Form 3160-3 UNITED STATES (April 2004) DEPARTMENT OF THE INTER	IORNew Mexico Oil Conse	rvation Discrete Form Appropriate Constitution OMB NO. 1004-0137
BUREAU OF LAND MANAGEM	ENT 1045 N. I	TE ENCLY SELECT STREET, 2007
4	Hobbs,	NNI 88246
APPLICATION FOR PERMIT TO DRILL		5. Lease Serial No. NMNM0141013
la. Type of Work X DRILL REENTE	SR.	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	1 = 11.05	8. Lease Name and Well No. 3499
Nearburg Producing Company	<15742>	Stetson Fyt 10 Federal #2
3a. Address	3b. Phone No. (include area code	9 API Well No
3300 N A St., Bldg 2, Ste 120, Midland, TX 79705	432/686-8235	30-025-3746
4. Location of Well (Report location clearly and in accordance with any Sta	te equirements)* l	10. Field and Pool, or Exploratory
At surface 660 FNL and 1980 FWL $U$ nit C	<u> </u>	Tonto: Seven Rivers
At proposed prod. zone	- d - D - d - A	11. Sec., T., R., M., or Blk. and Survey or Are
At proposed prod. zone	retery's Polasile	Sec 19-19S-34E
14. Distance in miles and direction from nearest town or post office*		12. County or Parish 13. State
7 miles North of Ha	l fway	Lea County NM
15. Distance from proposed*		17. Spacing Unit dedicated to this well
location to nearest property or lease line, ft. 660		A COLOR
property or lease line, ft. 660 (Also to nearest drg. unit line, if any)	320	NENW NENW
	19. Proposed Depth	20. BLM/BIA Bond No. on file/
18. Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20. BLIVIDIA BOING NO. OII HE
applied for, on this lease, ft. 1320	4000	NMT207
1320	4000'	NM1307
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will start	23. Estimated duration
3696	8/1/05	30 days
2	4. Attachments Capitan	Controlled Water Basin
The following, completed in accordance with the requirements of Onshore Oil	and Gas Order No. 1, shall be attached t	to this form:
1 Wall what contided have received a surround	A Dand to come the countries	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> </ol>	Item 20 above).	ns unless covered by an existing bond on file (see
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).	1 *	ormation and/or plans as may be required by the
/	authorized officer.	
25. Signuarite	Name (Printed/Typed)	Date
		$\sqrt{2}$
	Sarah Jordan	$\mathcal{O}(\mathcal{A})$
Title		,
Production-Analyst		
Approved by (Signautre)	Name (Printed Exped) S. C. Rus	Date
/s/ Linda S. C. Rundell	7s/ Linda S. C. Kui	
		SEP 1 5 2005
STATE DIRECTOR	Office	ate office
Application approval does not warrant or certify that the applicant holds leg	al or equitable title to those rights in th	e subject lease which would entitle the applicant to
conduct operations thereon.  Conditions of approval if any are attached	ADDOC	NAL EOD 1 VEAD

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

## 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:

NMNM0141013

Legal Description of Land:

660 FNL and 1980 FWL, Sec 19, 19S, 34E

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

Date

**Drilling Manager** 

#### State of New Mexico

DISTRICT I 1625 N. PRINCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

Form C-102

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

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT 1220 S. ST. FRANCIS DR., SANTA FE, NH 87605 ☐ AMENDED REPORT API Number Pool Code Pool Name ren Property Name Well Number STETSON EXTENSION 19 FEDERAL 2 OGRID No. Operator Name Elevation NEARBURG PRODUCING COMPANY 3696 Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	۱
С	19	19-S	34-E		660	NORTH	1980	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 Acre	B Joint o	r Infili Co	nsolidation (	Code Or	der No.				

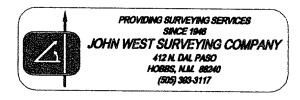
NO ALLOWABLE WI	LL BE ASSIGNED TO THIS COMPLETION U	NTIL ALL INTERESTS HAVE BEE	N CONSOLIDATED
	OR A NON-STANDARD UNIT HAS BEEN	APPROVED BY THE DIVISION	
LOT 1	3700.3' - 8 _ 3703.7	I hereby	CERTIFICATION certify the the information is true and complete to the
39.81 AC LOT 2	693.8' 3698.8	Signature	dge and belief.
39.75 AC		Title O-Date  SURVEYOR	August 05 CERTIFICATION
LOT 3	GEODETIC COORDINATES NAD 27 NME  Y=601320.4 N	I hereby certify to this plat was actual surveys m	hat the well location shown plotted from field notes of tade by me or under my that the same is true and
39.89 AC	X=725356.4 E  LAT.=32'39'03.58" N  LONG.=103'36'04.15" W	Date Surveyed.  Signature & Ge	E 9, 2005  DEL  Set 19 Only  MEXICAL COMPANY  GRAPH CANADA  GRAPH CANADA
40.03 AC		Certificate No.	GARY EIRSOF 12641

# VICINITY MAP

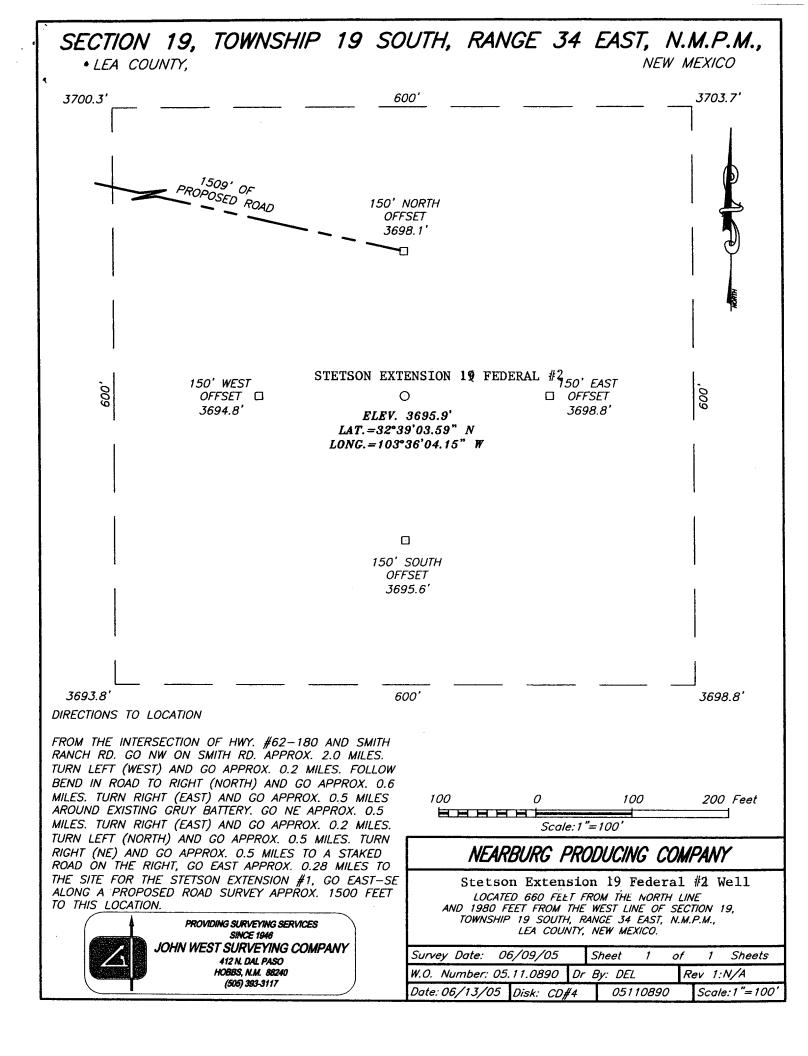
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16				<u> </u>								$\rightarrow$	
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33	34	35	36	31	322	33	34	35	36	31	32	33	3
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SCALE: 1" = 2 MILES

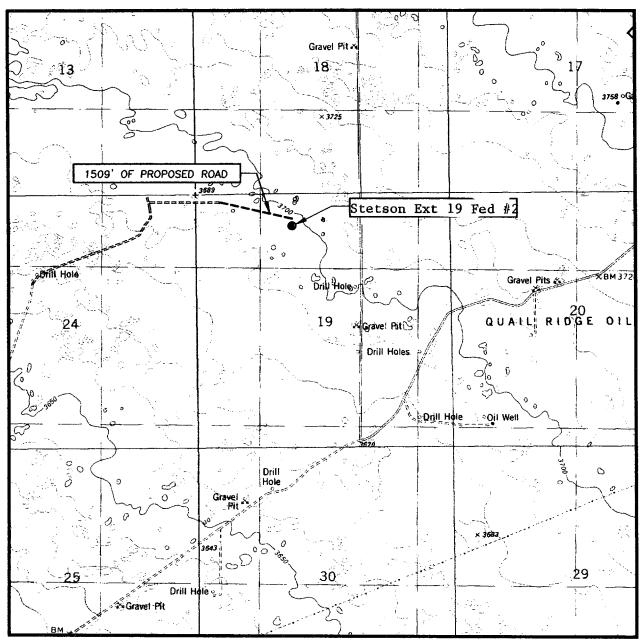
LEASE Stetson	Ext 19 Federal					
OPERATOR	ARBURG PRODUCING COMPANY					
ELEVATION	3696'					
DESCRIPTION 660' FNL & 1980' FWL						
COUNTY	LEA					
SURVEY	N.M.P.M.					
SEC. <u>19</u> TWP.	<u> 19-S_</u> RGE. <u>34-E</u>					







# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: IRONHOUSE WELL, N.M. - 10'

SEC. <u>19</u> TWP. <u>19-S</u> RGE. <u>34-E</u>
SURVEYN.M.P.M.
COUNTYLEA
DESCRIPTION 660' FNL & 1980' FWL
ELEVATION 3696'
NEARBURG OPERATOR PRODUCING COMPANY
LEASE Stetson Extension 19 Federal
U.S.G.S. TOPOGRAPHIC MAP IRONHOUSE WELL, 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 STETSON EXT 19 FEDERAL #2 660 FNL AND 1980 FWL, SEC 19, 19S, 34E LEA COUNTY, NEW MEXICO

#### **DRILLING PROGRAM**

#### 1. GEOLOGIC NAME OF SURFACE FORMATION

Quaternary Alluvium

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

B/ Salt	3100
Yates	3450
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	<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.

# STETSON EXT 19 FEDERAL #3

#### Page 2

#### 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 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. <u>ABNORMAL CONDITIONS</u>, <u>PRESSURES</u>, <u>TEMPERATURES</u> & <u>POTENTIAL</u> <u>HAZARDS</u>

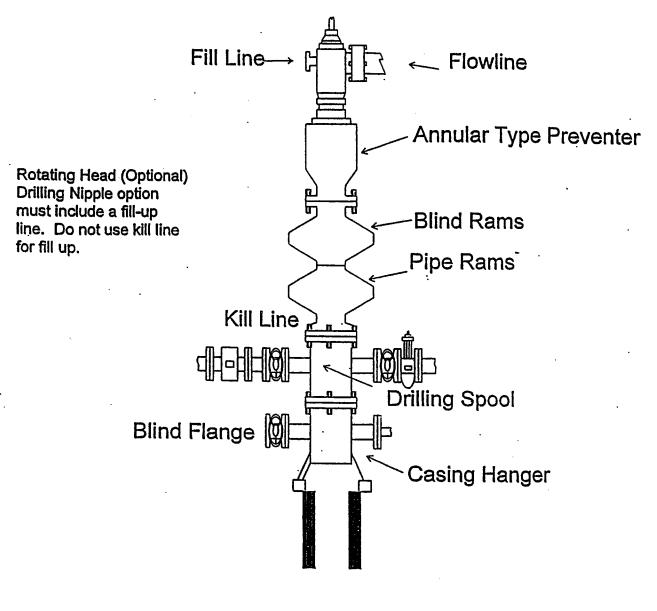
None anticipated.

BHP expected to be 1,100 psi.

#### 10. ANTICAPATED STARTING DATE:

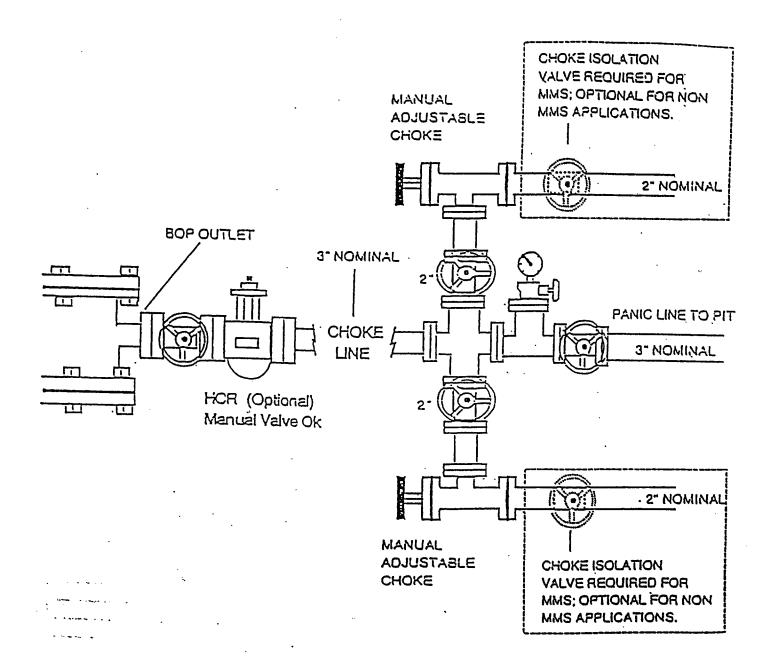
Is planned that operations will commence on August 1, 2005 with drilling and completion operation lasting about 30 days.

# NEARBURG PRODUCING COMPANY BOPE SCHEMATIC



2000#

# NEARBURG PRODUCING COMPANY CHOKE MANIFOLD 2M AND 3M SERVICE



## **SURFACE USE AND OPERATIONS PLAN FOR**

#### DRILLING, COMPLETION, AND PRODUCING

# NEARBURG PRODUCING COMPANY STETSON EXT 19 FEDERAL #2 660 FNL AND 1980 FWL, SEC 19, 19S, 34E LEA COUNTY, NEW MEXICO

#### **LOCATED**

7 miles North of Halfway

OIL & GAS LEASE

NMNM01410

**RECORD LESSEE** 

Devon

#### **BOND COVERAGE**

\$25,000 statewide bond of Nearburg Producing Company

**ACRES IN LEASE** 

320

#### **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'.

### STETSON EXT 19 FEDERAL #2

#### Page 2

#### 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.

# STETSON EXT 19 FEDERAL #2

#### Page 3

#### 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.

# STETSON EXT 19 FEDERAL #2 Page 4

#### 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

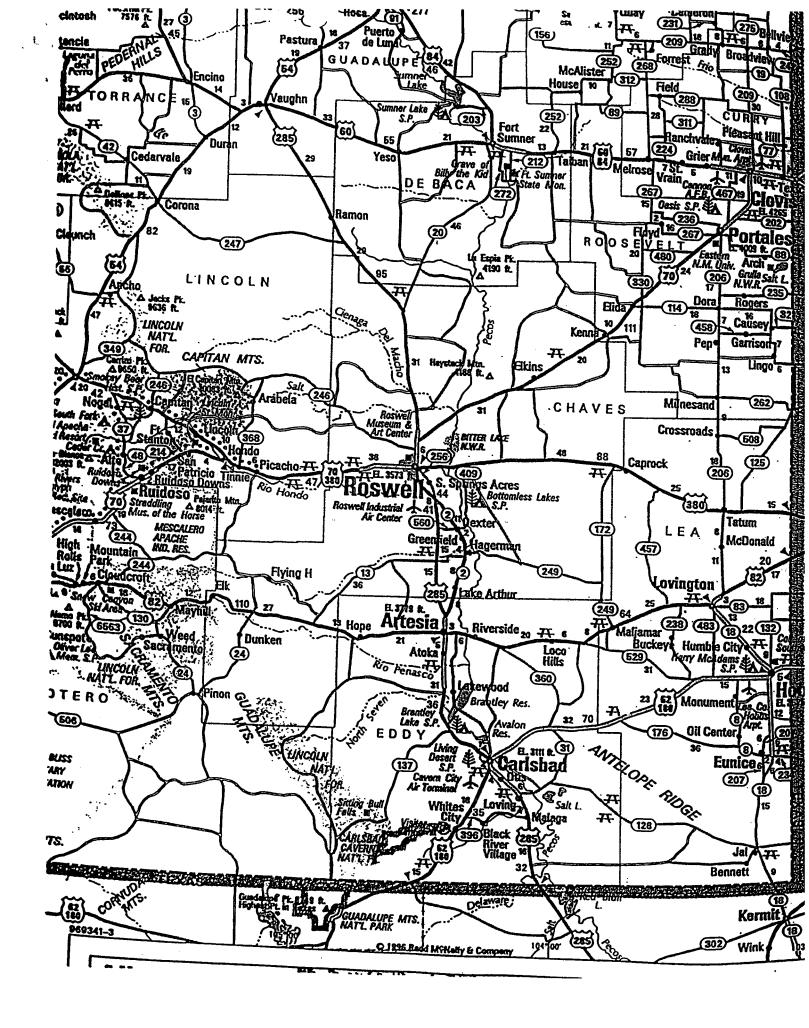
### 12. CERTIFICATION

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.

Date

H. R. Willis

Drilling Manager



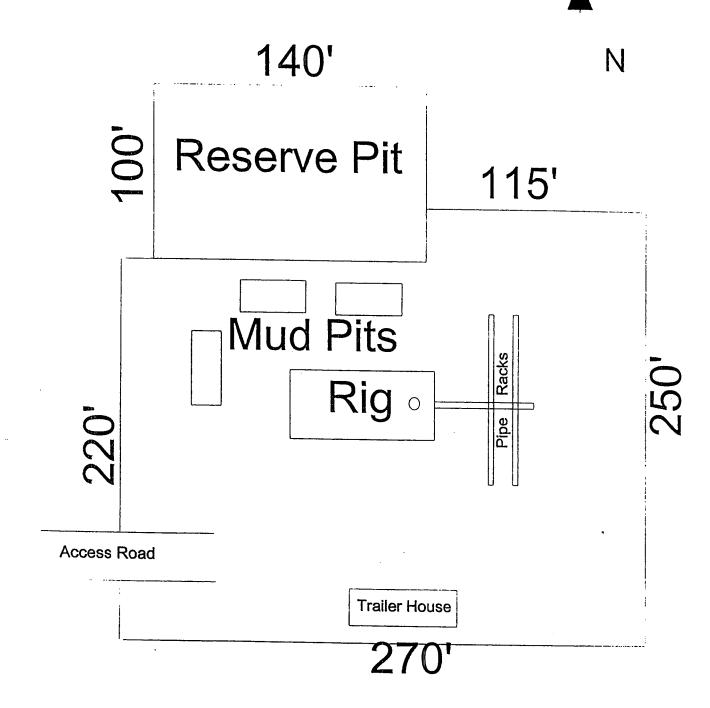


EXHIBIT B
DRILLING RIG LAYOUT
NEARBURG PRODUCING COMPANY

SCALE 1" = 50'

# HYDROGEN SULFIDE DRILLING OPERATIONS PLANS NEARBURG PRODUCING COMPANY STETSON EXT 19 FEDERAL #2

#### 1. HYDROGEN SULFIDE TRAINING

, b . . .

- 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:

4. . . .

- 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

A . . .

- 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.

# SPECIAL DRILLING STIPULATIONS

THE	FOLL.	OWING DAT	A IS REQUIRED	ON THE W	ELL SIG
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	Name Nearburg Pro						_	
Location _		1980 I				S, R 34 State New Mex	E.	
Lease No.	NM-01410 <b>13</b>		_ County	Lea_		State New Mex	<u>aco</u>	
drill is con be familian EACH PE	al stipulations check r ditioned upon compli r with the General Rec RMITTEE HAS THE E 43 CRF 3165.3 ANI	ance with such quirements, a c RIGHT OF A	stipulation	ns in addition ich is availab	to the Gelle from a I	neral Requireme Bureau of Land N	nts. The perr Management	nittee should office.
This permi	it is valid for a period	of one year fro	om the date	e of approval	or until lea	ase expiration or	termination v	whichever is
I. S	PECIAL ENVIRON	MENT REQUI	REMENT	S				
	r Prairie Chicken (stip imon Swale (stips atta			) Flood plain ) Other	(stips attac	ched)		
II. O	N LEASE - SURFAC	CE REQUIREM	MENTS PI	RIOR TO DR	ILLING			
	BLM will monitor confice (505) 393-3612, a						at (505) 234-	5972 ( )
(X)Road	ds and the drill pad fo	r this well mus	t be surfac	ed with 6	inches	of compacted ca	aliche.	
available f	psoil and vegetation effor resurfacing of the outelyinches in don.	disturbed area a	after comp	letion of the o	drilling op	eration. Topsoil	on the subject	t location is
( ) Other.								
III. V	WELL COMPLETION	N REQUIREM	ENTS					
	mmunlitization Agree ive date of the agreen				the well:	must be filed for	approval wit	h the BLM.
will be rec	face Restoration: If the duced to a slope of 3:1 al contours of the surr dicator (set at depth o	l or less. All ar ounding terrair	reas of the 1, and tops	pad not nece oil must be re	ssary for p e-distribute	roduction must bed and re-seeded	be re-contour with a drill e	ed to resemble quipped with
Side C	ed Mixture 1 (Loamy Dats Grama ( <i>Boutelou</i> Oropseed ( <i>Sporobolus</i>	a curtipendula		Sand Drops San	eed ( <i>Spord</i> ad Lovegra	ixture 2 (Sandy bolus crptandru ass (Eragostis tri taria magrostaci	s) 1.0 ichodes) 1.0	
	ed Mixture 3 (Shallov ats Grama ( <i>Boute cur</i>		0	All	cali Sacato	ture 4 (Gypsum : n ( <i>Sporobollud a</i> Atriplex canescer	airoides)	1.0
( ) OTHE	ER SEE ATTACHE	D SEED MIX	ΓURE					
	hould be done either l spring to take advanta				oer 15, bef	ore freeze up, or	early as poss	ible the
( ) Other.								

#### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

#### OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

#### **CULTURAL**

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

#### TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

#### PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the following lands: All of Section 19 T 19 S., R. 34 S.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Bureau of Land Management Carlsbad Field Office

SENM-S-22 December 1997

#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Nearburg Production Corporation Well Name & No: Stetson Ext 19 Federal No. 02

Location: Surface 660' FNL & 1980' FWL, Sec.19, T. 19 S. R. 34 E.

Lease: NMNM 0141013 Lea County, New Mexico

#### I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
- A. Spudding
- B. Cementing casing: 8 1/2 inch; 4 1/2 inch;
- C. BOP Tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan shall be in operations 500 feet and three days prior to drilling into the Top of the <u>Yates</u> formation.
- 3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

#### II. CASING:

- 1. The 8 ½ inch shall be set at 1650 Feet -OR- use the Lea County Conditions of approval (LEACOA attached) or set the surface casing at least 25 ft. into the Top of the Rustler Anhydrite with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the 4 ½ inch Production casing is to circulate to surface.

#### **III. PRESSURE CONTROL:**

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 ½ inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2 M psi.

#### III. Pressure Control (continued):

- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.
- -The test shall be done by an independent service company
- -The results of the test shall be reported to the appropriate BLM office.
- -Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures.
- -Use of drilling mud for testing is not permitted since it can mask small leaks.
- -Testing must be done in safe workman-like manner. Hard line connections shall be required.
- -Both <u>low pressure</u> and <u>high pressure</u> testing of BOPE is required.

# ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING

# Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:

# Casing and Cementing

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

### **Drilling Fluid**

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation., fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

BLM Serial Number: NM-0141013

Company Reference: Stetson Extension Federal #2

Well No. & Name: Nearburg Producing Co.

# STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

#### GENERAL REQUIREMENTS

- A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

- D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.
  - E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

#### 1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/\_\_/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

#### 2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

. —	/ Ditching will be required on both sides of the road attached map or as staked in the field.	dway as shown on the
//	Flat-blading is authorized on segment(s) delineated	d on the attached map.
3.	DRAINAGE	

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

#### SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

 /_x_/	400 foot intervals.
	foot intervals.
	locations staked in the field as per spacing intervals above.
	locations delineated on the attached map.

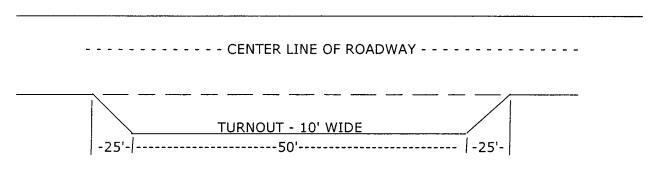
- B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).
- C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

Example: 4% slope: spacing interval = 400 + 100 = 200 feet

4

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

#### 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

#### 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

#### MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

#### 8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

#### 9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

#### 10. SPECIAL STIPULATIONS:

BLM Serial Number: NM-0141013

Company Reference: Nearburg Producing Co. Well No. & Name: Stetson Extension 19 Federal #2

#### STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 11. Special Stipulations: LPC Timing Stips.

### -Form 3160-5 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-HORBS

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

5. Lease Serial No.

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

NMNM01410/3
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		
Type of Well     Gas Well     Other      Name of Operator				8. Well Name a Stetson Ex #2	and No. tension 19 Federal
Nearburg Producing Company				9. API Well No	),
3a. Address	1I TV 7070F	3b. Phone No. (include are			
3300 N A St., Bldg 2, Ste 120, Mid 4. Location of Well (Footage, Sec., T., R., M., or Survey)  660 FML and 1980 FML Sec. 19, 198	Description)	432/686-8235 >	X 203	10. Field and I Tonto; Sev	Pool, or Exploratory Area en RIvers
660 FNL and 1980 FWL, Sec 19, 19S,	J4L			11. County or	Parish, State
				Lea	NM
12. CHECK APPROPRIATE	BOX(ES) TO INC	ICATE NATURE OF N	NOTICE, REPO	ORT, OR OTI	HER DATA
TYPE OF SUBMISSION		TYP	PE OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
	Alter Casing	Fracture Treat	Reclamation	n	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	•	X Other ROW
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporaril	y Abandon	
	Convert to Injection	n Plug Back	Water Disp	osal	
#2 to Stetson Ext 19 Federal #1 a Peterson in the Carlsbad BLM offi					
<ol> <li>I hereby certify that the foregoing is true and correct Name (Printed/Typed)</li> <li>Duke Roush</li> </ol>		Title St Lan	dman		
Duly To	ush	Date 7/19/05			
THI	S SPACE FOR FED	ERAL OR STATE OF	FICE USE		
Approved by  Conditions of approval, if any, are attached. Approval certify that the applicant holds legal or equitable title to	of this notice does not we those rights in the sub	carrent or occ	MANAGE LSBAD F		SEP 0 7 2005
which would entitle the applicant to conduct operations t	hereon.				
Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section States any false fictitions or fraudulent statements or res	on 1212, makes it a crim	e for any person knowingly a atter within its jurisdiction.	and willully to ma	ine to any depart	ment of agency of the officed

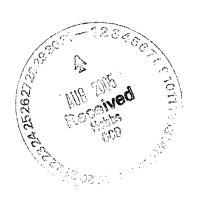
# Nearburg Producing Company

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

# Hydrogen Sulfide (H2S) Contingency Plan

For

Stetson Ext 19 Federal #2 660 FNL and 1980 FWL Sec 19, 19S, 34E Lea County, New Mexico



# PUBLIC PROTECTION PLAN NEARBURG PRODUCING COMPANY

## **TABLE OF CONTENTS**

		<b>SECTION</b>
PURPOSE		1
SCOPE		2
DEFINITIONS		3
THE PLAN		. 4
DISTRIBUTION AN	ID 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.

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.

#### 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.

## Phase I:

Upon discov	ery (	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
	П	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
	П	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 discov	ery o	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 <u>Incident Command System</u> 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 pers	soni	nel not involved in the immediate response:
	soni	If a total evacuation is ordered, report to the incident command center or nearest muster
		•
		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

### **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.

6. APPROVALS

Approved by:

Name: 7

Title: Drilling Manager

1015 Date: 6.205

# NEARBURG PRODUCING COMPANY REGULATORY CONTACTS

	Contact Name					
Agency	First	Last	Division/Area	Main Phone #	Cell Phone	Home Phone #
NMOCD	<b>Emergency Number</b>		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 Re	esponse Cent	ter	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	Police, Fire, Ambulance	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 #
			liono: none
Drilling Superintendent	tore and the property of the control of	ius no sesso se la	The state of the s
Butch Willis	432-686-8235 (223)		
Production Superintendent			
Matt Lee	505-746-0422	505-365-6662	505-746-0932
Operations			The state of the s
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

## PREPARED FOR:

# Mr. Butch Willis NEARBURG PRODUCING COMPANY Midland, Texas

Stetson Ext 19 Federal # 2
Section 19
T-19-S
R-34-E
Lea County, New Mexico

Prepared by: Randy Auburg June 21, 2005

## **DRILLING FLUID SYNOPSIS**

Stetson Ext 19 Federal # 2
Section 19
T-19-S
R-34-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 an Amgel and Lime type fluid, circulating through the working pits. Use Paper, as needed, for seepage control and for sweeps. 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. Maintain a 9.0 to 9.5 pH with Caustic. Use Star NP-110 for sweeps and for solids control. Use Paper for seepage and for sweeps. While drilling this interval, monitor background 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. Maintain a 9.0 to 9.5 pH with Caustic. 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 Starhib TSW 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 Amseagel 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.

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

Printed Name/Title: \_

#### State of New Mexico Energy, Minerals and Natural Resources

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

March 12, 2004 For drilling and production facilities, submit to

Form C-144

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 \( \subseteq No \) \( \text{X} \) 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: 686-8235 e-mail address: sjordan@nearburg.com Address: 3300 N A St., Bldg 2, Ste 120, Midland, TX 79705 Facility or well name: Stetson Ext 19 Fed #2 API #: 30 D D 25-374 B 2U/L or Qtr/Qtr C Sec 19 T 195 R 34E Lea Latitude Longitude NAD: 1927 X 1983 Surface Owner Federal X State Private Indian Pit Below-grade tank Type: Drilling | Production | Disposal | Volume: \_\_\_\_bbl Type of fluid: \_\_\_ Workover Emergency Construction material: \_\_ Lined X Unlimited Double-walled, with leak detection? Yes If not, explain why not. Liner type: Synthetic X Thickness \_\_\_12mil Clay Volume Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal high 50 feet or more, but less than 100 feet (10 points) water elevation of ground water.) 100 feet or more (0 points) 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.) (.0, points) Χ 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.) NO ( 0 points) 1000 feet or more 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 X, a general permit , or an (attached) alternative OCD-approved plan . Date: 6/20/05 Printed Name/Title: Sarah Jordan, Production Analyst 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: PETROLEUM ENGINEER gnature SEP 2 2 2005