Form 3160-3 (April 2004)

# N.M. Oil Cons. DIV-Dist. 2 FORM APPROVED DEPARTMENT OF THE INTERIOR 1301 W. Grand Avenue OMB NO. 1004-0137 Expires March 31, 2007

BUREAU OF LAND MANAGEN	Artesia, NM	88210	Expires interest 51, 2007
$\mathcal L$ APPLICATION FOR PERMIT TO DRILI		5. Lease Seria	
la. Type of Work X DRILL REENT	ER		allotee or Tribe Name
1b. Type of Well X Oil Well Gas Well Other	Single Zone Multiple Zon	e 7. Unit or CA	Agreement Name and No.
2. Name of Operator		8. Lease Nam	e and Well No.
Nearburg Producing Company	3b. Phone No. (include area co		ederal #2
3a. Address  3300 N A St., Bldg 2, Suite 120, Midland, TX 797  4. Location of Well (Report location clearly and in accordance with any Si	05 432/686-8235	9. A.3 Well F	<u>-015-33649</u>
At surface 840 FSL and 1650 FEL	RECEIVE		ool, or Exploratory ., M., or Blk. and Survey or Are
At proposed prod. zone			22S, 24E
14. Distance in miles and direction from nearest town or post office*	SEP <b>3 0</b> 20	12 County of	
13-1/2 miles west of	Carlsbad 988 ARTE	SIA Eddy	NM
15. Distance from proposed*	16. No. of Acres in lease	17. Spacing Unit ded	icated to this well
location to nearest property or lease line, ft. 840 (Also to nearest drg. unit line, if any)	160		160
18. Distance from proposed location*	19. Proposed Depth	20.BLM/BIA Bond	No. on file
to nearest well, drilling, completed, applied for, on this lease, ft. 1140	8600'		NM1307
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will star	rt* 23.Estim	ated duration
3922	1/1/05 30 day		30 days
	24. Attachments		
The following, completed in accordance with the requirements of Onshore O	il and Gas Order No. 1, shall be attached	to this form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System Lands, SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		·	an existing bond on file (see
25. Signuature	Name (Printed/Typed)		Date
/ Diday	Sarah Jordan	6.28.04	
Production Analyst			
Approved by (Signautre) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G.	Lara	Date 2 9 SEP 2004
FIELD MANAGER	Office CARLSBA	D FIELD OF	FICE
Application approval does not warrant or certify that the applicant holds le			
conduct operations thereon.  Conditions of approval, if any, are attached.	APPRO	VAL FOR	YEAR
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri		illy to make to any de	partment or agency of the United

\*(Instructions on page 2) Mc Kittick Hills; Upper Penn

CARLSBAD CONTROLLED WATER BASIN

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 

Form 3160-5 (April 2004) + UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

#### 5. Lease Serial No.

NMNM97110

#### 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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE -	Other instructions on reverse side	7. If Unit or CA/Agreement, Name and/or No
1. Type of Well  X Oil Well Gas Well Other  2. Name of Operator Nearburg Producing Company  3a. Address  3300 N A St., Bldg 2, Ste 120, Midl  4. Location of Well (Footage, Sec., T., R., M., or Survey)  SHL: 470 FNL and 1520 FEL, Sec 24,  / BHC: 660 ESL and 1650 FEL Sec 13-	Description)	8. Well Name and No. US 13 Fed #2  9. API Well No.  10. Field and Pool, or Exploratory Area McKittrick Hills. Upper Penn (Gas) 11. County or Parish, State
12. CHECK APPROPRIATE	BOX(ES) TO INDICATE NATURE OF NOTICE, RI	
TYPE OF SUBMISSION	TYPE OF ACTIO	
X Notice of Intent	Acidize Deepen Produc	ction (Start/Resume) Water Shut-Off
Subsequent Report  Final Abandonment Notice		
<ol> <li>Describe Proposed or Completed Operation (clear) If the proposal is to deepen directionally or recomp</li> </ol>	y state all pertinent details, including estimated starting date of any plete horizontally, give subsurface locations and measured and true	proposed work and approximate duration thereof.

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 recomplete 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 recompletion 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.)

Due to the SHL requested by Barry Hunt and Jim Goodbar, BLM reps, being in an arch site, NPC requests to drill the subject well as a vertical hole and move the subject location from:

SHL: 470 FSL and 1520 FEL, Sec 24, 22S, 24E BHL: 660 FSL and 1650 FEL, Sec 13, 22S, 24E

to the location below:

SHL: 840 FSL and 1650 FEL, Sec 13, 225, 24E

See attached C102 (plat).

14. I hereby certify that the foregoing is true and correct Name (printed Typed)  / Sarah Jordan	Title Production Analyst
Dida 1	Date 8/27/04
THIS SPA	CE FOR FEDERAL OR STATE OFFICE USE
Approved by /s/ Joe G. Lara	Title FIELD MANAGER Date 9 SEP 2004
Conditions of approval, if any, are attached. Approval of this n	otice does not warrant or Office

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.

CARLSBAD FIELD OFFICE

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 failed, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

#### State of New Mexico

DISTRICT I

Busings, Minutels and Natural Resources Department

DISTRICT II 130( W. CRAND AVENUE, ARTESIA, NW 68210 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

DISTRICT III 1000 Rio Brazos Rd., Asteq, NM 87410

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT AMENDED REPORT 1820 S. ST. FRANCIS DR., SANTA PE, NM 87605 API Number Pool Code Pool Name Property Name Well Number Property Code U.S. 13 FEDERAL 2 OGRID No. Operator Name Elevation NEARBURG PRODUCING COMPANY 3922

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	feet from the	North/South line	Feet from the	East/West line	County
0	13	22 <b>-</b> S	24~E		840'	SOUTH	1650'	EAST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No. 3	ection Town	ship Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infil	Consolidation	Code Or	der No.				
320		i						

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
!		1	contained herein is true and complete to the
	1		
	!		I I I I I I I
'-			Signostric
	GEODETIC COORDINATES NAD 27 NME		Printed Name
	Y=504142.8 N	l	1 Managan
1	X=464S22.3 E	1	1 trile 8/24/04
	LAT.=32'23'09.42" N		Date
	LONG = 104°26'53.75" W	atilities and	SURVEYOR CERTIFICATION
		Jacob	! hereby certify that the well location shown
			on this plat was plotted from field notes of actual surveys made by me or under m
marki	i		supervison, and that the same is true an correct to the best of my belief.
		-	MARCH 11, 2004
			Date Surveyed REV: 08/26/04 JF
	5886.8:	_1926.6'	Signature & Seal of Professional Surveyor
!	1 600	1	
		1650'	bay & Zalm 8/20/04
je	3915.9	] 3957.6'	. 04 <u>.1</u> 3.0755
Approximate I and	ar Jan D	ا مراسم	Certificate No. GARY EDSON: 12644

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 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

For drilling and production facilities, submit to

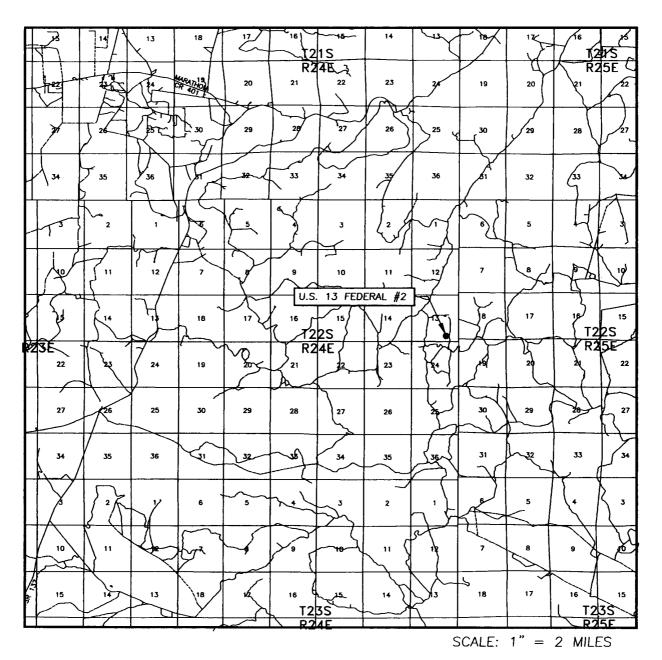
Form C-144 March 12, 2004

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 \( \subseteq No \) \( \subsete \)

Type of action: Registration of a pit or	below-grade tank X Closure of a pit or below-grade	tank			
Operator: Nearburg Producing Company Telephone: 68 Address: 3300 N A St., Bldg 2, Ste 120, Midland, TX	79705				
Facility or well name: US 13 Federal #2 API #:					
County: Eddy Latitude Longitude	NAD: 1927 🔀 1983 🗌 Surface Owne	r Federal State Private Indian			
Pit	Below-grade tank				
Type: Drilling X Production Disposal	Volume:bbl Type of fluid:				
Workover Emergency	C	_ / (V			
Lined [X] Unlimited [	Double-walled, with leak detection? Yes I If not	t, explain why not			
Liner type: Synthetic X Thickness 12mil Clay Volume		OCA CEIVED +			
bbl		t, explain why not received the second secon			
	Less than 50 feet	(20 Froints)			
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points) (10 points) (10 points) (10 points)			
water elevation of ground water.)	100 feet or more	115131418 (Strice 0)			
Wellhead protection area. (Less than 200 feet from a private domestic	Yes	(20 points)			
water source, or less than 1000 feet from all other water sources.)	No	( 0 points) X			
Distance to surface viotage (horizontal distance to all sustlands where	Less than 200 feet	(20 points)			
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)			
irrigation canals, ditches, and perennial and ephemeral watercourses.)	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 re onsite offsite If offsite, name of facility If yes, show depth below diagram of sample locations and excavations.	3) Attach a general description of remedial action taken	n including remediation start date and end			
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 [X], a general permit [					
ApproJUL 0 7 2004 Date: Printed Name/Title:	PSignature:	)			

### VICINITY MAP



SEC. 13 TWP. 22-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

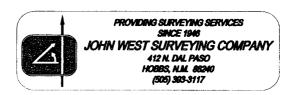
DESCRIPTION 840' FSL & 1650' FEL

ELEVATION 3922'

NEARBURG

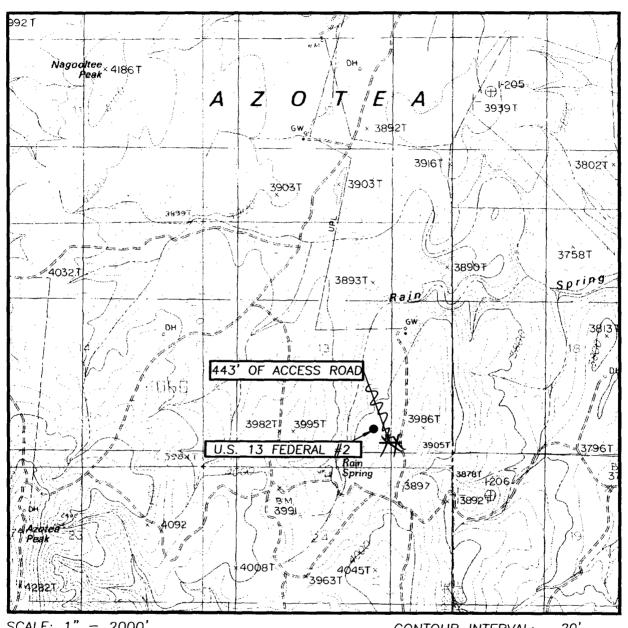
OPERATOR PRODUCING COMPANY

LEASE U.S. 13 FEDERAL





### LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:

AZOTEA PEAK, N.M.

20'

SEC. <u>13</u> TWP. <u>22-S</u> RGE. <u>24-E</u> SURVEY\_\_\_ N.M.P.M.

**EDDY** COUNTY\_\_

DESCRIPTION 840' FSL & 1650' FEL

ELEVATION\_\_\_\_\_\_3922'

OPERATOR NEARBURG PRODUCING COMPANY

U.S. 13 FEDERAL LEASE

U.S.G.S. TOPOGRAPHIC MAP AZOTEA SPEAK, 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 US 13 FEDERAL #2 840 FSL AND 1650 FEL, SEC 13, 22S, 24E EDDY COUNTY, NEW MEXICO

#### **DRILLING PROGRAM**

#### 1. GEOLOGIC NAME OF SURFACE FORMATION

Permian Artesia Group

#### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

Delaware	1342 TVD
Bone Spring	2912 TVD
Wolfcamp Shale	7467 TVD
Cisco	7887 TVD

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

Cisco/ Canyon

7887 TD

#### 4. CASING AND CEMENTING PROGRAM

	Casing Size	From To 137 0' - 1,500 1570	Weight	Grade	<u>Joint</u>
WITNESS	9-5/8"	0'-1,500-1570	36#	J55	STC WITNESS
	7"	0' - 8,600'	23 & 26#	K55, N80	LTC & BTC

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

We plan to drill a 14-3/4" hole to equal 1500'. 9-5/8" casing will be cemented with 700 sxs Class "C" or volume necessary to bring cement back to surface.

8-3/4" hole will be drilled to 8,600' and 7" production casing will be cemented with approximately 1000 sxs of Class "H" cement circulated to surface.

#### US 13 FEDERAL #2 Page 2

#### 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 1,500' with fresh water mud for surface string. The production section from 1,600' to 8,600' will be 8.3 ppg Fresh 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. <u>ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS</u>

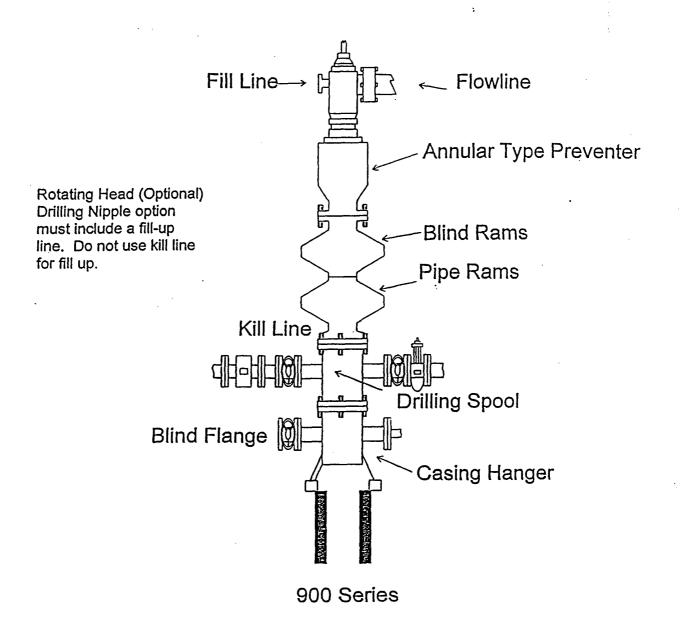
None anticipated.

BHP expected to be 1,100 psi.

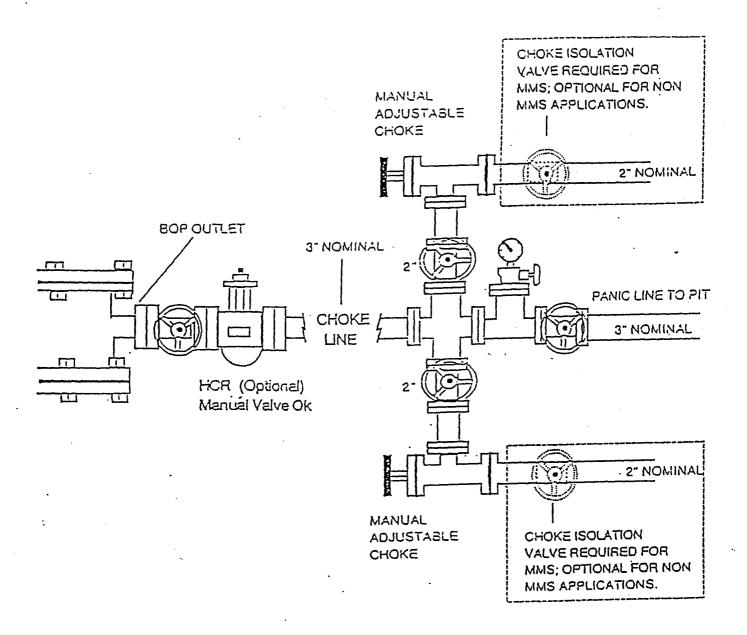
#### 10. ANTICAPATED STARTING DATE:

Is planned that operations will commence on January 1, 2005 with drilling and completion operation lasting about 30 days.

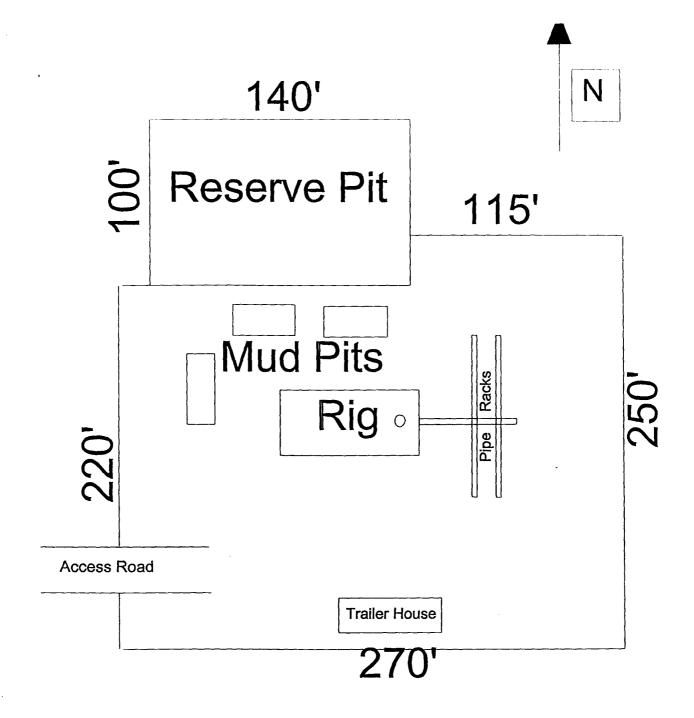
## BOPE SCHEMATIC NEARBURG PRODUCING COMPANY



U.S. 13 FEDERAL #1-Y 1,977' FNL & 998' FWL' Eddy County, New Mexico



U.S. 13 Federal #1-Y 1,977' FNL & 998' FWL Eddy County, New Mexico



DRILLING RIG LAYOUT NEARBURG PRODUCING COMPANY

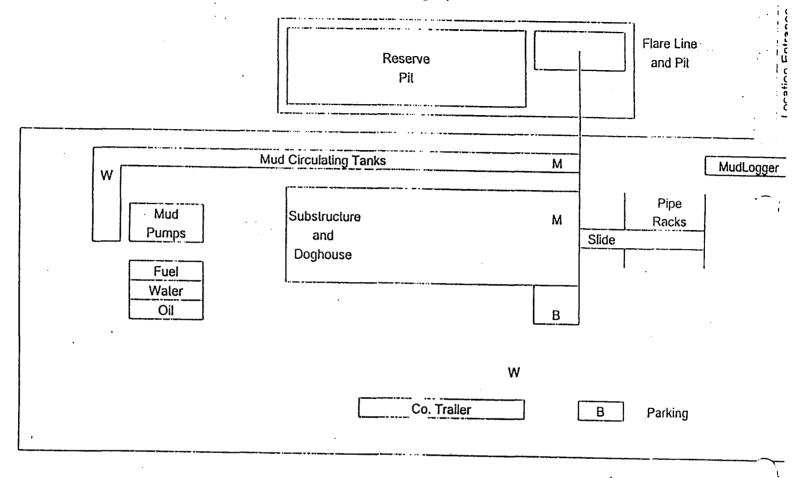
### WARNING

## YOU ARE ENTERING AN H S AREA AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED.
- 2. HARD HATS REQUIRED.
- 3. SMOKING IN DESIGNATED AREAS ONLY.
- 4. BE WIND CONSCIOUS AT ALL TIMES.
- 5. CHECK WITH NPC SUPT AT MAIN OFFICE.

Nearburg Producing Company 1-432-686-8235

## Nearburg Producing Company Hydrogen Sulfide Drilling Operations Location Plan



- M H2S Monitors with alarms at bell nipple and shale shaker
- W Wind Direction Indicators
- B Safe Briefing areas with caution signs and protective breathing equipment. Minimum 150' from wellhead.

Prevailing Wind Directions: Summer - South/Southwest

Winter - North/Northwest

#### HYDROGEN SULFIDE DRILLING OPERATIONS PLANS NEARBURG PRODUCING COMPANY US 13 FEDERAL #2

#### 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.



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

May 10, 2004

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

OCD-Artesia

Nearburg Exploration Company, L.L.C.

Holland & Hart LLP

P. O. Box 2208

Santa Fe, New Mexico 87504-2208

RECEIVED

MAY 1 9 7004

OCD-ARTESIA

Attention:

William F. Carr

Administrative Order NSP-1872

Dear Mr. Carr:

Reference is made to the following: (i) your application dated April 16, 2004 (administrative application reference No. pMES0-412139757) on behalf of the operator, Nearburg Exploration Company, L.L.C. ("Nearburg"); and (ii) the records of the New Mexico Oil Conservation Division ("Division") in Santa Fe: all concerning Nearburg's request for the formation of the following described non-standard 160-acre deep gas spacing unit to be applicable to any and all formations and/or pools from the top of the Wolfcamp to the base of the Morrow formation that are:

- (1) developed on 320-acre spacing; and
- (2) governed under the provisions of Division Rule 104.C (2), revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, which presently includes but is not necessarily limited to the Undesignated McKittrick Hills-Upper Pennsylvanian Gas Pool (81160), Undesignated McKittrick Hills-Strawn Gas Pool (81200), Undesignated McKittrick Hills-Atoka Gas Pool (81120), and Undesignated McIver Ranch-Morrow Gas Pool (81070):

## EDDY COUNTY, NEW MEXICO TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPM Section 13: SE/4.

This unit is to be dedicated to Nearburg's proposed U. S. Federal "13" Well No. 2, to be drilled at a standard gas well location thereon and pursuant to Division Rule 104.C (2) (a), as revised.

This application has been duly filed under the provisions of Division Rule 104.D (2), as revised.

Page 2

By the authority granted me under the provisions of Division Rule 104.D (2) (b), as revised, the above-described 160-acre non-standard deep gas spacing unit for any and all formations from the top of the Wolfcamp formation to the base of the Morrow formation for Nearburg's proposed U. S. Federal "13" Well No. 2.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Michael E. Stogner Engineer/Hearing Officer

MS/ms

cc: New Mexico Oil Conservation Division - Artesia

U. S. Bureau of Land Management, Carlsbad Resource Area - Carlsbad

U. S. Bureau of Land Management, New Mexico State Office – Santa Fe