Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM16357

1a. Type of Work: [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name:

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.:

2. Name of Operator: Nearburg Producing Company

8. Lease Name and Well No.: Kudu 9 Federal #4

3a. Address: 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705

3b. Phone No. (include area code): 432/686-8235

9. API Well No.: 30-025-36980

4. Location of Well (*Report location clearly and in accordance with any State equirements*)*

At surface: 330 FSL and 1650 FEL Unit O

At proposed prod. zone:

10. Field and Pool, or Exploratory: Tonto; Seven Rivers

11. Sec., T., R., M., or Blk. and Survey or Area: Sec 9-19S-33E

Capitan Controlled Water Basin

14. Distance in miles and direction from nearest town or post office*: 8 miles NE of Halfway

12. County or Parish: Lea County

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
330	240	40

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
1980	4000'	NM1307

21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will start*	23. Estimated duration
3673	9/1-04	30 days

RECEIVED
Hobbs OCD

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (*Printed/Typed*)	Date
Sarah Jordan	Sarah Jordan	7.8.04

Title: Production Analyst

Approved by (Signautre)	Name (*Printed/Typed*)	Date
/s/ Joe G. Lara	/s/ Joe G. Lara	NOV 24 2004

Title	Office
ACTING FIELD MANAGER	CARLSBAD FIELD OFFICE

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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly 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 page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

OPER. OGRID NO. 15742
PROPERTY NO. 34266
POOL CODE 59470
EFF. DATE 11/30/04
API NO. 30-025-36980

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Nearburg Producing Company
3300 North "A" Street, Building 2, Suite 120
Midland, Texas 77905

The undersigned accepts all applicable terms, conditions, stipulations and restrictions covering operations conducted on the leased land or portion thereof, as described below:

Lease No:	NMNM16357
Legal Description of Land:	330 FSL and 1650 FEL, Sec 9, 19S, 33E Lea County, New Mexico
Formation(s) (if applicable):	Tonto; Seven Rivers
Bond Coverage:	$25,000 statewide bond of Nearburg Producing Company
BLM Bond File No:	NM1307

7.8.21
Date

H. R. Willis
Drilling Manager

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
30-025-36980	59470	Tonto; Seven Rivers

Property Code	Property Name	Well Number
34266	KUDU 9 FEDERAL	4

OGRID No.	Operator Name	Elevation
015742	NEARBURG PRODUCING COMPANY	3673'

Surface Location

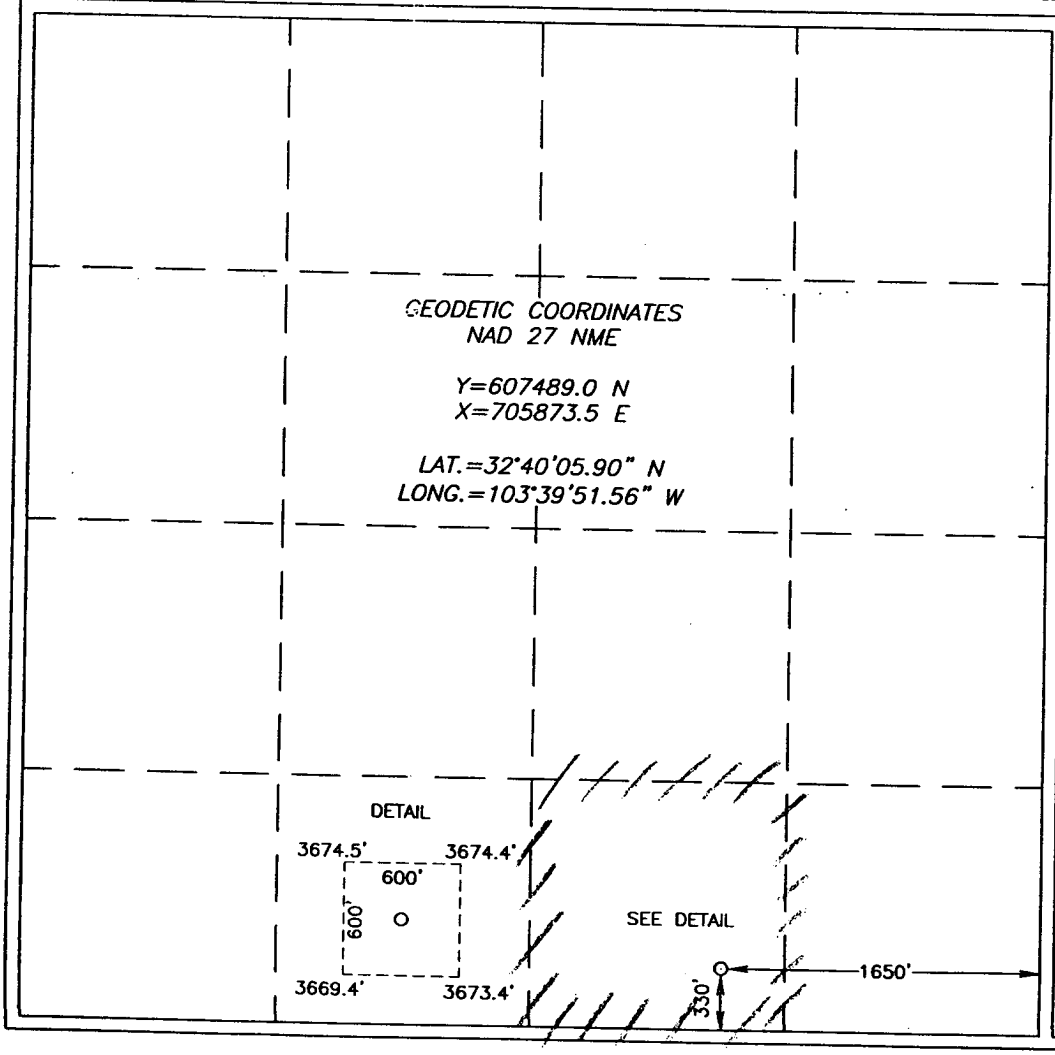
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	9	19-S	33-E		330'	SOUTH	1650'	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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.

Signature

Sarah Jordan
Printed Name

Prod Analyst
Title

7.8.04
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.

JUNE 22, 2004
Date Surveyed JR

Signature & Seal of Professional Surveyor

GARY L. EIDSON
NEW MEXICO
12641

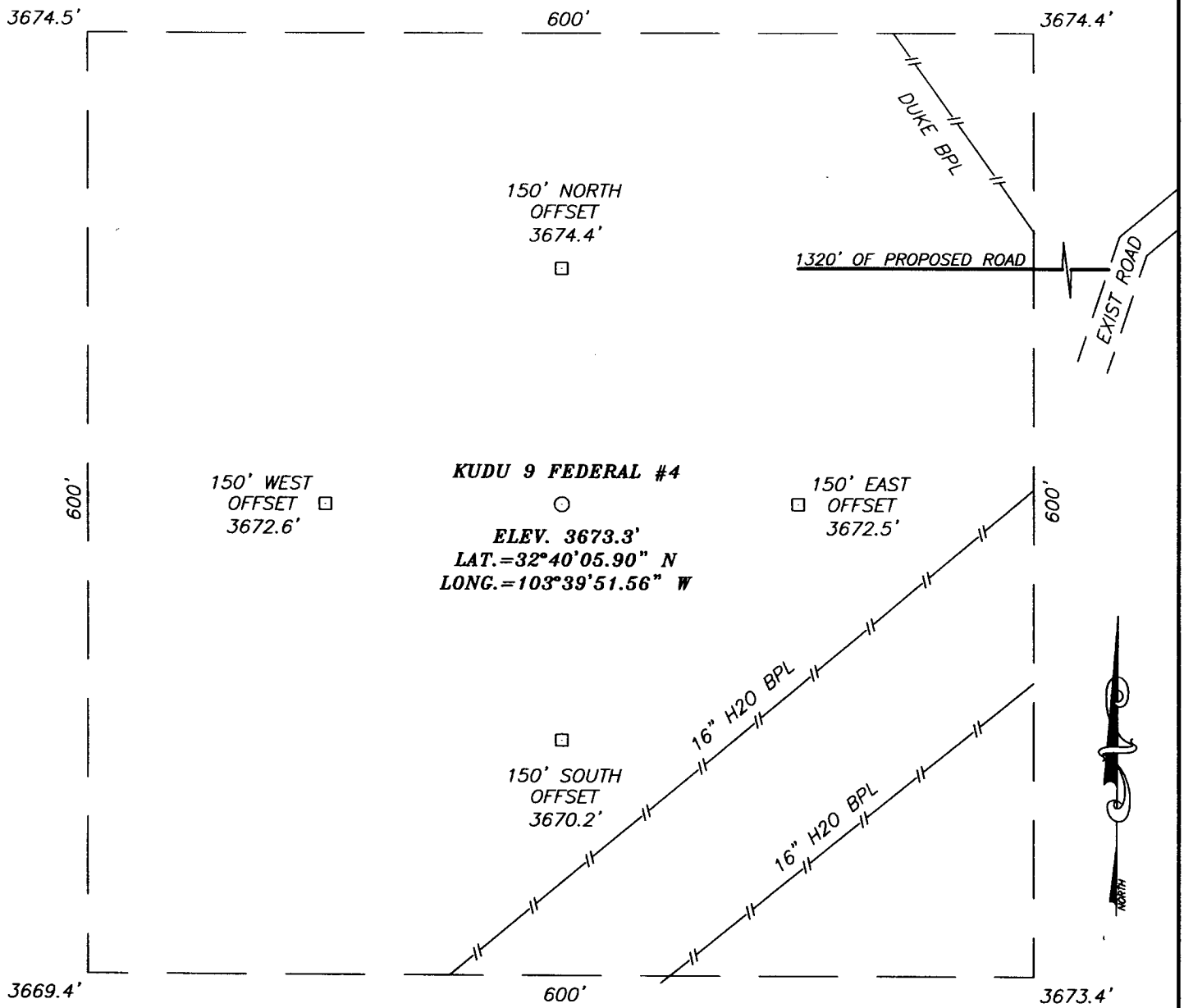
Gary L. Eidson 6/28/04

04.11.0733

Certificate No. GARY EIDSON 12641

SECTION 9, TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF SMITH RANCH RD. (CO. RD. H55) AND U.S. HWY. 62–180 GO NORTH ON SMITH RANCH RD. 2.1 MILES TO FORK IN ROAD. STAY TO THE LEFT AND FOLLOW PAVEMENT 0.1 MILES TO A CATTLE GUARD ON THE WEST SIDE OF THE ROAD. GO NORTHWEST APPROX. 0.6 MILES TO FORK IN ROAD. STAY TO THE RIGHT AND GO NORTHWEST 0.8 MILES. TURN RIGHT (NORTH) AND GO APPROX. 0.3 MILES. TURN RIGHT (EAST) AND GO APPROX. 0.1 MILES THROUGH CURVE TO THE NORTH. FOLLOW ROAD NORTH APPROX. 1.4 MILES. TURN LEFT AND GO 0.6 MILES. TURN RIGHT AND GO 0.4 MILES. TURN LEFT AND GO APPROX. 0.4 MILES TO A STAKED ROAD. FOLLOW STAKED ROAD APPROX. 300' WEST. THEN FOLLOW STAKED ROAD APPROX. 1320' NORTH TO PROPOSED LOCATION.

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

100 0 100 200 Feet

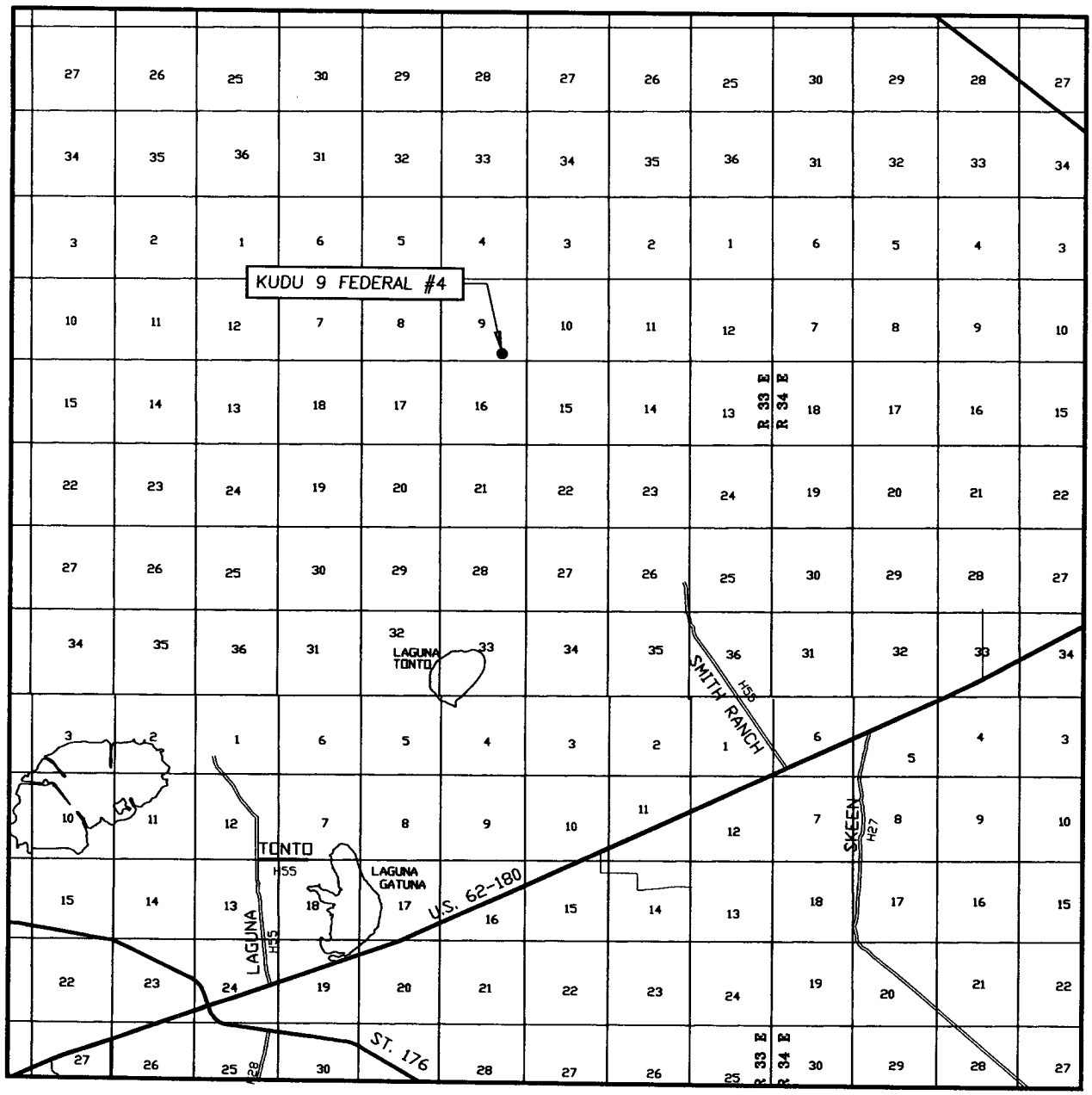
Scale: 1"=100'

NEARBURG PRODUCING COMPANY

KUDU 9 FEDERAL #4 WELL
LOCATED 330 FEET FROM THE SOUTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 9,
TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 06/22/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.0733	Dr By: J. RIVERO	Rev 1:N/A	
Date: 06/24/04	Disk: CD#10	04110733	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 1650' FEL

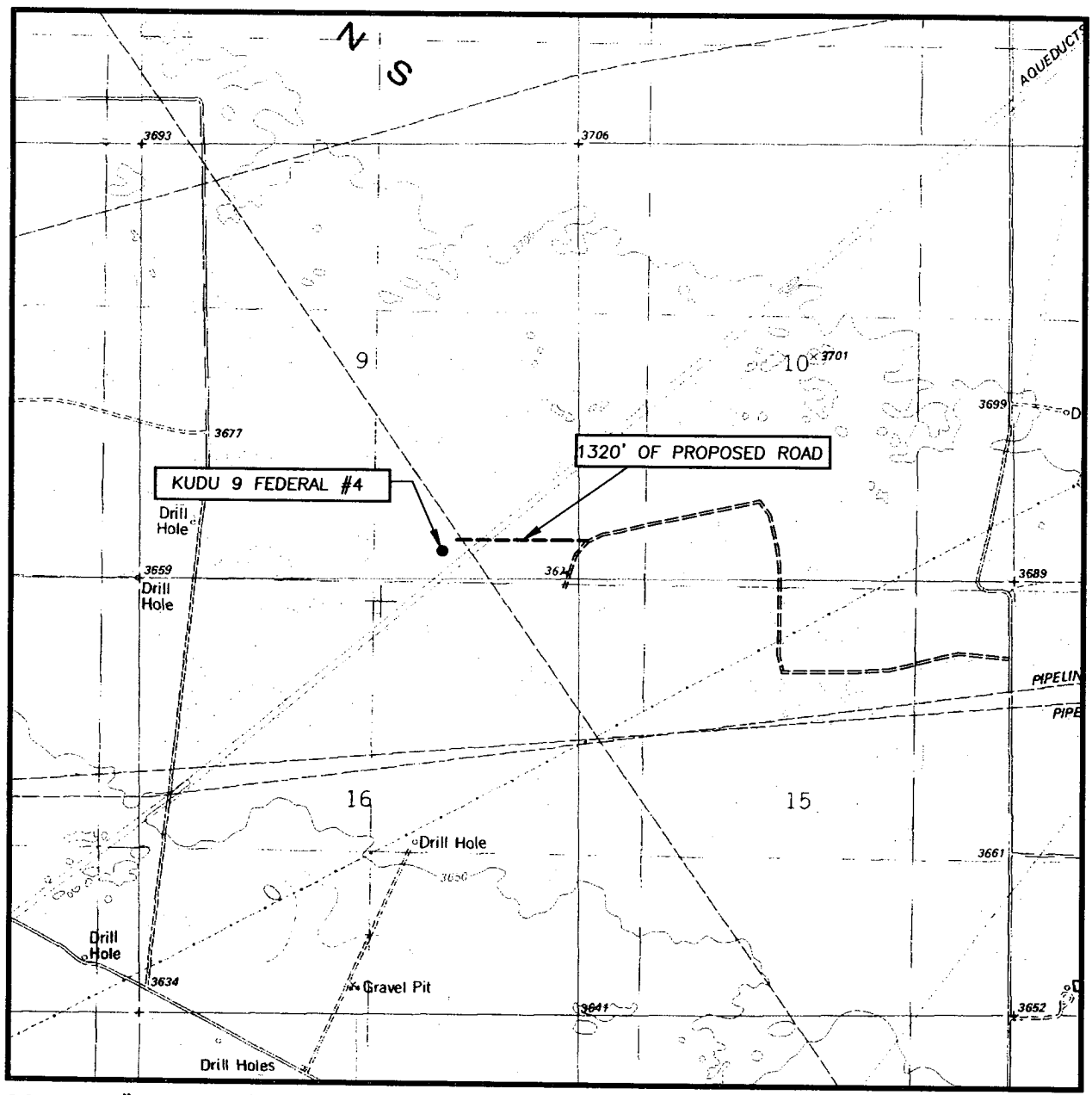
ELEVATION 3673'

OPERATOR NEARBURG PRODUCING COMPANY

LEASE KUDU 9 FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LAGUNA GATUNA NW, N.M. – 10'

SEC. 9 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FSL & 1650' FEL

ELEVATION 3673'

OPERATOR NEARBURG PRODUCING COMPANY

LEASE KUDU 9 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
LAGUNA GATUNA NW, N.M.

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

ATTACHMENT TO FORM 3160-3
KUDU 9 FEDERAL #4
330 FSL AND 1650 FEL, SEC 9, 19S, 33E
LEA COUNTY, NEW MEXICO

DRILLING PROGRAM

1. GEOLOGIC NAME OF SURFACE FORMATION

   Red Bed

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Anhydrite	1400
B/ Salt	3150
Yates	3350
7-Rivers	3700

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

7-Rivers	3700

4. CASING AND CEMENTING PROGRAM

Casing Size	From To	Weight	Grade	Joint
8-5/8"	0' – 1,550'	32#	K55	STC
4-1/2"	0' – 4,000'	11.6#	N80	LTC

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

We plan to drill a 12-1/4" hole to equal 1,550'. 8-5/8" casing will be cemented with 800 sxs Class "C" or volume necessary to bring cement back to surface.

7-7/8" hole will be drilled to 4,000' and 4-1/2" production casing will be cemented with approximately 800 sxs of Class "C" cement circulated to surface.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

The BOP stack will consist of a 3,000 psi working pressure, dual ram type preventer and annular.
A BOP sketch is attached.

6. TYPES AND CHARACTERTICS OF THE PROPOSED MUD SYSTEM

Spud and drill to 1,550' with fresh water mud for surface string. The production section from 1,550' to 4,000' will be 10.0 ppg Brine Water system with mud weight sufficient to control formation pressures.

7. AUXILLARY WELL CONTROL AND MONITORING EQUIPMENT

None required.

8. LOGGING, TESTING, AND CORING PROGRAM

DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS

None anticipated.

BHP expected to be 1,100 psi.

10. ANTICAPATED STARTING DATE:

Is planned that operations will commence on September 1, 2004 with drilling and completion operation lasting about 30 days.

SURFACE USE AND OPERATIONS PLAN FOR

DRILLING, COMPLETION, AND PRODUCING

NEARBURG PRODUCING COMPANY
KUDU 9 FEDERAL #4
330 FSL AND 1650 FEL, SEC 9, 19S, 33E
LEA COUNTY, NEW MEXICO

LOCATED

8 miles NE of Halfway

OIL & GAS LEASE

NMNM16357

RECORD LESSEE

Chase Oil Corporation

BOND COVERAGE

$25,000 statewide bond of Nearburg Producing Company

ACRES IN LEASE

240

GRAZING LEASE

Kenneth Smith

POOL

Tonto; Seven Rivers

EXHIBITS

A. Area Road Map
B. Drilling Rig Layout
C. Vicinity Oil & Gas Map
D. Topographic & Location Verification Map
E. Well Location & Acreage Dedication Map

This well will be drilled to a depth of approximately 4,000'.

1. EXISTING ROADS

   A. Exhibit A is a portion of a section map showing the location of the proposed well as staked.

   B. Exhibit C is a plat showing existing roads in the vicinity of the proposed well site.

2. ACCESS ROADS

   A. Length and Width

      The access road will be built and is shown on Exhibit D.

   B. Surface Material

      Existing.

   C. Maximum Grade

      Less than five percent

   D. Turnouts

      None necessary.

   E. Drainage Design

      Existing.

   F. Culverts

      None necessary.

   G. Gates and Cattle Guards

      None needed.

3. LOCATION OF EXISTING WELLS

   Existing wells in the immediate area are shown in Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

   Necessary production facilities for this well will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY

It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing roads shown on Exhibit D.

6. METHODS OF HANDLING WASTE DISPOSAL

A. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

B. Water produced during tests will be disposed of in the drilling pits.

C. Oil produced during tests will be stored in test tanks.

D. Trash will be contained in a trash trailer and removed from well site.

E. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

7. ANCILLARY FACILITIES

None required.

8. WELL SITE LAYOUT

Exhibit B shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit, and the location of major rig components.

9. PLANS FOR RESTORATION OF THE SURFACE

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. The well site will be cleaned of all trash and junk to leave the site in an as aesthetically pleasing condition as possible.

B. After abandonment, all equipment, trash, and junk will be removed and the site will be clean.

10. OTHER INFORMATION

A. Topography

The land surface at the well site is rolling native grass with a regional slope being to the east.

B. Soil

Topsoil at the well site is sandy soil.

C. Flora and Fauna

The location is in an area sparsely covered with mesquite and range grasses.

D. Ponds and Streams

There are no rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

There are no residences within a mile of the proposed well site.

F. Archaeological, Historical, and Cultural Sites

None observed on this area.

G. Land Use

Grazing

H. Surface Ownership

Bureau of Land Management (USA)

11. OPERATOR'S REPRESENTATIVE

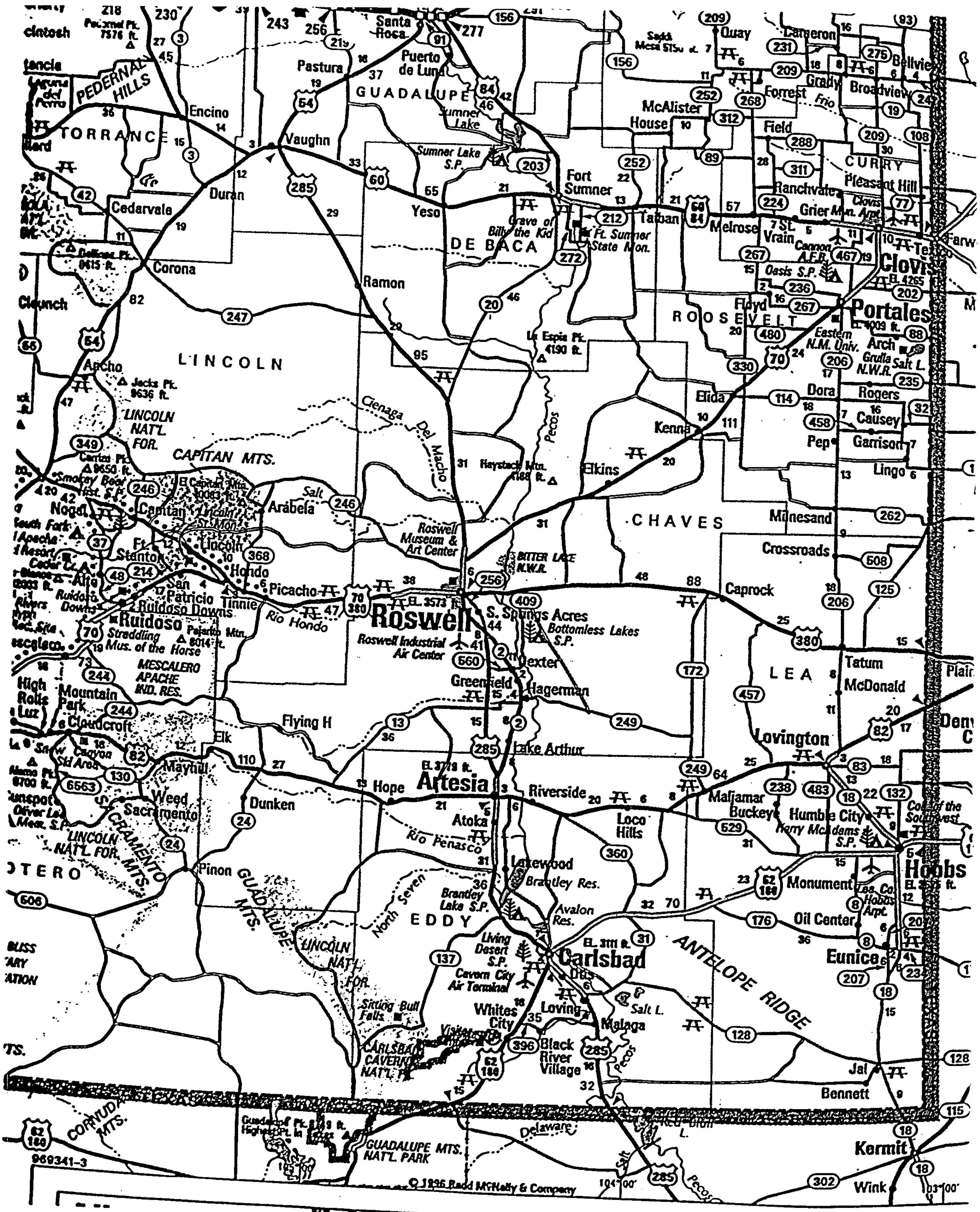
H. R. Willis
3300 North "A" Street, Bldg 2, Suite 120
Midland, Texas 79705
Office: (432) 686-8235
Home: (432) 697-2484

12. 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 presently 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 Nearburg Producing Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

7.8.04
Date

H R Willis/SG
H. R. Willis
Drilling Manager


Santa Rosa
Pastura
Puerto de Luna
GUADALUPE
Sumner Lake
Sumner Lake S.P.
Fort Sumner
Grave of Billy the Kid
Ft. Sumner State Mon.
Taiban
Quay
Cameron
Bellview
Grady
Broadview
Forrest
McAlister
House
Field
CURRY
Pleasant Hill
Ranchvale
Clovis Mun. Arpt.
Grier
Melrose
St. Vrain
Cannon A.F.B.
Oasis S.P.
Texico
Clovis
Portales
Floyd
ROOSEVELT
Eastern N.M. Univ.
Arch
Salt L.
Elida
Dora
Rogers
Causey
Kenna
Pep
Garrison
Lingo
Milnesand
Crossroads
Caprock
Tatum
McDonald
LEA
Lovington
Maljamar
Buckeye
Humble City
Harry McAdams S.P.
Hobbs
Monument
Oil Center
Eunice
Jal
Bennett
Kermit
Wink
TORRANCE
PEDERNAL HILLS
Encino
Vaughn
Duran
Cedarvale
Corona
Yeso
DE BACA
Ramon
Clonch
LINCOLN
Ancho
LINCOLN NAT'L FOR.
CAPITAN MTS.
Cienaga Del Macho
Pecos
Haystack Mtn.
Elkins
CHAVES
Capitan
Arabela
Lincoln
Ft. Stanton
Hondo
San Patricio
Tinnie
Picacho
Ruidoso
Ruidoso Downs
Rio Hondo
Roswell Museum & Art Center
Bitter Lake N.W.R.
Roswell
Roswell Industrial Air Center
S. Springs Acres
Bottomless Lakes S.P.
Dexter
Greenfield
Hagerman
MESCALERO APACHE IND. RES.
Mountain Park
High Rolls
Cloudcroft
Flying H
Elk
Mayhill
Lake Arthur
Artesia
Hope
Riverside
Loco Hills
Weed
Sacramento
Dunken
Atoka
Rio Penasco
LINCOLN NAT'L FOR.
SACRAMENTO MTS.
OTERO
Pinon
GUADALUPE MTS.
Lakewood
Brantley Res.
Brantley Lake S.P.
North Seven
EDDY
Avalon Res.
ANTELOPE RIDGE
Living Desert S.P.
Carlsbad
Cavern City Air Terminal
Sitting Bull Falls
Whites City
Loving
Malaga
Salt L.
Black River Village
CARLSBAD CAVERNS NAT'L PK.
CORNUDAS MTS.
GUADALUPE MTS. NAT'L PARK
Delaware
969341-3
© 1996 Rand McNally & Company

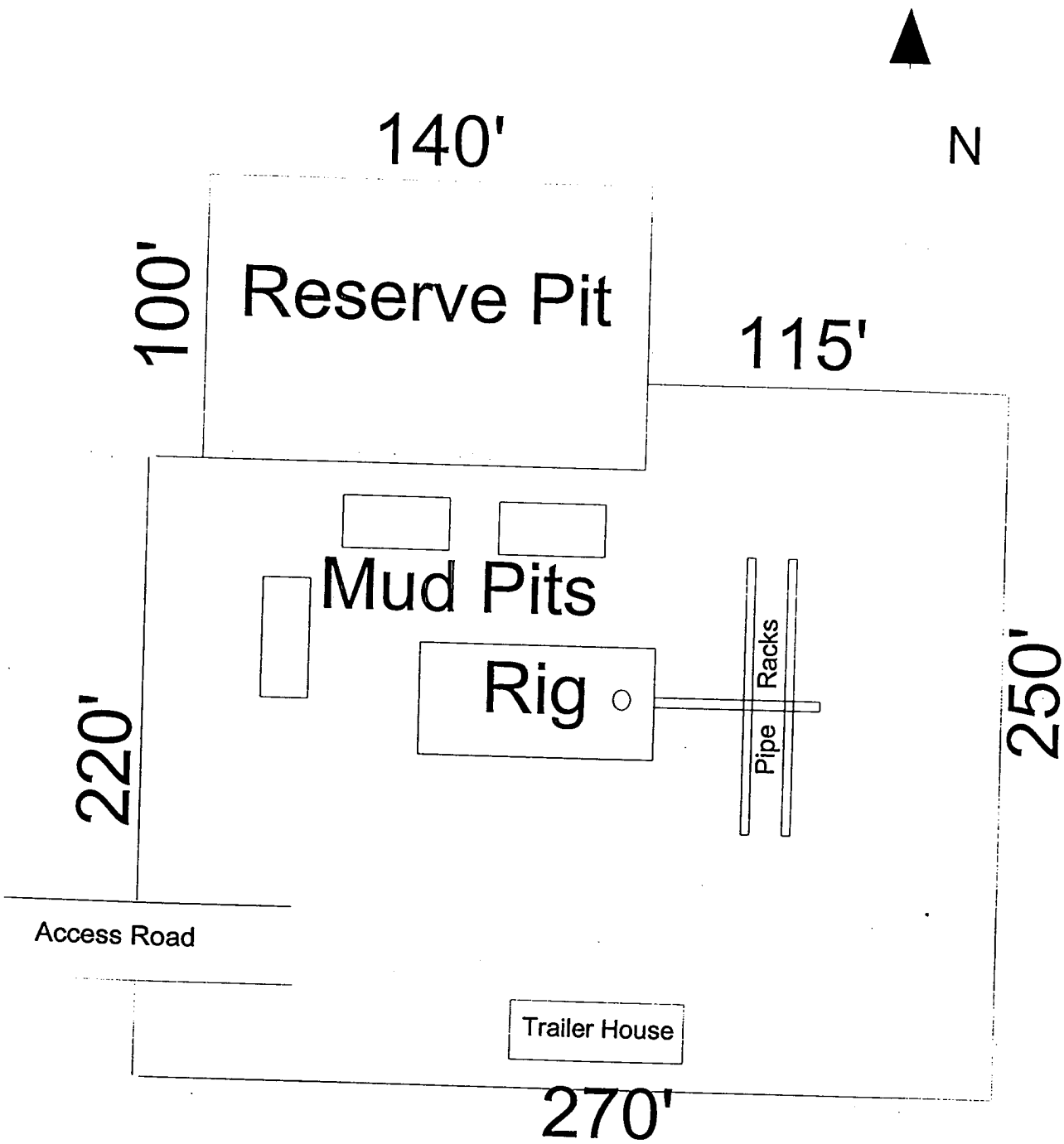
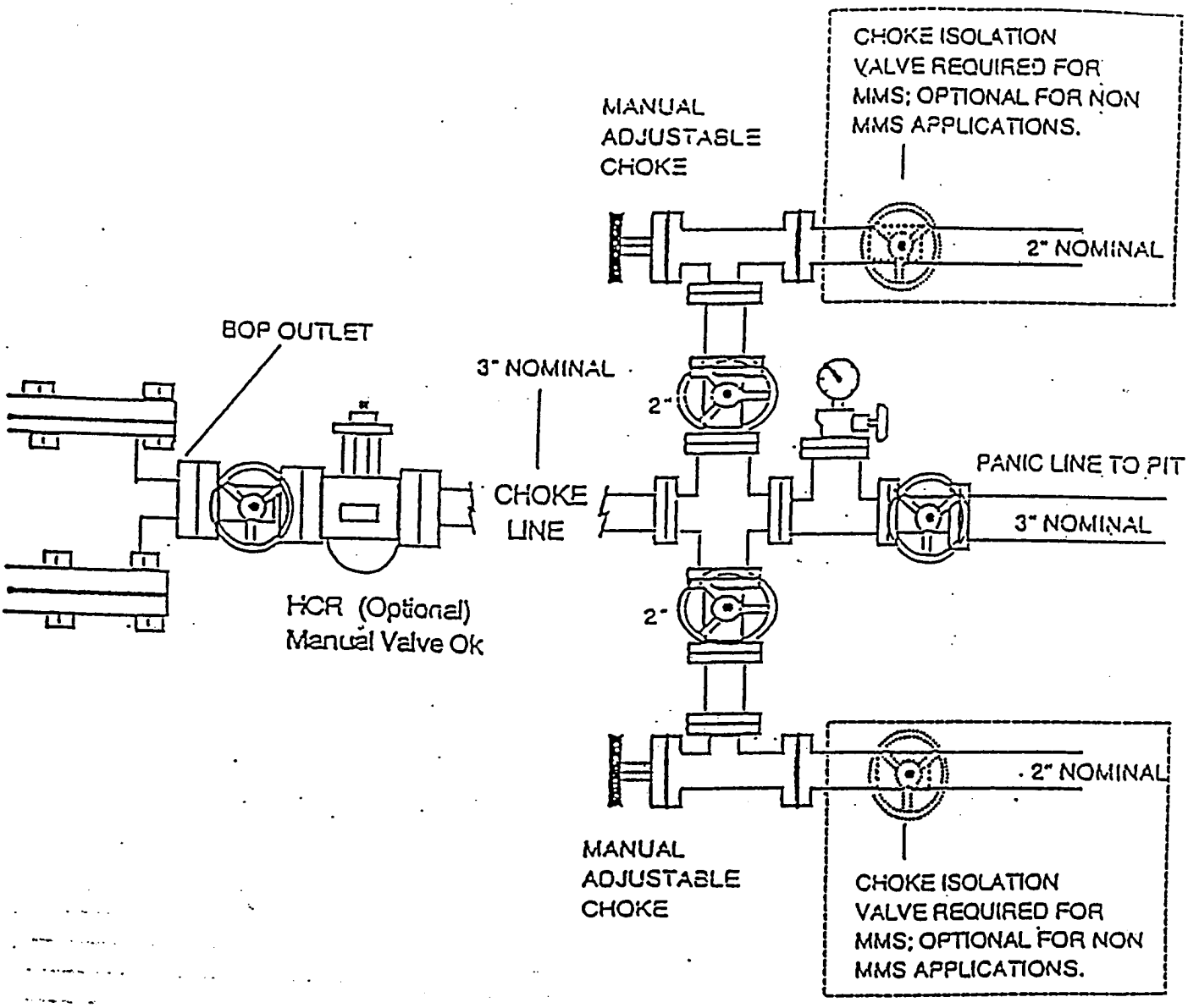


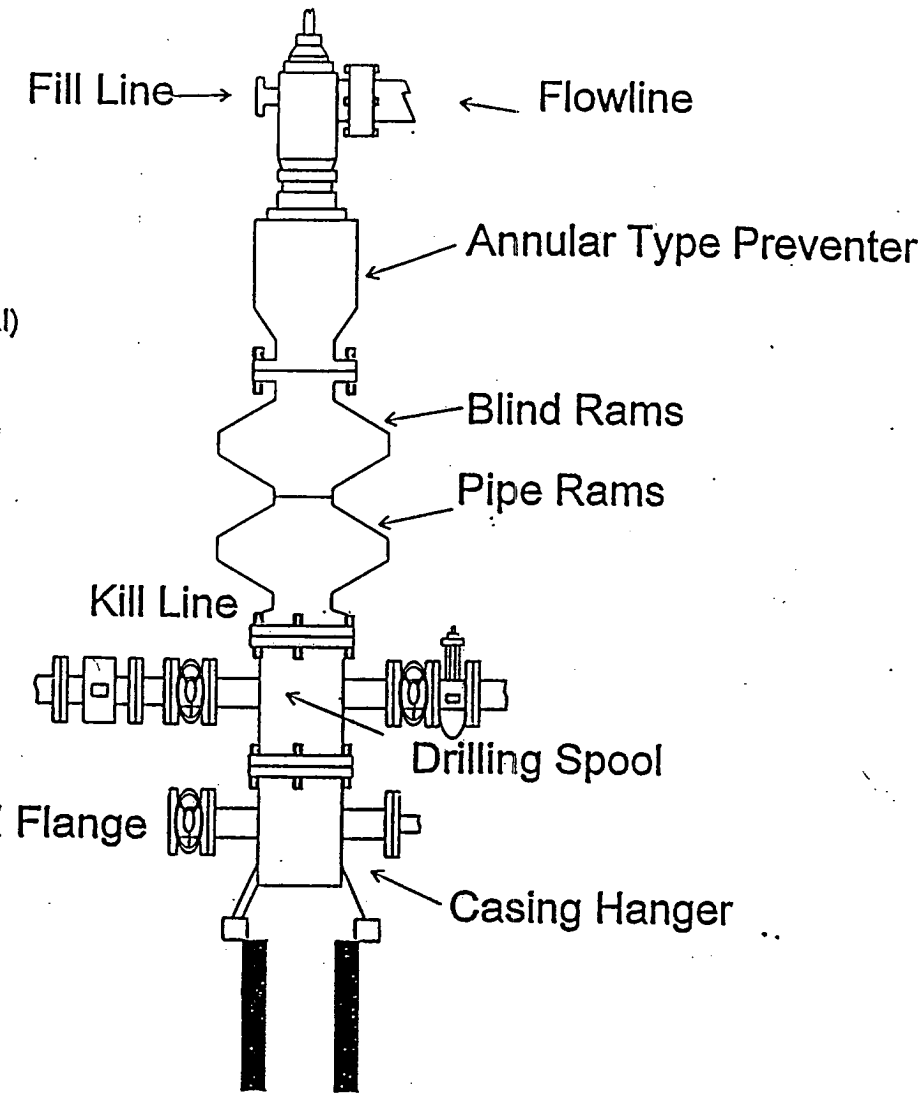
EXHIBIT B
DRILLING RIG LAYOUT
NEARBURG PRODUCING COMPANY

SCALE 1" = 50'

NEARBURG PRODUCING COMPANY
CHOKE MANIFOLD
2M AND 3M SERVICE



NEARBURG PRODUCING COMPANY
BOPE SCHEMATIC



Rotating Head (Optional)
Drilling Nipple option
must include a fill-up
line. Do not use kill line
for fill up.

900 Series

HYDROGEN SULFIDE DRILLING OPERATIONS PLANS
NEARBURG PRODUCING COMPANY
KUDU 9 FEDERAL #4

1. HYDROGEN SULFIDE TRAINING

   A. All regularly assigned personnel, contracted or employed by Nearburg Producing Company, will receive training from a qualified instructor in the following areas prior to commencing drilling potential hydrogen sulfide bearing formations in this well:

      1. The hazards and characteristics of hydrogen sulfide (H2S).

      2. The proper use and maintenance of personal protective equipment and life support systems.

      3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.

      4. The proper techniques for first aid and rescue procedures.

   B. In addition, supervisory personnel will be trained in the following areas:

      1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

      2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

      3. The contents and requirements of the H2S Drilling Operations Plan.

   C. There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

A. Well Control Equipment:

1. Flare line with continuous pilot.

2. Choke manifold with a minimum of one remote choke.

3. Blind rams and pipe rams to accommodate all sizes with properly sized closing unit.

4. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head and flare gun with flares as needed.

B. Protective Equipment for Essential Personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.

C. H2S Detection and Monitoring Equipment:

1. Two portable H2S monitors positioned and location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.

2. One portable SO2 monitor positioned near flare line.

D. Visual Warning systems:

1. Wind direction indicators as shown on well site diagram.

2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example attached.

E. Mud Program

1. The Mud Program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weights, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

2. A mud-gas separator will be utilized as needed.

F. Metallurgy

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and line and valves shall be suitable for H2S service.

G. Communication

1. Cellular telephone communications in company vehicles and mud logging trailer.

2. Land line (telephone) communications at area office.

H. Well Testing

Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing in an H2S environment will be conducted during the daylight hours.

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: Nearburg Producing Company Telephone: 686-8235 e-mail address: sjordan@nearburg.com
Address: 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705
Facility or well name: Kudu 9 Fed #4 API #: 30-025-36980 U/L or Qtr/Qtr 0 Sec 9 T 19S R 33E
County: Lea Latitude _____ Longitude _____ NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☒ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlimited ☐ 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) X
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) X
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) X
	Ranking Score (Total Points)	0

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 end 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: 7/8/04
Printed Name/Title: Sarah Jordan, Production Analyst Signature: Sarah Jordan

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: NOV 30 2004
Printed Name/Title: _____ Signature: ORIGINAL SIGNED BY PAUL F. KAUTZ PETROLEUM ENGINEER

PREPARED FOR:

Mr. Butch Willis
NEARBURG PRODUCING COMPANY
Midland, Texas

Kudu 9 Federal # 4
Section 9
T-19-S
R-33-E
Lea County, New Mexico

Prepared by:
Jason Edwards
July 15, 2004

DRILLING FLUID SYNOPSIS

Kudu 9 Federal # 4
Section 9
T-19-S
R-33-E
Lea County, New Mexico

Recommended Casing

8 5/8" at 1,550'

4 1/2" at 4,000'

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	DRILL SOLIDS	COMMENTS
0'-1,550'	8.4 to 8.5	28 to 29	No Control	<1%	Fresh Water, Star NP-110, Lime, Paper
1,550'-3,000'	9.0 to 10.0	28 to 29	No Control	<1%	Cut Brine, Star NP-110, Caustic, Paper
3,000'-4,000'	9.0 to 10.0	30 to 32	<20cc	<5%	Star NP-110, Starch, Caustic

ESTIMATED FORMATION TOPS

RUSTLER	1,530'
TANSILL	3,120'
YATES	3,350'
SEVEN RIVER	3,680'
TD	4,000'

RECOMMENDED CASING PROGRAM

8 5/8"	at	1,550'
4 1/2"	at	4,000'

RECOMMENDED DRILLING FLUID PROGRAM

DEPTH	WEIGHT	VISCOSITY	FILTRATE
0'-1,550'	**8.4-8.5**	**28-29**	**No Control**

Spud with a Fresh Water Gel and Lime type fluid, circulating through the working pits. Use Paper, as needed, for seepage control. . If lost returns are encountered, please refer to **Ambar Lone Star's Lost Circulation Procedure.**

DEPTH	WEIGHT	VISCOSITY	FILTRATE
1,550'-3,000'	**9.0-10.0**	**28-29**	**No Control**

Drill out with cut brine, circulating through the reserve. Use Caustic to control pH at 9-10. Utilize Star NP-110 for sweeps and to control solids. Additions of Paper should be made as needed for seepage. While drilling this interval, monitor back ground gas and adjust the fluid weight if needed, with additions of brine. There is a potential for lost returns in this interval. If lost returns are encountered, please refer to **Ambar Lone Star Mud's Lost Circulation Procedure.** If a mud is required in this interval for evaluation, we recommend you mud up as discused in the next interval.

DEPTH	WEIGHT	VISCOSITY	FILTRATE
3,000'-4,000'	**9.0-10.0**	**30-32**	**<20cc**

At **3,600'**, or as hole conditions dictate, return to the working pits and mud up with a **Star NP-110/Starch** system. Use Caustic Soda to control pH at 9.0 to 9.5. Use Starch for an API fluid loss of less than 20cc. It will be necessary to monitor sulfite-reducing bacteria with this system. Our engineer will perform this test at the well, and recommend additions of bactericide as needed to control. If abnormal pressure is encountered, adjust the fluid weight with brine as needed. There is a potential for lost returns in this interval. If lost returns are encountered, please refer to **Ambar Lone Star's Lost Circulation Procedure.** Prior to evaluation or running pipe, sweep the hole with a viscous Salt Gel sweep.

Estimated Drilling Fluid Cost: $4,000.00 to $8,000.00
Estimated Drilling Days: 7 to 9

Cost is based on a 600 bbl system and does not reflect lost circulation, water flows, or abnormal pressures.

AMBAR LONE STAR FLUID SERVICES
LOST CIRCULATION PROCEDURES

Loss of circulation is a possibility on this well. Although each well is different, there are some basic procedures and drilling practices that can aid in reducing the severity or, in some cases, prevent lost circulation. Below is a list, which may prove helpful.

1. Maintain viscosities as low as possible and still clean the hole. We recommend a viscosity of 28 to 32 on this well.
2. Maintain mud weights as low as possible without jeopardizing safety.
3. Use slow trip speeds to prevent swabbing and surging.
4. Break circulation in stages with reduced pump strokes while tripping in the hole.
5. Rotate pipe prior to and while tripping in the hole.
6. Use an optimum hydraulics program.

Severe seepage to total loss of circulation may occur even when the above procedures are followed. For severe seepage, we recommend circulating pills (50-100 bbls. depending on hole size) containing 10-30 ppb of various (fibrous and flake) lost circulation material. It would be helpful to reduce pump rates until full returns are established. Once full returns are regained, normal pump rates should be returned to in stages. The inclusion of lost circulation material in the entire system is recommended only if the above procedures do not adequately seal off the loss zone.

For total loss of circulation, we recommend pulling enough stands to place the bit above the loss zone. A viscous pill containing the appropriate type of loss circulation material should be spotted. The size of the pill should be determined by hole size and should contain at <u>least</u> 30 ppb lost circulation material. Several attempts should be made before considering other alternatives. After returns are regained, we recommend staging back to bottom using the procedure outlined above.

If returns are not fully re-established, consideration should be given to dry drilling while pumping periodic sweeps to ensure hole cleaning.

Nearburg Producing Company

3300 N A St., Bldg 2, Suite 120
Midland, TX 79705

Hydrogen Sulfide (H2S) Contingency Plan

For

Kudu 9 Federal #4
330 FSL and 1650 FEL
Sec 9, T19S, R33E
Lea County, New Mexico

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

TABLE OF CONTENTS

		SECTION
PURPOSE	.....	1
SCOPE	.....	2
DEFINITIONS	.....	3
THE PLAN	.....	4
DISTRIBUTION AND REVIEW	.....	5
APPROVALS	.....	6
APPENDIX A	ROE calculation data	7
APPENDIX B	Contact Information	8
APPENDIX C	Site specific plans	9
APPENDIX D	Emergency Equipment	10
APPENDIX E	Layout Diagram	11
APPENDIX F	Revision Log	12

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

1. PURPOSE

This plan is intended to protect the health and safety of the public, contractors and Nearburg Producing Company (NPC) personnel should an unanticipated release of a potentially hazardous volume of Hydrogen Sulfide (H2S) occur.

Further to:

- Comply with the Bureau of Land Management's (BLM) Onshore Oil and Gas Operations Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations (43 CFR Part 3160).
- Comply with the State of New Mexico Oil Conservation Division's (NMOCD) rule 19 NMAC 15.C 118.
- Assure proper notification of the appropriate parties and agencies.

2. SCOPE

The provisions of this document are intended to address Hydrogen Sulfide (H2S) releases and H2S emergencies at Nearburg Producing Companies production batteries and all surrounding operated field locations in the McKittrick Hills Field. Facilities for which calculations indicate a potential hazardous volume of H2S could occur have additional site specific response information and radius of exposure drawn on the attached plat map. The field is located approximately 20 miles west of Carlsbad, New Mexico (Eddy County).

This plan is intended to be used in conjuction with the Emergency Response plan that is available at the Artesia Field Office and applies to RMS Level 1 incidents.

3. DEFINITIONS

All Clear - Notification of effected personnel, by the response leader, that the incident has ended and the area is safe to re-enter.

A Potentially Hazardous Volume - a volume of Hydrogen Sulfide (H2S) gas of such concentrate that:

- The 100-ppm ROE includes any public area.
- The 500-ppm ROE includes any public road.
- The 100-ppm ROE exceeds 3,000 feet.

Facility – Equipment involved in producing, processing, or transporting natural gas and/or crude oil, including the property to the edge of the pad or fence.

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

Hydrogen Sulfide Gas (H2S) – is extremely flammable, colorless, poisonous gas that may occur naturally as a component of production streams, such as crude oil, produced water and natural gas. At low concentrations it has a rotten egg odor, but at higher concentrations deadens the sense of smell. Its specific gravity is heavier than air giving it a tendency to collect in low-lying areas on still days. The permissible exposure limit is 10 ppm and the short term exposure limit is 15 ppm. It is considered to be immediately dangerous to life and health at 300 ppm. H2S is readily dispersed in air and is water soluble.

ICS (Incident Command System) – A team based concept for emergency response in which roles and responsibilities are predetermined.

Incident Commander (IC) – Senior Nearburg Producing Company employee in charge of an emergency response.

Incipient Stage Fire – A fire in the beginning or very early stages of development, which can be effectively extinguished by one or more persons with portable fire fighting equipment.

Muster Site – A pre-defined staging or meeting area.

RMS Level I – an emergency that can be reasonably addressed by Artesia Area Office in which the incident occurs and that can be resolved in approximately two days or less.

ROE (Radius of Exposure) – The radius constructed with the point of escape (of gas) as its starting point and its length calculated using the Pasquill-Gifford derived equation or computer modeling where the H2S concentration is greater than 10%.

PPM – Parts per Million

Public Area – Any building or structure that is not associated with the well, facility or operation for which the ROE is being calculated and that is used as a dwelling, office, place of business, church, school, hospital or government building, or any portion of a park, city, town, village, or designated school bus stop or other similar area where members of the public may reasonably be expected o be present.

Public Road – Any federal, state, municipal or county road or highway.

Serious Incident – An event which results or has the potential to result in severe personal injury and/or significant equipment damage.

Sulfur Dioxide (SO2) – A heavy colorless toxic gas that is formed when hydrogen sulfide is burned. It has a pungent odor and is a respiratory irritant. The permissible exposure limit is 2 ppm, the short rem exposure limit is 5 ppm. It is considered to be immediately dangerous to life and health at 100 ppm. SO2 is readily dispersed in air and is water soluble.

Total Personnel Evacuation – An evacuation of all persons (contract employees, or visitors) from the emergency area to a muster area.

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

4. THE PLAN

Training:

All personnel (company, contractors and sub-contractors) working in the field for NPC are required to complete hydrogen sulfide training before beginning work and annually thereafter.

Training on the contents of this plan shall be provided to all NPC and appropriate contract personnel working for NPC:

- whenever the employees' responsibilities or designated actions under the plan change,
- whenever the contents of the plan are changed/revised
- whenever a new employee begins employment, and
- periodically as needed for all employees.

Nearburg Producing Company supervision is responsible for this training.

Orientation:

All persons visiting or working at Indian Basin shall receive an orientation covering the following minimum items:

- What types of emergencies are possible,
- What the emergency evacuation alarm sounds like in the gas plant,
- How to report an incident/emergency,
- Who will be in charge during an emergency,
- How to safely evacuate the plant, and
- Where to assemble so that all persons can be accounted for.

The NPC representative responsible for the contractors or visitors shall conduct the orientations and shall document attendees and dates.

H2S Monitors:

All personnel working at the Indian Basin are required to wear personal H2S monitor at all times when working in the plant or field. Monitors should have a vibrating alarm if used in high noise areas.

Activation:

Phase I – activated when:

1. Sustained H2S concentration reaches 10 parts per million (ppm) in any work area and the source is not readily identified and/or controllable.
2. Continuous H2S levels are detected at 10 ppm (or greater) at any public road, near an occupied residence or bus stop, and the source is not readily identified and/or immediately controlled.

Phase II – activated when:

1. A potentially hazardous volume of H2S is detected.
2. When sustained H2S concentrations exceed 50 ppm at any facility boundary.

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

Phase I:

Upon discovery on-site personnel should:

- ☐ Make others on-site aware of the presence of H2S and leave the area upwind or crosswind to a safe location. (Pre-determine if a pre-job tailgate meeting was conducted).
- ☐ Prevent unauthorized persons from entering the area. Request assistance if needed.
- ☐ If a residence or other public area is in the vicinity, monitor for H2S to ensure exposure is less than 10 ppm. Notify supervisor if higher exposures are noted or if any other questions arise about steps necessary to protect these sensitive areas.
- ☐ If considering re-entering the area to assess the H2S source, ensure you have been properly trained to respond. Use an H2S monitor with digital display (preferably a multi-gas monitor) and have a supplied air respirator (SAR) and back up person with SAR readily available. Consider notification of supervisor if appropriate.
- ☐ Proceed with caution. If H2S concentration reaches 10 ppm in your breathing zone, back out and use SAR to re-enter. **If H2S concentration reaches 50 ppm at the facility boundary, immediately notify supervision.**
- ☐ If source can be safely controlled, monitor area to ensure H2S levels are below 10 ppm. End response here and sound all clear to allow others to re-enter the area. Report length of release and volume to supervisor.
- ☐ If the source of H2S cannot be identified and/or controlled, or if you cannot do so with out exposing yourself to danger, leave the area to a safe distance.
- ☐ Notify supervision.
- ☐ Continue to monitor for H2S and maintain site security until instructed be supervision to do otherwise.

Supervision:

- ☐ Gather necessary information to determine the course of action and level of response.
- ☐ Mobilize any additional man power or equipment necessary.
- ☐ Ensure Phase II measures are implemented if appropriate.
- ☐ Continue to monitor situation until incident is over.
- ☐ Make notifications if required.
- ☐ Complete reports if required.
- ☐ Investigate as indicated.

Phase II

Upon discovery on-site personnel should:

- ☐ Make others on-site aware of the presence of H2S and leave the area upwind or crosswind to a safe location. (Pre-determined if a pre-job tailgate meeting was conducted).
- ☐ Prevent authorized persons from entering the area.
- ☐ **Notify Supervisor.**

Supervision:

- ☐ Initiate the Incident Command System as deemed appropriate.
- ☐ Mobilize the resources necessary to maintain site security and provide for the protection of personnel and the public.
- ☐ Issue warnings to all NPC personnel by radio and/or phone (IB Contact List) to make them aware of the incident and its location. Have non-essential personnel leave the area. If deemed necessary, order a total personnel evacuation of the area.

- ☐ Notify non-company personnel known to work or reside in the area (IB Contact List). If necessary to ensure their safety, dispatch NPC personnel with the appropriate monitor, supplied air respirators and means of communication to these locations. *(Appendix B)*
- ☐ Have NPC personnel set up road blocks to prevent unauthorized entry into impacted areas until relieved by law enforcement or other authorized personnel.
- ☐ Make all appropriate notifications to NPC, Federal, State and local authorities.
- ☐ When the release has been contained and monitoring indicates the area is safe to re-enter, terminate operations and sound the all clear.
- ☐ Complete records if required.
- ☐ Investigate as indicated.
- ☐ For spills, well blowouts, fires, natural disasters and terrorist or bomb threats

All other personnel not involved in the immediate response:

- ☐ If a total evacuation is ordered, report to the incident command center or nearest muster site to which you have safe access. (See Appendix A for muster site locations)
- ☐ Ensure all contract personnel working for you (or in your area) are accounted for and have them report to a safe muster site.
- ☐ Senior employee at each muster site should make a roster of all personnel reporting to that muster site and be prepared to make it available to the incident commander (IC).
- ☐ Maintain communication with the IC and be prepared to offer assistance as it is requested.

Ignition of H2S:

While no uncontrollable release of H2S is anticipated, should ignition of gas be necessary for the protection of personnel or the public, the determination would be made by the NPC Incident Commander. The method of ignition will maintain the safety of the person performing this task as the primary concern. The most likely method would be the use of a flare gun from a safe distance.

If this becomes necessary, monitoring will include sulfur dioxide (SO2) in addition to H2S.

PUBLIC PROTECTION PLAN
NEARBURG PRODUCING COMPANY

6. APPROVALS

Approved by: Name: _____ Date: 7.19.04
Title: Drilling Manager

Name: _____ Date: _____
Title: Production Supervisor

NEARBURG PRODUCING COMPANY
REGULATORY CONTACTS

Agency	Contact Name		Division/Area	Main Phone #	Cell Phone	Home Phone #
	First	Last				
NMOCD	Emergency Number		District 1	505-370-7106		
NMOCD	Field Rep On-Call		District 1	505-370-7106		
NMOCD	Chris	Williams	District 1	505-393-6161	505-370-3182	
NMOCD	Sylvia	Dickey	District 1	505-393-6161		
NMOCD	Elidio	Gonzales	District 1	505-393-6161	505-370-3177	
NMOCD	Buddy	Hill	District 1	505-393-6161	505-370-3180	
NMOCD	Larry	Johnson	District 1	505-393-6161	505-370-3184	
NMOCD	Lori	Wortenberhy	Santa Fe Division Ofc.	505-827-7131	505-476-3460	505-466-0134
NMOCD	Ed	Martin	Santa Fe Division Ofc.	505-827-7131	505-476-3492	505-685-4056
NMOCD	Roger	Anderson	Santa Fe Division Ofc.	505-827-7131	505-476-3490	505-471-2017
NM State Police			District 1, Hobbs	505-392-5588		
BLM			Hobbs	505-393-3612		
US Coast Guard			National Response Center	800-424-8802		
NMED			Air Quality Bureau	505-827-1494		
	State Emergency Response Center			505-827-9126		
NM OSHA	New Mexico OSHA Ofc.			505-827-2850		

EMERGENCY SERVICES

Service Provider	Description	Main Phone	
General Emergency	***Police, Fire, Ambulance***	***911***	
Hobbs Police, Fire, Ambulance Service		505-397-9265	
Lea Regional Hospital	Medical Services	505-392-1979	
Hobbs Fire Dept.	Fire Control	505-397-9308	
Lea County Sheriff		505-394-2020	

NEARBURG PRODUCING COMPANY
EMERGENCY RESPONSE PLAN

Position	Office Phone	Cell Phone #	Home Phone #
Drilling Superintendent			
Butch Willis	432-686-8235 (223)		
Production Superintendent			
Matt Lee	505-746-0422	505-365-6662	505-746-0932
Operations			
Roger King	505-746-0422	505-361-3605	505-885-3605
Rick Foutch	505-746-0422	505-361-4211	505-887-7844
Jerry Stark	505-746-0422	505-365-4672	505-746-3862
Planning Section			
Fred White	214-739-1778	469-644-1326	972-931-8845
Bob Shelton	432-686-8235 (214)	432-682-3100	432-528-6134
Public Affairs			
Bob Shelton	432-686-8235 (214)	432-682-3100	432-528-6134