

UNITED STATES
New Mexico Oil Conservation Division, District I
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1625 N. French Drive
Hobbs, NM 88240

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

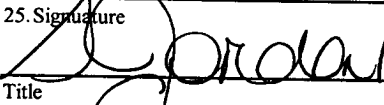
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM1003470002052
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Nearburg Producing Company		7. Unit or CA Agreement Name and No.
3a. Address 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705	3b. Phone No. (include area code) 432/686-8235	8. Lease Name and Well No. Panama 13 Federal #4
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 990 FSL and 660 FWL per SN dated 8/25/04 At proposed prod. zone 780 FWL Unit M		9. API Well No.
14. Distance in miles and direction from nearest town or post office* 8 miles NE of Halfway		10. Field and Pool, or Exploratory Tonto; Seven Rivers
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 990		11. Sec., T., R., M., or Blk. and Survey or Area Sec 13-19S-33E
16. No. of Acres in lease 40		12. County or Parish Lea County
17. Spacing Unit dedicated to this well SWSW		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320		20. BLM/BIA Bond No. on file NM1307
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3684		22. Approximate date work will start* 9/1/04
		23. Estimated duration 30 days

24. Attachments CAPTAIN CONTROLLED WATER BASIN

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

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

25. Signature 	Name (Printed/Typed) Sarah Jordan	Date 7.15.04
Title Production Analyst		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 16 SEP 2004
Title FIELD MANAGER	Office 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 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 page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DECLARED WATER BASIN
CEMENT BEHIND THE 8 3/8"
CASING MUST BE CIRCULATED
OPER. OGRID NO. 15742
PROPERTY NO. 26700
POOL CODE 59475
EFF. DATE 9/23/04
API NO. 30-025-36874

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Nearburg Producing Company

3a. Address

3300 N A St, Bldg 2, Ste 120, Midland, TX 79705

3b. Phone No. (include area code)

432/686-8235 x 203

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

990 FSL and 660 FWL

5. Lease Serial No.

NMNM100347

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Panama 13 Federal #4

9. API Well No.

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

11. County or Parish, State

Lea County NM

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

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other Location

Move

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 final site is ready for final inspection.)

Per request from BLM rep Don Peterson, due to topography (sand dunes), NPC is requesting location move as follows:

From - 990 FSL and 660 FWL

TO - 990 FSL and 780 FWL.

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

H. R. Willis

Title

Operations Manager

Date 8/25/04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Joe G. Lara

Title

FIELD MANAGER

Date 1 SEP 2004

Office

CARLSBAD FIELD OFFICE

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.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, 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.

State of New Mexico

DISTRICT I

1825 N. FRANKLIN DR., SHERBO, NM 87440

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

DISTRICT II

1201 W. GRAND AVENUE, ALBUQUERQUE, NM 87102

OIL CONSERVATION DIVISION

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

DISTRICT III

1000 Rio Brasos Rd., Artes, NM 87410

DISTRICT IV

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36874	Pool Code 59475	Pool Name Tomb; Seven Rivers
Property Code 26700	Property Name PANAMA 13 FEDERAL	
OGRID No. 015742	Operator Name NEARBURG PRODUCING COMPANY	Well Number 4
		Elevation 3682'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	19-S	33-E		990'	SOUTH	780'	WEST	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 4.0	Joint or Infill	Consolidation Code	Order No.						

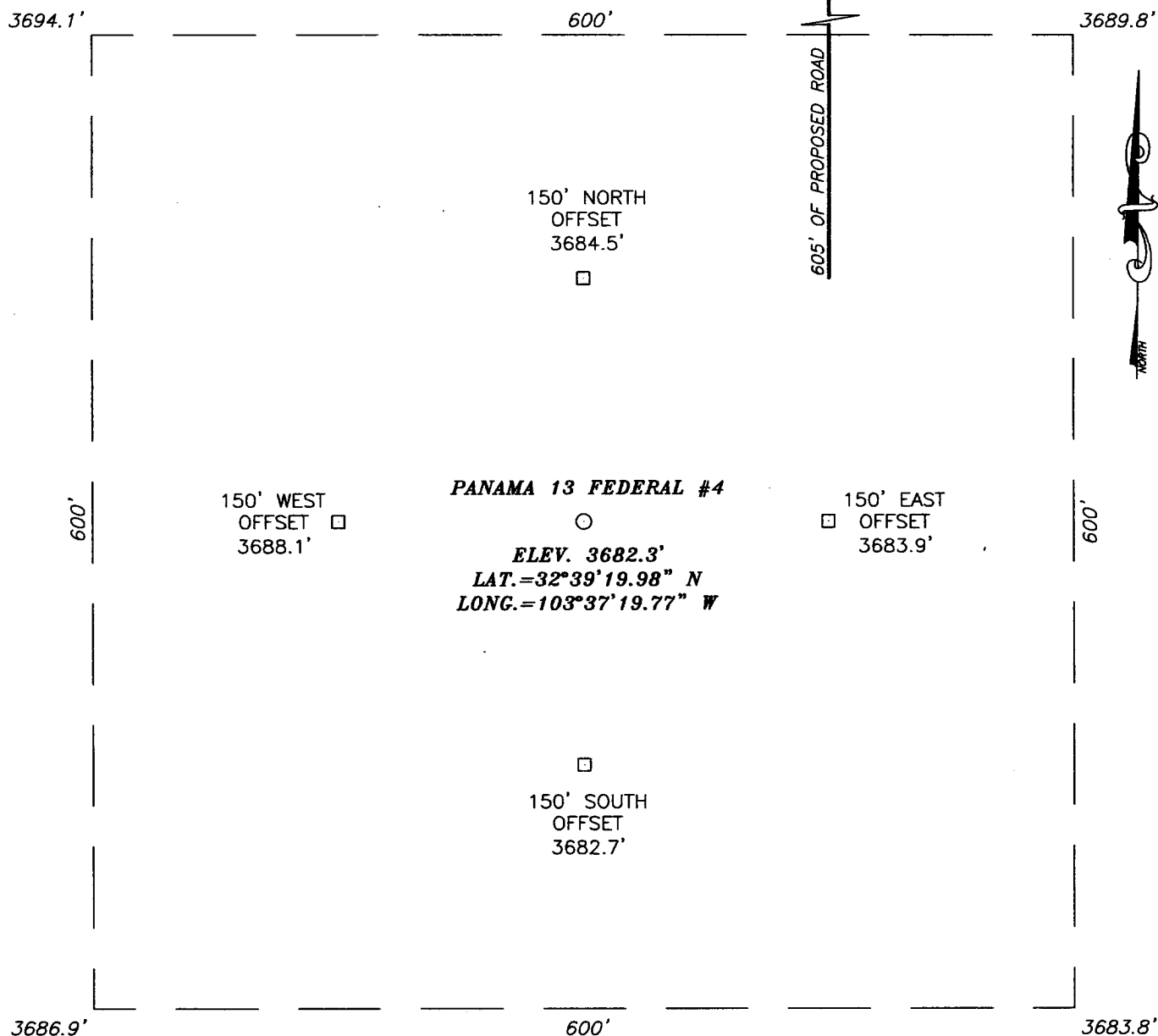
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=602933.7 N X=718879.8 E</p> <p>LAT.=32°39'19.98" N LONG.=103°37'19.77" W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Sarah Jordan</i> Signature</p> <p>Sarah Jordan Printed Name</p> <p>Prod Analyst Title</p> <p>9.16.04 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>AUGUST 20, 2004</p> <p>Date Surveyed</p> <p><i>Sarah Jordan</i> Signature of Surveyor</p> <p>NEW MEXICO Professional Surveyor</p> <p>04111084 Surveyor No.</p> <p>12841 Certificate No.</p>

SECTION 13, TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,

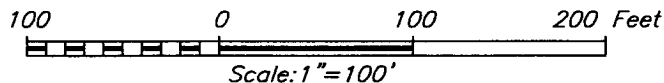
LEA COUNTY,

NEW MEXICO



DIRECTIONS TO LOCATION

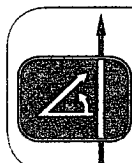
FROM THE INTERSECTION OF CO. RD. #55 (SMITH RANCH RD.) AND U.S. HWY. 62-180 GO NORTH ON SMITH RANCH ROAD 2.1 MILES TO FORK IN ROAD. STAY TO THE LEFT AND FOLLOW PAVEMENT 0.1 MILES TO TEE. TURN LEFT AT CATTLEGUARD GO WEST-NORTHWEST 1.8 MILES TO ANOTHER FORK. STAY TO THE RIGHT AND GO NORTH 1.4 MILES. TURN RIGHT GO EAST APPROX. 1.25 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY 605' SOUTH TO THIS LOCATION.



NEARBURG PRODUCING COMPANY

PANAMA 13 FEDERAL #4 WELL
LOCATED 990 FEET FROM THE SOUTH LINE
AND 780 FEET FROM THE WEST LINE OF SECTION 13,
TOWNSHIP 19 SOUTH, RANGE 33 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 08/20/04		Sheet 1 of 1 Sheets	
W.O. Number: 04.11.1084		Dr By: J. RIVERO	Rev 1:N/A
Date: 08/25/04	Disk: CD#10	04111084	Scale: 1"=100'

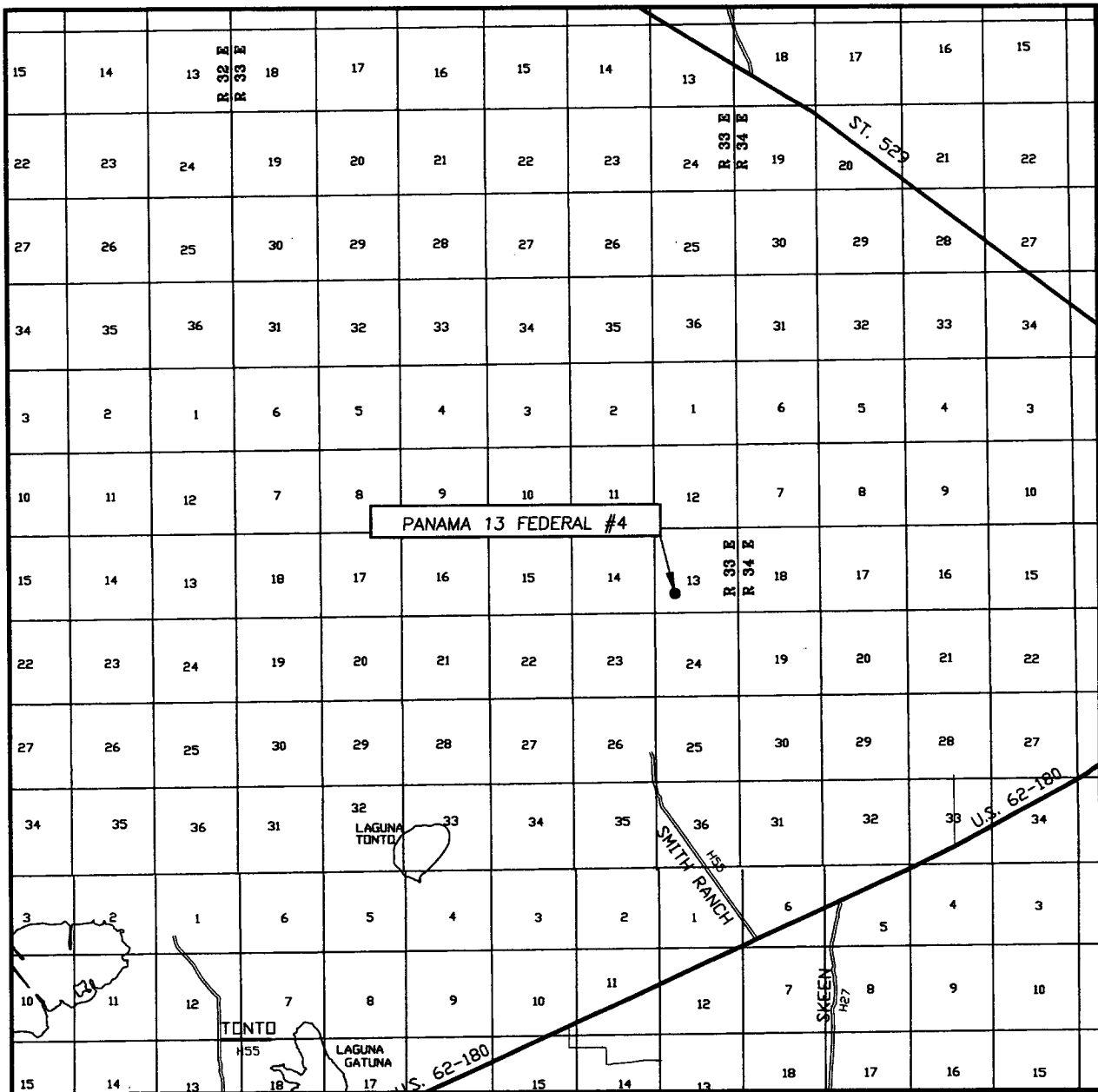


PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

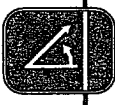
COUNTY LEA

DESCRIPTION 990' FSL & 780' FWL

ELEVATION 3682'

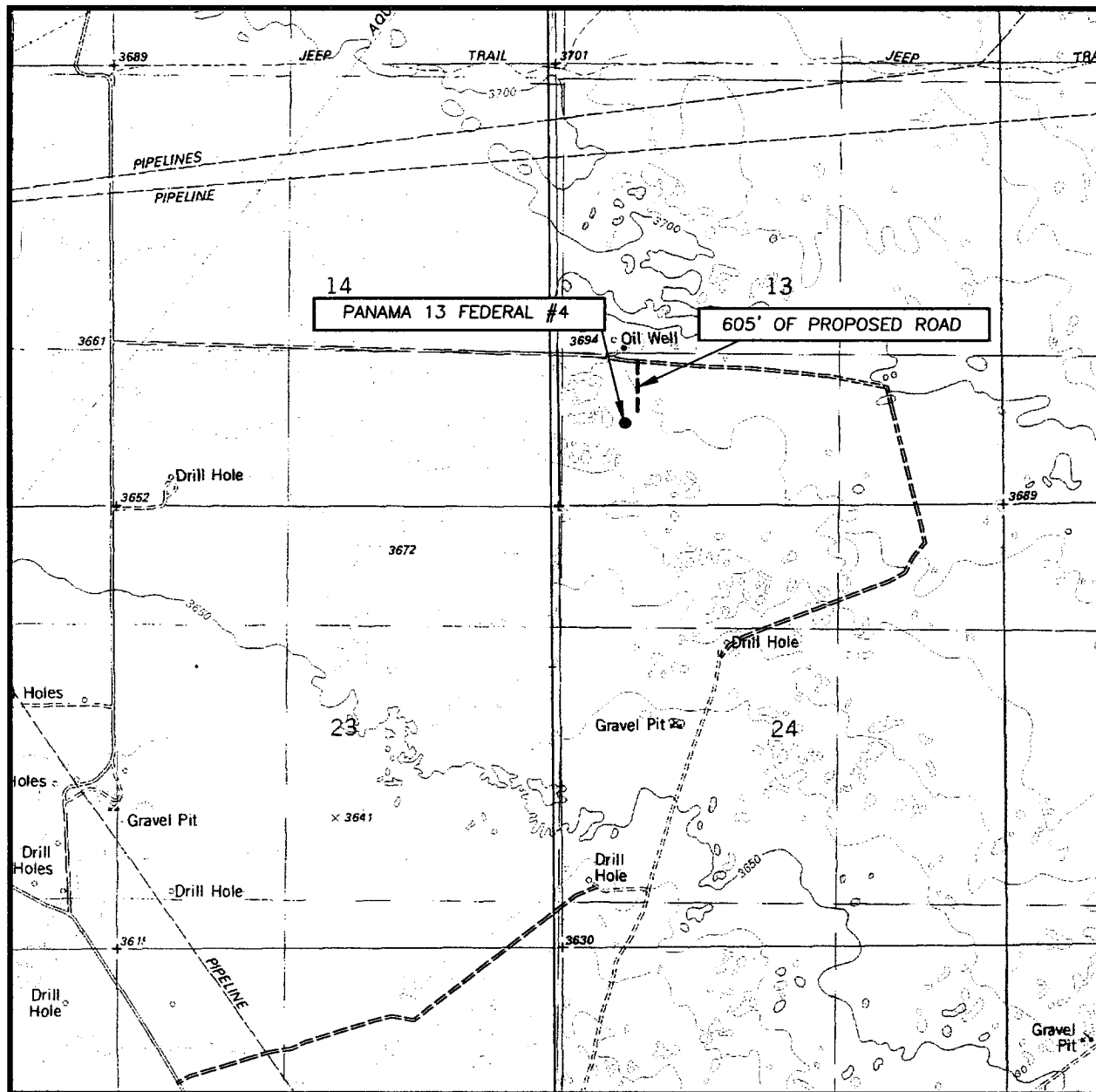
NEARBURG
OPERATOR PRODUCING COMPANY

LEASE PANAMA 13 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:
IRON HOUSE WELL, N.M. - 10'

SEC. 13 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

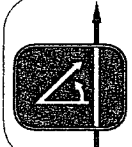
DESCRIPTION 990' FSL & 780' FWL

ELEVATION 3682'

NEARBURG
OPERATOR PRODUCING COMPANY

LEASE PANAMA 13 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
IRON HOUSE WELL, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

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: NMNM1003470002852

Legal Description of Land: 990 FSL and 660 FWL, Sec 14, 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

7.15.04

Date

H. R. Willis / SG

H. R. Willis
Drilling Manager

ATTACHMENT TO FORM 3160-3
PANAMA 13 FEDERAL #4
990 FSL AND 660 FWL, SEC 13, 19S, 33E
LEA COUNTY, NEW MEXICO

DRILLING PROGRAM

1. GEOLOGIC NAME OF SURFACE FORMATION

Quaternary Alluvium

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
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4. CASING AND CEMENTING PROGRAM

<u>Casing Size</u>	<u>From</u>	<u>To</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
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 2,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.

6. TYPES AND CHARACTERISTICS 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. AUXILIARY 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

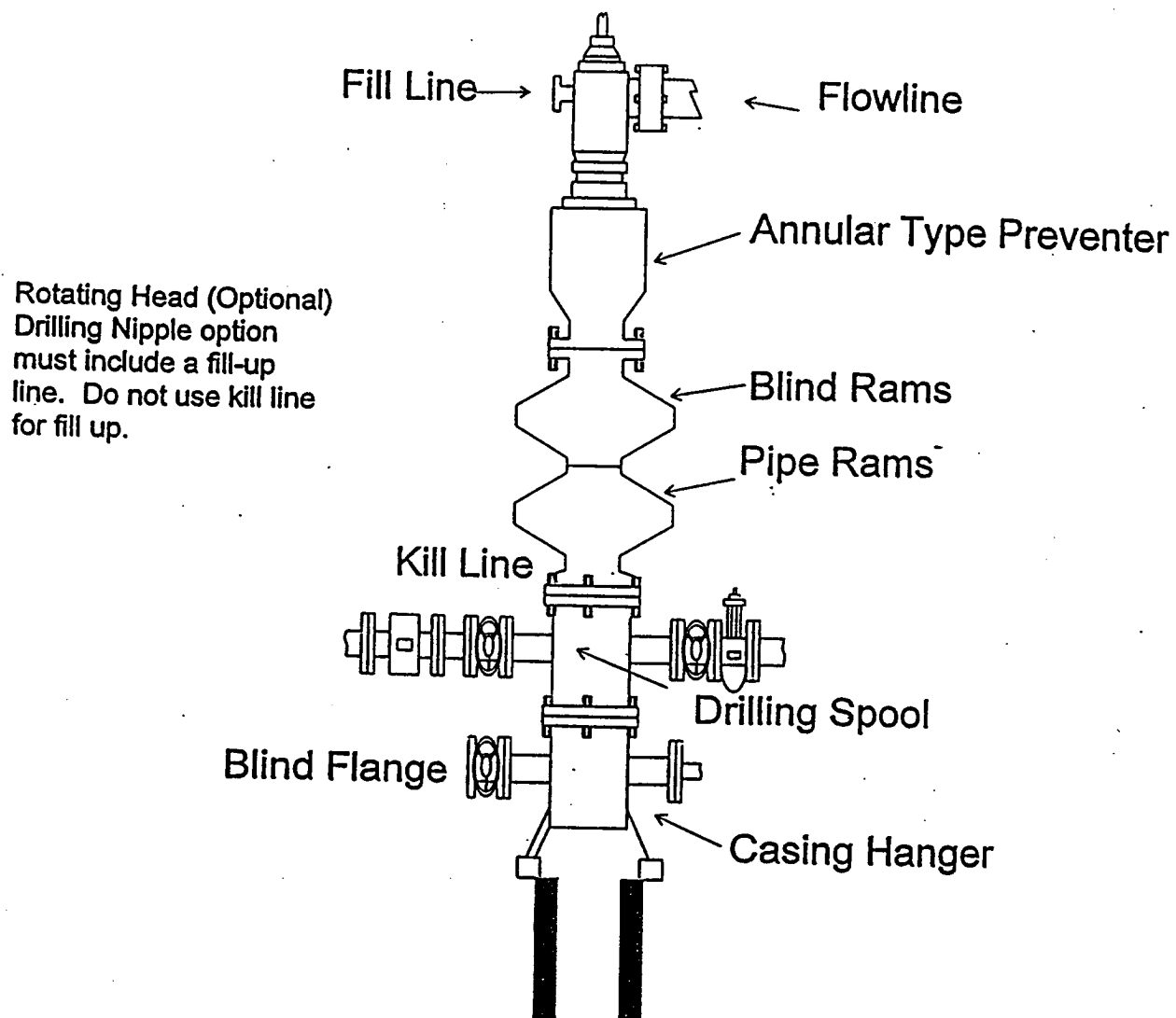
None anticipated.

BHP expected to be 1,100 psi.

10. ANTICIPATED STARTING DATE:

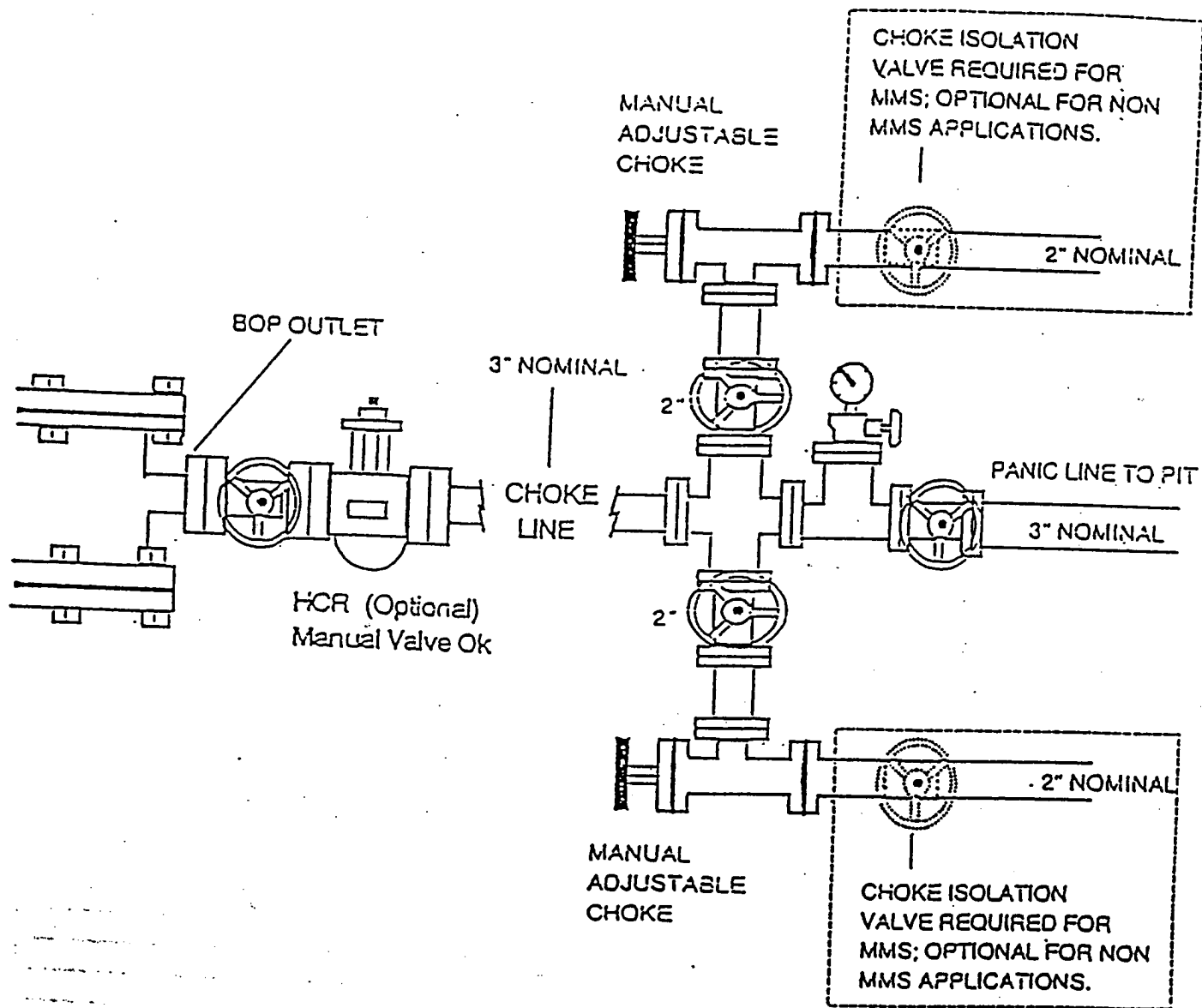
Is planned that operations will commence on September 1, 2004 with drilling and completion operation lasting about 30 days.

NEARBURG PRODUCING COMPANY
BOPE SCHEMATIC



2000 #

CHOKE MANIFOLD 2M AND 3M SERVICE



SURFACE USE AND OPERATIONS PLAN FOR
DRILLING, COMPLETION, AND PRODUCING

NEARBURG PRODUCING COMPANY
PANAMA 13 FEDERAL #4
990 FSL AND 660 FWL, SEC 13, 19S, 33E
LEA COUNTY, NEW MEXICO

LOCATED

8 miles NE of Halfway

OIL & GAS LEASE

NMNM1003470002852

RECORD LESSEE

Doug J Schutz

BOND COVERAGE

\$25,000 statewide bond of Nearburg Producing Company

ACRES IN LEASE

40

GRAZING LEASE

Smith Ranch, 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

BLM (USA)

11. OPERATOR'S REPRESENTATIVE

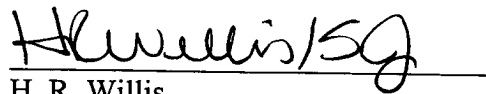
H. R. Willis
3300 North "A" Street, Bldg 2, Suite 120
Midland, Texas 79705
Office: (432) 686-8235
Home: (432) 697-2484

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.

7.15.04

Date



H. R. Willis
Drilling Manager

**HYDROGEN SULFIDE DRILLING OPERATIONS PLANS
NEARBURG PRODUCING COMPANY
PANAMA 13 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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLANS

PAGE 2

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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLANS
PAGE 3

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

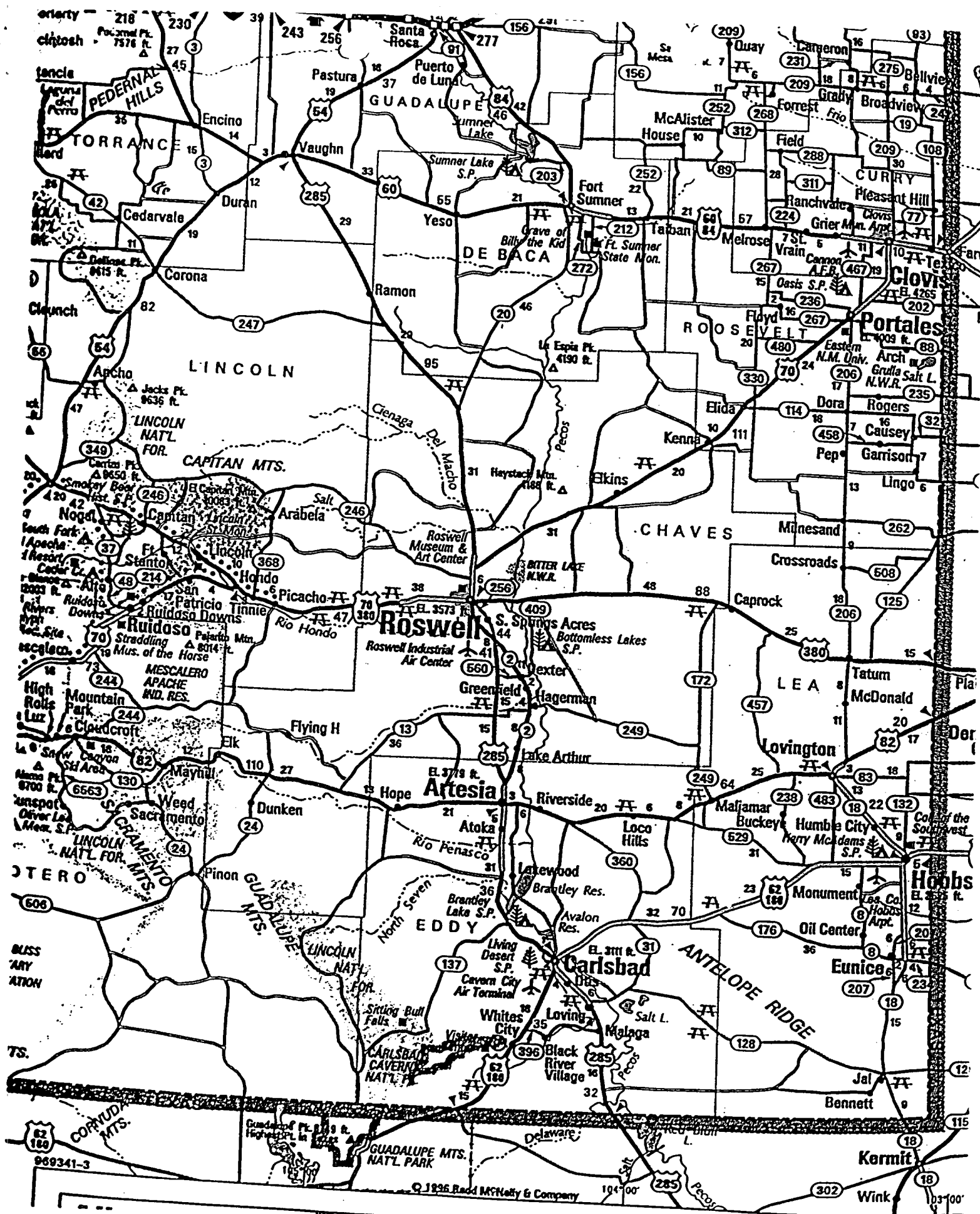
All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and line and valves shall be suitable for H₂S service.

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.



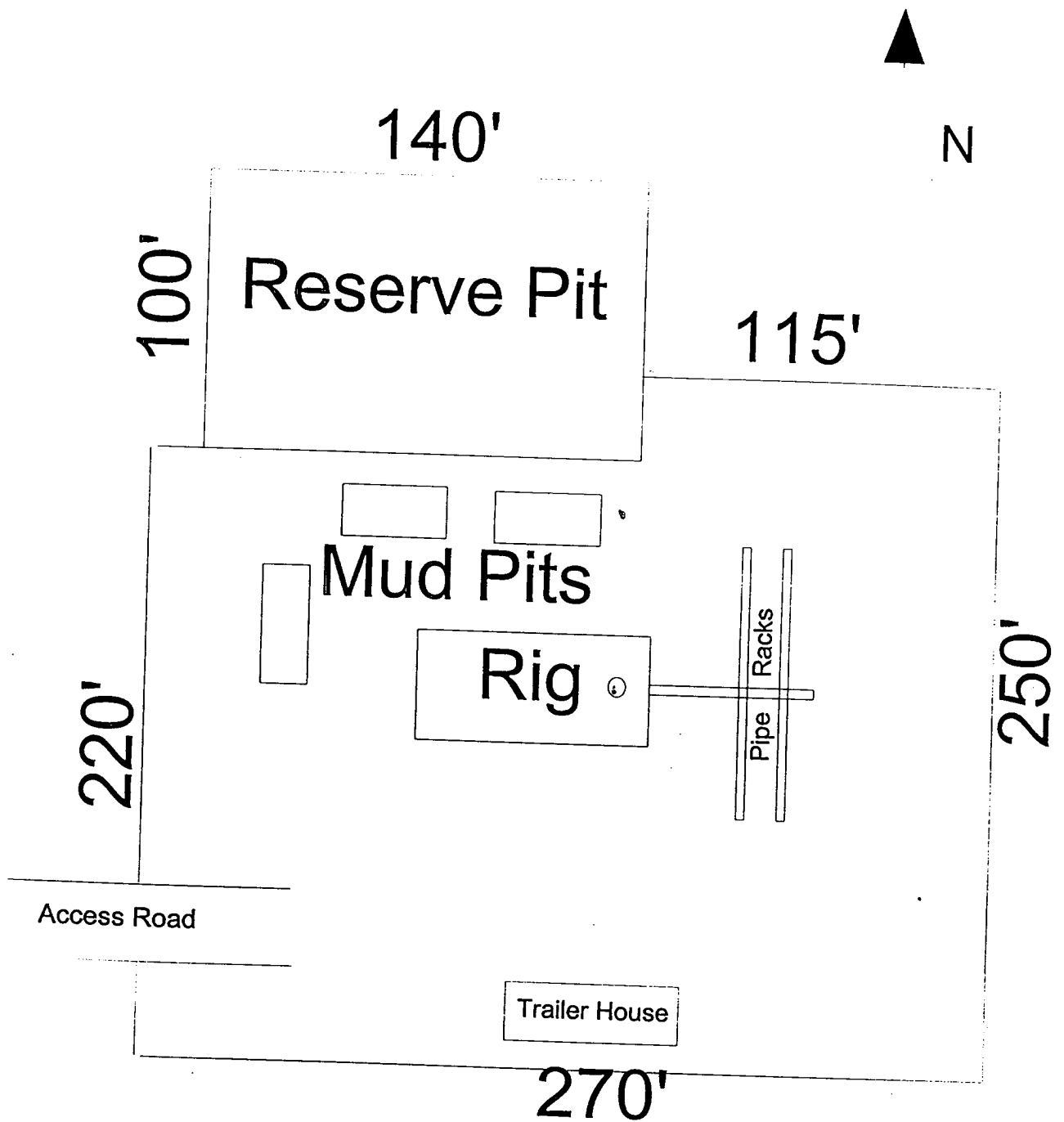


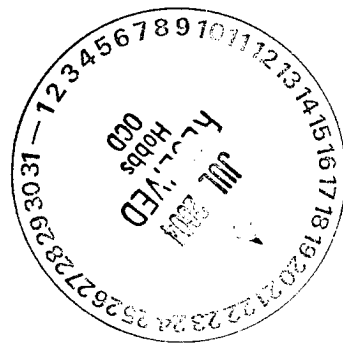
EXHIBIT B
DRILLING RIG LAYOUT
NEARBURG PRODUCING COMPANY

SCALE 1" = 50'

PREPARED FOR:

Mr. Butch Willis
NEARBURG PRODUCING COMPANY
Midland, Texas

Panama 13 Federal # 4
Section 13
T-19-S
R-33-E
Lea County, New Mexico



Prepared by:
Jason Edwards
July 15, 2004

DRILLING FLUID SYNOPSIS

Panama 13 Federal # 4
Section 13
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 discussed 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 36 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 least 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.

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

Form C-144
March 12, 2004

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

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: s.jordan@nearburg.com
Address: 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705
Facility or well name: Panama 13 Fed #4 API #: 30-025-36874 U/L or Qtr/Qtr M Sec 13 T 19S R 33E
County: Lea Latitude _____ Longitude _____ NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlimited ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume _____ bbl

Below-grade tank

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

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

(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

(20 points)

No

(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

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

(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: 7/19/04

Printed Name/Title: Sarah Jordan, Production Analyst

Signature: _____

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: 9/23/04

PETROLEUM ENGINEER

Printed Name/Title: _____

Signature: _____