal NCT-1 No. 3
Gruy Petroleum Management Co.
SHL: 1350' FSL & 2050' FWL
Section 30-T24S-R26E
BHL: 1350' FSL & 1650' FWL
Section 30-T24S-R26E
Eddy County, NM

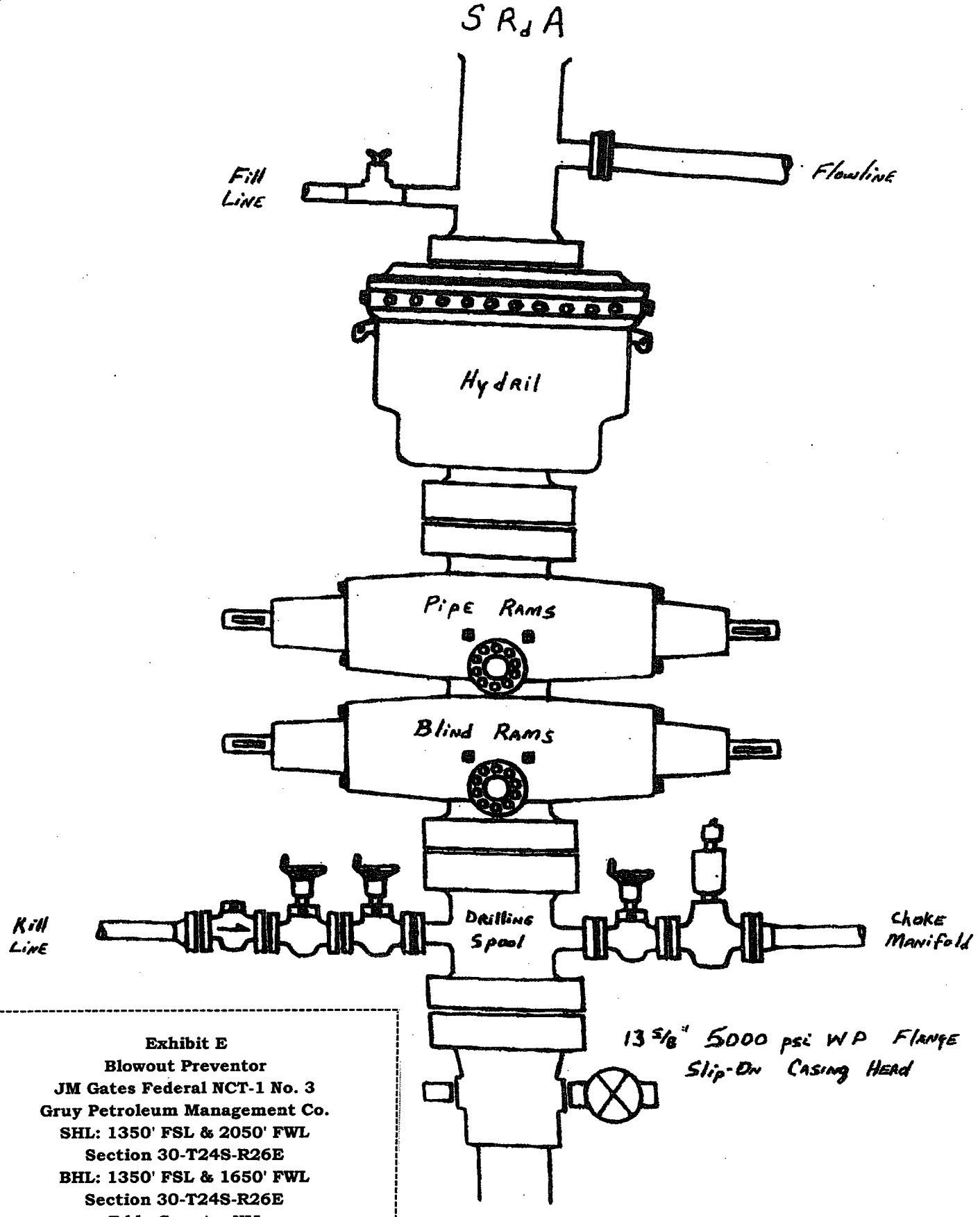


Exhibit E
Blowout Preventor
JM Gates Federal NCT-1 No. 3
Gruy Petroleum Management Co.
SHL: 1350' FSL & 2050' FWL
Section 30-T24S-R26E
BHL: 1350' FSL & 1650' FWL
Section 30-T24S-R26E
Eddy County, NM

DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE

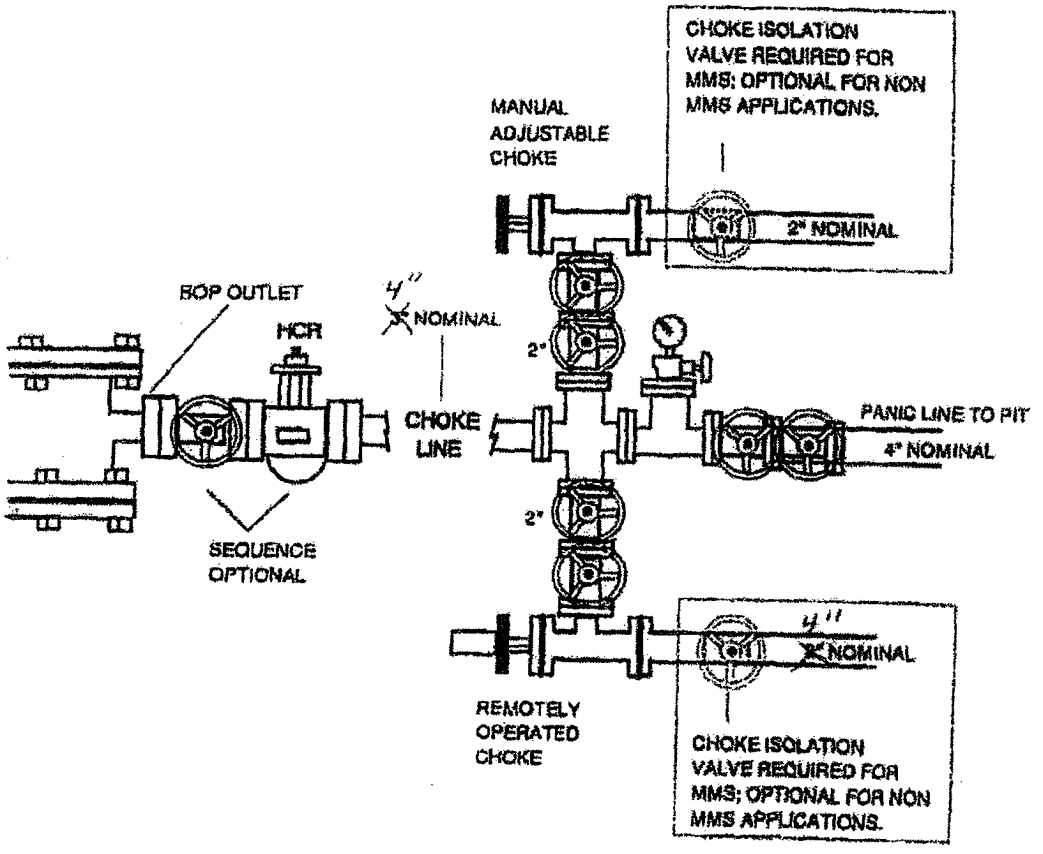


Exhibit E-Cont'd
Blowout Preventor-Choke Manifold
JM Gates Federal NCT-1 No. 3
Gruy Petroleum Management Co.
SHL: 1350' FSL & 2050' FWL
Section 30-T24S-R26E
BHL: 1350' FSL & 1650' FWL
Section 30-T24S-R26E
Eddy County, NM

Gruy Petroleum Management Co.
New Mexico
Eddy County
Gruy
J.M. Gates NCT 1 #3 - Version 1

Sperry-Sun

Proposal Report

2 February, 2005

Proposal Ref: pro8129

Prepared by: Dennis Cook
Checked by:
Approved by:

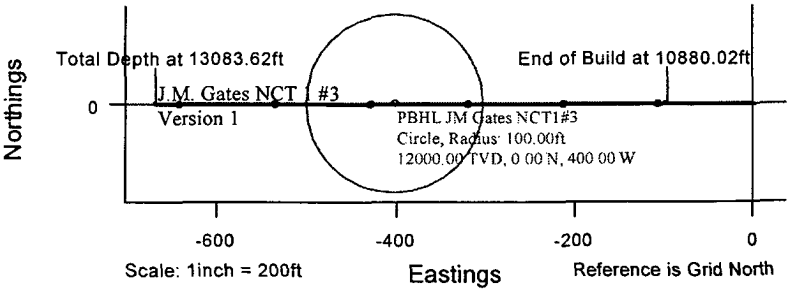
HALLIBURTON

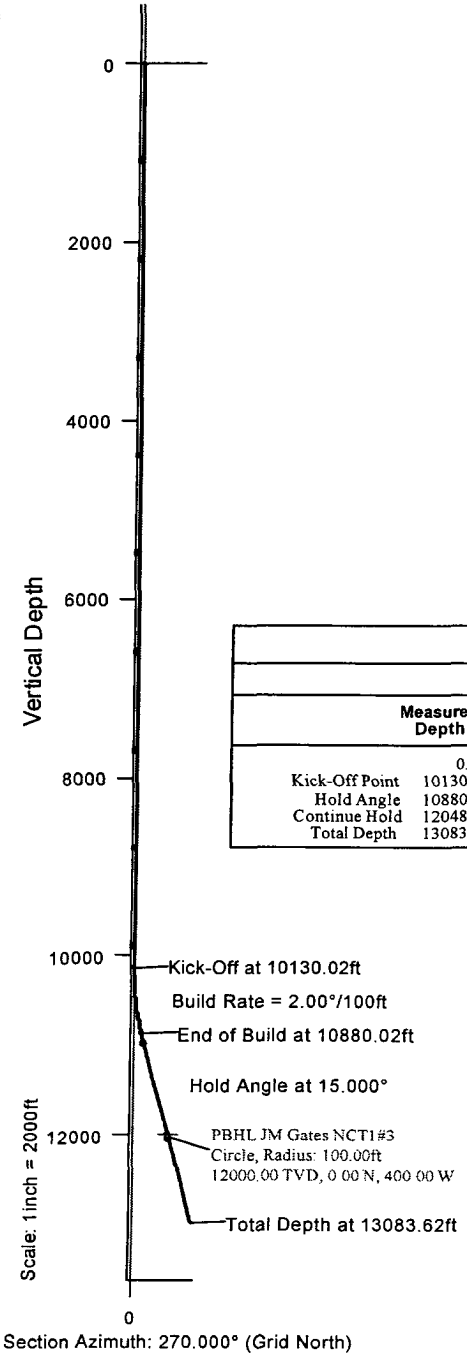
HALLIBURTON

Gruy Petroleum Management Co.

DrillQuest
Sperry-Sun

New Mexico
Eddy County
Gruy
J.M. Gates NCT 1 #3
Version 1





J.M. Gates NCT 1 #3 Surface Location	
RKB Elevation:	3485.00ft above Mean Sea Level
Ref. Structure:	114742.56 S, 129.10 W
Ref. Geographical Coordinates:	32° 11' 04.4852" N, 104° 20' 01.5023" W

Version 1 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	10130.02	0.000	0.000	10130.02	0.00 N	0.00 E	0.00	0.00
Hold Angle	10880.02	15.000	270.000	10871.49	0.00 N	97.62 W	97.62	2.00
Continue Hold	12048.35	15.000	270.000	12000.00	0.00 N	400.00 W	400.00	0.00
Total Depth	13083.62	15.000	270.000	13000.00	0.00 N	667.95 W	667.95	0.00

Version 1 Bottom Hole Location	
Ref. RKB(3465`+20`KB):	13000.00ft
Ref. Structure:	9515.00ft
Ref. Wellhead:	0.00 N, 667.95 W
Ref. Global Coordinates:	430870.20 N, 499202.95 E
Ref. Geographical Coordinates:	32° 11' 04.4851" N, 104° 20' 09.2748" W

Prepared by:	Date/Time:	Checked:	Approved:
Dennis Cook	2 February, 2005 - 16:39		

Proposal Report for Gruy - J.M. Gates NCT 1 #3 - Version 1

Measured Depth (ft)	Incl.	Grid Azim.	Vertical Depth (ft)	Local Coordinates Northings (ft)	Local Coordinates Eastings (ft)	Global Coordinates Northings (ft)	Global Coordinates Eastings (ft)	Geographic Coordinates Latitude	Geographic Coordinates Longitude	Comment
0.00	0.000	0.000	0.00	0.00 N	0.00 E	430870.20 N	499870.90 E	32° 11' 04.4852" N	104° 20' 01.5023" W	
10130.02	0.000	0.000	10130.02	0.00 N	0.00 E	430870.20 N	499870.90 E	32° 11' 04.4852" N	104° 20' 01.5023" W	Kick-Off at 10130.02ft
10200.00	1.400	270.000	10199.99	0.00 N	0.85 W	430870.20 N	499870.05 E	32° 11' 04.4852" N	104° 20' 01.5122" W	
10300.00	3.400	270.000	10299.90	0.00 N	5.04 W	430870.20 N	499865.86 E	32° 11' 04.4852" N	104° 20' 01.5609" W	
10400.00	5.400	270.000	10399.60	0.00 N	12.71 W	430870.20 N	499858.19 E	32° 11' 04.4852" N	104° 20' 01.6502" W	
10500.00	7.400	270.000	10498.97	0.00 N	23.86 W	430870.20 N	499847.04 E	32° 11' 04.4852" N	104° 20' 01.7799" W	
10600.00	9.400	270.000	10597.89	0.00 N	38.46 W	430870.20 N	499832.44 E	32° 11' 04.4852" N	104° 20' 01.9499" W	
10700.00	11.400	270.000	10696.25	0.00 N	56.51 W	430870.20 N	499814.39 E	32° 11' 04.4851" N	104° 20' 02.1599" W	
10800.00	13.400	270.000	10793.91	0.00 N	77.99 W	430870.20 N	499792.91 E	32° 11' 04.4851" N	104° 20' 02.4098" W	
10880.02	15.000	270.000	10871.49	0.00 N	97.62 W	430870.20 N	499773.28 E	32° 11' 04.4851" N	104° 20' 02.6382" W	End of Build at 10880.02ft
10900.00	15.000	270.000	10890.78	0.00 N	102.79 W	430870.20 N	499768.11 E	32° 11' 04.4851" N	104° 20' 02.6983" W	
11000.00	15.000	270.000	10987.37	0.00 N	128.67 W	430870.20 N	499742.23 E	32° 11' 04.4851" N	104° 20' 02.9995" W	
11100.00	15.000	270.000	11083.97	0.00 N	154.55 W	430870.20 N	499716.35 E	32° 11' 04.4851" N	104° 20' 03.3007" W	
11200.00	15.000	270.000	11180.56	0.00 N	180.43 W	430870.20 N	499690.47 E	32° 11' 04.4851" N	104° 20' 03.6019" W	
11300.00	15.000	270.000	11277.15	0.00 N	206.31 W	430870.20 N	499664.59 E	32° 11' 04.4851" N	104° 20' 03.9030" W	
11400.00	15.000	270.000	11373.74	0.00 N	232.20 W	430870.20 N	499638.70 E	32° 11' 04.4851" N	104° 20' 04.2042" W	
11500.00	15.000	270.000	11470.34	0.00 N	258.08 W	430870.20 N	499612.82 E	32° 11' 04.4851" N	104° 20' 04.5054" W	
11600.00	15.000	270.000	11566.93	0.00 N	283.96 W	430870.20 N	499586.94 E	32° 11' 04.4851" N	104° 20' 04.8066" W	
11700.00	15.000	270.000	11663.52	0.00 N	309.84 W	430870.20 N	499561.06 E	32° 11' 04.4851" N	104° 20' 05.1077" W	
11800.00	15.000	270.000	11760.11	0.00 N	335.72 W	430870.20 N	499535.18 E	32° 11' 04.4851" N	104° 20' 05.4089" W	
11900.00	15.000	270.000	11856.71	0.00 N	361.60 W	430870.20 N	499509.30 E	32° 11' 04.4851" N	104° 20' 05.7101" W	
12000.00	15.000	270.000	11953.30	0.00 N	387.49 W	430870.20 N	499483.41 E	32° 11' 04.4851" N	104° 20' 06.0112" W	
12048.35	15.000	270.000	12000.00	0.00 N	400.00 W	430870.20 N	499470.90 E	32° 11' 04.4851" N	104° 20' 06.1569" W	Target - PBHL JM Gates NCT1#3, 100.00 Radius., Current Target
12100.00	15.000	270.000	12049.89	0.00 N	413.37 W	430870.20 N	499457.53 E	32° 11' 04.4851" N	104° 20' 06.3124" W	
12200.00	15.000	270.000	12146.48	0.00 N	439.25 W	430870.20 N	499431.65 E	32° 11' 04.4851" N	104° 20' 06.6136" W	

Proposal Report for Gruy - J.M. Gates NCT 1 #3 - Version 1

Measured Depth (ft)	Incl.	Grid Azim.	Vertical Depth (ft)	Local Coordinates Northings (ft)	Local Coordinates Eastings (ft)	Global Coordinates Northings (ft)	Global Coordinates Eastings (ft)	Geographic Coordinates Latitude	Geographic Coordinates Longitude	Comment
12300.00	15.000	270.000	12243.08	0.00 N	465.13 W	430870.20 N	499405.77 E	32° 11' 04.4851" N	104° 20' 06.9148" W	
12400.00	15.000	270.000	12339.67	0.00 N	491.01 W	430870.20 N	499379.89 E	32° 11' 04.4851" N	104° 20' 07.2159" W	
12500.00	15.000	270.000	12436.26	0.00 N	516.90 W	430870.20 N	499354.00 E	32° 11' 04.4851" N	104° 20' 07.5171" W	
12600.00	15.000	270.000	12532.86	0.00 N	542.78 W	430870.20 N	499328.12 E	32° 11' 04.4851" N	104° 20' 07.8183" W	
12700.00	15.000	270.000	12629.45	0.00 N	568.66 W	430870.20 N	499302.24 E	32° 11' 04.4851" N	104° 20' 08.1195" W	
12800.00	15.000	270.000	12726.04	0.00 N	594.54 W	430870.20 N	499276.36 E	32° 11' 04.4851" N	104° 20' 08.4206" W	
12900.00	15.000	270.000	12822.63	0.00 N	620.42 W	430870.20 N	499250.48 E	32° 11' 04.4851" N	104° 20' 08.7218" W	
13000.00	15.000	270.000	12919.23	0.00 N	646.31 W	430870.20 N	499224.59 E	32° 11' 04.4851" N	104° 20' 09.0230" W	
13083.62	15.000	270.000	13000.00	0.00 N	667.95 W	430870.20 N	499202.95 E	32° 11' 04.4851" N	104° 20' 09.2748" W	Total Depth at 13083.62ft

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB(3465'+20'KB). Northings and Eastings are relative to Wellhead.
Global Northings and Eastings are relative to NAD27 New Mexico State Planes, Eastern Zone.

Based upon Minimum Curvature type calculations, at a Measured Depth of 13083.62ft,
The Bottom Hole Displacement is 667.95ft, in the Direction of 270.000° (Grid).

Proposal Report for Gruy - J.M. Gates NCT 1 #3 - Version 1

Comments

Measured Depth (ft)	Station Coordinates TVD (ft)	Northings (ft)	Eastings (ft)	Comment
10130.02	10130.02	0.00 N	0.00 E	Kick-Off at 10130.02ft
10880.02	10871.49	0.00 N	97.62 W	End of Build at 10880.02ft
13083.62	13000.00	0.00 N	667.95 W	Total Depth at 13083.62ft

Targets associated with this wellpath

Target Name		Target Entry Coordinates TVD (ft)	Northings (ft)	Eastings (ft)	Target Shape	Target Type
PBHL JM Gates NCT1#3		12000.00	0.00 N	400.00 W	Circle	Current Target
	Mean Sea Level/Global Coordinates:	8515.00	430870.20 N	499470.90 E		
	Geographical Coordinates:		32° 11' 04.4851" N	104° 20' 06.1569" W		

North Reference Sheet for Gruy - J.M. Gates NCT 1 #3

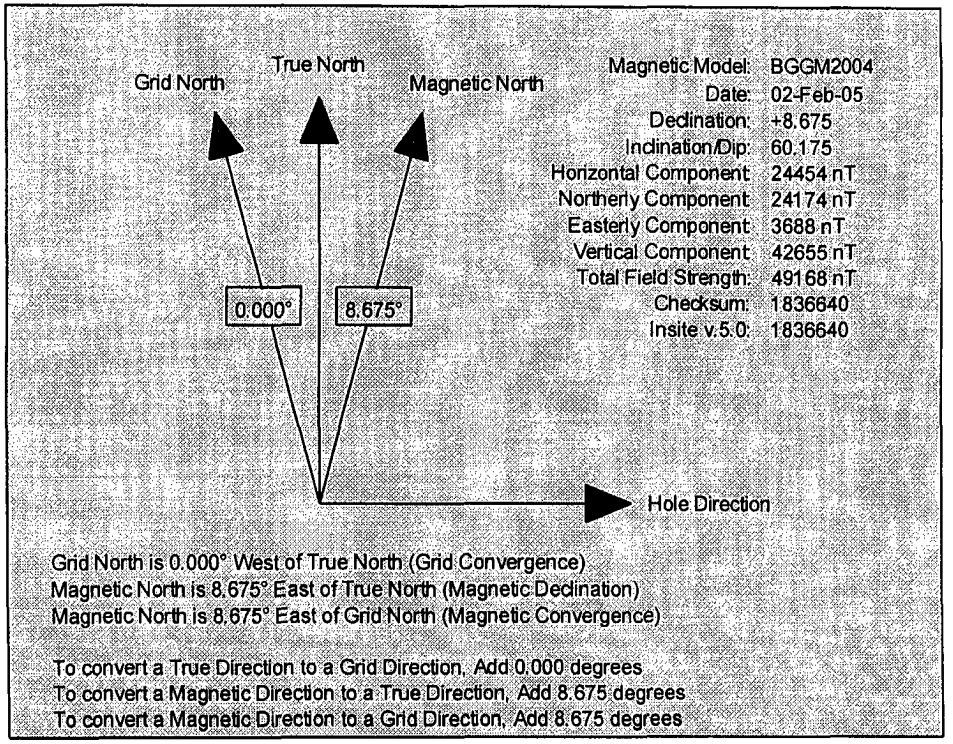
Coordinate System is NAD27 New Mexico State Planes, Eastern Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

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: 430870.20 N, 499870.90 E
Geographical Coordinates of Well: 32° 11' 04.4852" N, 104° 20' 01.5023" W
Surface Elevation of Well: 3485.00ft
Grid Convergence at Surface is -0.000°
Magnetic Convergence at Surface is -8.675° (2 February, 2005)



Halliburton Sperry-Sun

Gruy Petroleum Management Co.
J.M. Gates NCT 1 #3 - Version 1

New Mexico
Eddy County
Gruy
Data Source:

Meas. Depth (ft)	Incl.	Azm.	Sub-Sea Depth (ft)	Vert. Depth (ft)	Local Northings (ft)	Local Eastings (ft)	Global Northings (ft)	Global Eastings (ft)	Vert. Section (ft)	Dogleg Rate (°/100ft)	
0	0	0	-3485	0	0.00 N	0.00 E	430870.20 N	499870.90 E	0	0	
10130.02	0	0	6645.02	10130.02	0.00 N	0.00 E	430870.20 N	499870.90 E	0	0	Kick-Off at 10130.02ft
10200	1.4	270	6714.99	10199.99	0.00 N	0.85 W	430870.20 N	499870.05 E	0.85	2	
10300	3.4	270	6814.9	10299.9	0.00 N	5.04 W	430870.20 N	499865.86 E	5.04	2	
10400	5.4	270	6914.6	10399.6	0.00 N	12.71 W	430870.20 N	499858.19 E	12.71	2	
10500	7.4	270	7013.97	10498.97	0.00 N	23.86 W	430870.20 N	499847.04 E	23.86	2	
10600	9.4	270	7112.89	10597.89	0.00 N	38.46 W	430870.20 N	499832.44 E	38.46	2	
10700	11.4	270	7211.25	10696.25	0.00 N	56.51 W	430870.20 N	499814.39 E	56.51	2	
10800	13.4	270	7308.91	10793.91	0.00 N	77.99 W	430870.20 N	499792.91 E	77.99	2	
10880.02	15	270	7386.49	10871.49	0.00 N	97.62 W	430870.20 N	499773.28 E	97.62	2	End of Build at 10880.02ft
10900	15	270	7405.78	10890.78	0.00 N	102.79 W	430870.20 N	499768.11 E	102.79	0	
11000	15	270	7502.37	10987.37	0.00 N	128.67 W	430870.20 N	499742.23 E	128.67	0	
11100	15	270	7598.97	11083.97	0.00 N	154.55 W	430870.20 N	499716.35 E	154.55	0	
11200	15	270	7695.56	11180.56	0.00 N	180.43 W	430870.20 N	499690.47 E	180.43	0	
11300	15	270	7792.15	11277.15	0.00 N	206.31 W	430870.20 N	499664.59 E	206.31	0	
11400	15	270	7888.74	11373.74	0.00 N	232.20 W	430870.20 N	499638.70 E	232.2	0	
11500	15	270	7985.34	11470.34	0.00 N	258.08 W	430870.20 N	499612.82 E	258.08	0	
11600	15	270	8081.93	11566.93	0.00 N	283.96 W	430870.20 N	499586.94 E	283.96	0	
11700	15	270	8178.52	11663.52	0.00 N	309.84 W	430870.20 N	499561.06 E	309.84	0	
11800	15	270	8275.11	11760.11	0.00 N	335.72 W	430870.20 N	499535.18 E	335.72	0	
11900	15	270	8371.71	11856.71	0.00 N	361.60 W	430870.20 N	499509.30 E	361.6	0	
12000	15	270	8468.3	11953.3	0.00 N	387.49 W	430870.20 N	499483.41 E	387.49	0	
12048.35	15	270	8515	12000	0.00 N	400.00 W	430870.20 N	499470.90 E	400	0	Target - PBHL JM Gates NCT1#3 100.00 Radius. Current Target
12100	15	270	8564.89	12049.89	0.00 N	413.37 W	430870.20 N	499457.53 E	413.37	0	
12200	15	270	8661.48	12146.48	0.00 N	439.25 W	430870.20 N	499431.65 E	439.25	0	
12300	15	270	8758.08	12243.08	0.00 N	465.13 W	430870.20 N	499405.77 E	465.13	0	
12400	15	270	8854.67	12339.67	0.00 N	491.01 W	430870.20 N	499379.89 E	491.01	0	
12500	15	270	8951.26	12436.26	0.00 N	516.90 W	430870.20 N	499354.00 E	516.9	0	
12600	15	270	9047.86	12532.86	0.00 N	542.78 W	430870.20 N	499328.12 E	542.78	0	
12700	15	270	9144.45	12629.45	0.00 N	568.66 W	430870.20 N	499302.24 E	568.66	0	
12800	15	270	9241.04	12726.04	0.00 N	594.54 W	430870.20 N	499276.36 E	594.54	0	
12900	15	270	9337.63	12822.63	0.00 N	620.42 W	430870.20 N	499250.48 E	620.42	0	
13000	15	270	9434.23	12919.23	0.00 N	646.31 W	430870.20 N	499224.59 E	646.31	0	
13083.62	15	270	9515	13000	0.00 N	667.95 W	430870.20 N	499202.95 E	667.95	0	Total Depth at 13083.62ft

All data is in feet (us) unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB(3465'+20'KB). 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 270.000° (Grid).

Coordinate Eastern Zone.
Grid Convergence at Surface is 0.000°.

Based upo at a Measured Depth of 13083.62ft.
The Bottom in the Direction of 270.000° (Grid).