

N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

Form 3160-3  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.  
NMLC065680

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator  
PECOS PRODUCTION COMPANY

3a. Address 400 W. ILLINOIS, SUITE 1070, MIDLAND  
TX 79701

3b. Phone No. (include area code)  
432-620-8480

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

8. Lease Name and Well No.

WESTPAW 25 FEDERAL #1

9. API Well No.

30-015-34133

10. Field and Pool, or Exploratory

;YTS-7RV-QU-GB

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

At surface 330' FSL & 330' FEL

At proposed prod. zone SAME

RECEIVED

MAY 24 2005

OOD-ARTESIA

11. Sec., T. R. M. or Blk. and Survey or Area

SEC 25, T18S, R31E

14. Distance in miles and direction from nearest town or post office\*  
10 MILES SOUTH OF MALJAMAR

12. County or Parish

EDDY COUNTY

13. State

NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) 330'

16. No. of acres in lease

160

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

19. Proposed Depth

4500'

20. BLM/BIA Bond No. on file

NMB000020

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3675' GL

22. Approximate date work will start\*

Upon Approval

23. Estimated duration

4 WEEKS

MAY 16 2005

OOD-ARTESIA

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

*William R. Huck*

Name (Printed/Typed)

William R. Huck

Date

03/15/2005

Title

VP- Engr & Operations

Approved by (Signature)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

MAY 13 2005

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

Captain Controlled Water Basin

WITNESS 8 5/8" Cement Job

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

29.5, Sat

## DRILLING PROGRAM

Attachment to Form 3160-3  
Pecos Production Company  
**Westpaw 25 Federal No. 1**  
330' FSL & 330' FEL  
Section 25, T18S, R31E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Formations

Top of Salt Section	950'
Base of Salt Section	2300'
Yates	2550'
Queen	3600'
San Andres	4450'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

Water: Approximately 200'  
Oil: 3600', 4050', 4450'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Any surface fresh water sands will be protected by setting 8-5/8" casing at 650' and circulating cement back to surface. The Salt will be isolated with a 5-1/2" production casing string set through the San Andres @ approximately 4500' and cement circulated to surface.

4. Casing Program

*850' or 2.5' into Roubidoux Formation (JSS)*

<u>Hole Size</u>	<u>Interval</u>	<u>Casing</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
11"	<del>650'</del>	8-5/8"	24#	J-55	ST&C
7-7/8"	0' - 4500'	5-1/2"	15.5#	J-55	LT&C

Cementing Program\*

*850' or 25' into Rustler Formation (JSS)*  
~~650'~~ 8-5/8" Surface Casing: Cement to surface:

Slurry: 350 sxs Class C containing 0.25 pps Cello-flake. 2% CaCl.

4500' 5-1/2" Production Casing

Lead Slurry: 50:50:10 Poz C containing 10% bentonite, 0.1% FLAC, 0.25 pps Cello-flake – or equivalent.

Tail Slurry: 50:50:2 Poz C containing 2% bentonite, 5% (bwow) salt, 0.25 pps Cello-flake – or equivalent.

\*Cement designs may change as hole conditions dictate.

5. Minimum Specifications for Pressure Control

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type preventor. This unit will be hydraulically operated. The BOP will be installed on the 8-5/8" surface casing and utilized continuously until total depth is reached. Prior to drilling out of the 8-5/8" casing shoe, the BOP will be pressure tested to 1000 psi.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function test will be documented on the daily driller's log. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having a 3000# WP rating.

6. Types and Characteristics of Proposed Mud System

This well will be drilled to total depth with fresh water, and cut brine/starch mud systems. Depths are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity</u>	<u>Water Loss</u>
<i>850' or 25' into Rustler Formation (JSS)</i> 0' - <del>650'</del>	Spud Mud	8.3 - 9.2	28 - 36	No control
650' - 2500'	Brine	10.0 - 10.3	29	No control
2500' - 4500'	Brine/Starch	10.0	32	10cc

7. Auxiliary Well Control and Monitoring Equipment

A. A kelly cock will be in the drill string at all times.

B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

**UNITED STATES DEPARTMENT OF THE INTERIOR**

Bureau of Land Management  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201-1287

**Statement Accepting Responsibility for Operations**

**Operator Name** : Pecos Production Company  
**Street or Box** : 400 W. Illinois, Suite 1070  
**City, State** : Midland, TX  
**Zip Code** : 79701

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


**Lease No.:** NMLC065680

**Legal Description of Land:** 330' FSL & 330' FEL of Section 25, T18S-R31E

**Formation (s) (if applicable):** Queen / Grayburg

**Bond Coverage (State if individually bonded or another's bond):** \$25,000  
Statewide (NM)

**BLM Bond File No.:** NMB000020

**Authorized Signature:** 

**Title:** Vice President

**Date:** 3/15/04

# BLOWOUT PREVENTOR ARRANGEMENT

11" DOUBLE RAM – 3000 psi WP  
80 GALLON, 3 STATION ACCUMULATOR  
3000 PSI CHOKE MANIFOLD

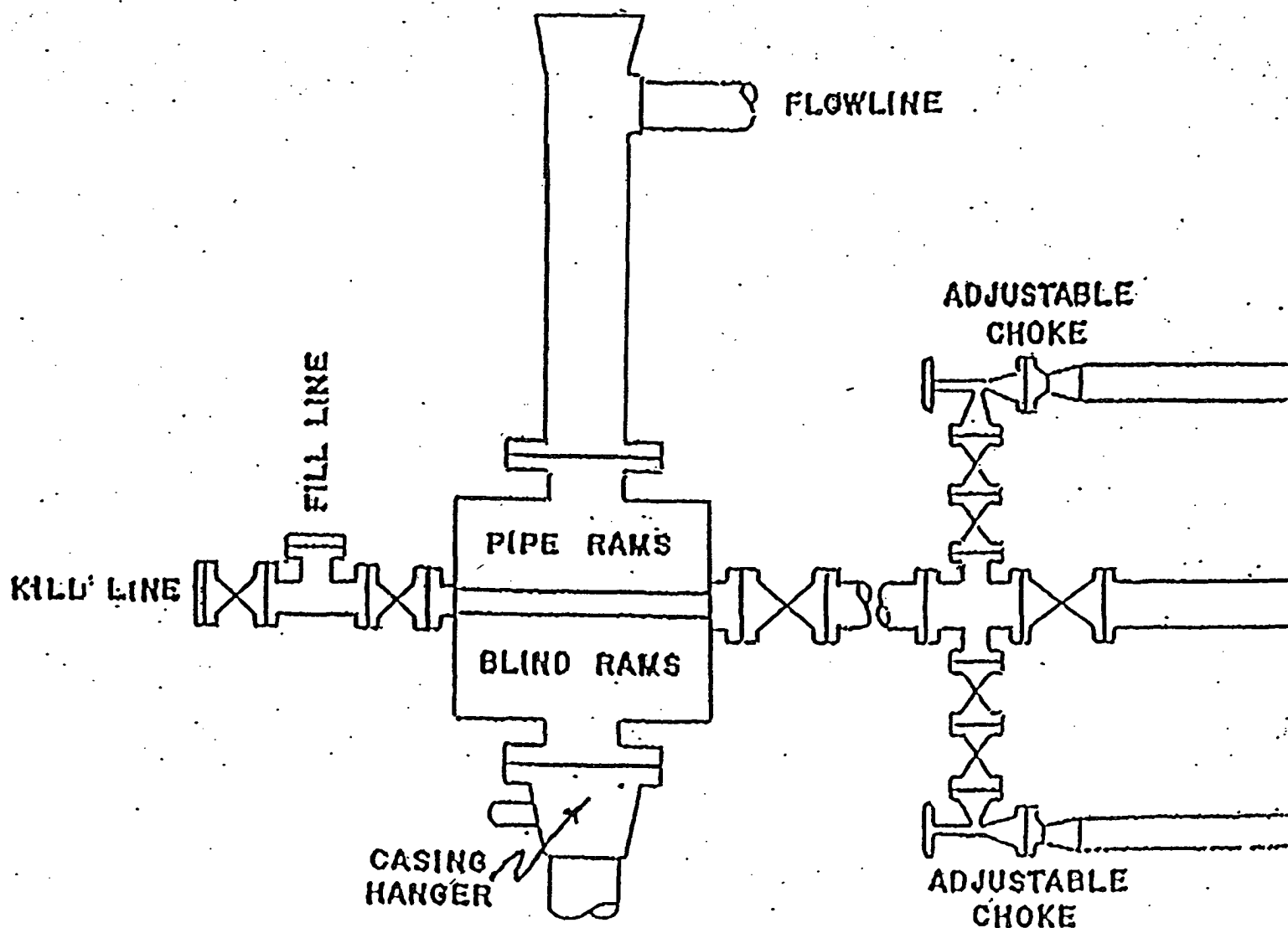


Exhibit #1  
Pecos Production Company  
Westpaw 25 Federal #1  
330' FSL & 330' FEL  
Sec 25, T18S, R31E  
Eddy County, New Mexico

Attachment to Exhibit #1  
Attachment to Form 3160-3  
Pecos Production Company  
**Westpaw 25 Federal No. 1**  
330' FSL & 330' FEL  
Section 25, T18S, R31E  
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 2000 psi working pressure.
3. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
4. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
5. Will maintain a kelly cock attached to the kelly.
6. Hand wheels and wrenches will be properly installed and tested for safe operation.
7. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

## State of New Mexico

## DISTRICT I

1825 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

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

## OIL CONSERVATION DIVISION

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

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
		63680	Watkins; Yts-7RVS-QU-GB
Property Code	Property Name		Well Number
	WESTPAW 25 FEDERAL		1
OGRID No.	Operator Name		Elevation
215758	PECOS PRODUCTION COMPANY		3675'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	25	18-S	31-E		330	SOUTH	330	EAST	EDDY

## Bottom Hole Location If Different From Surface

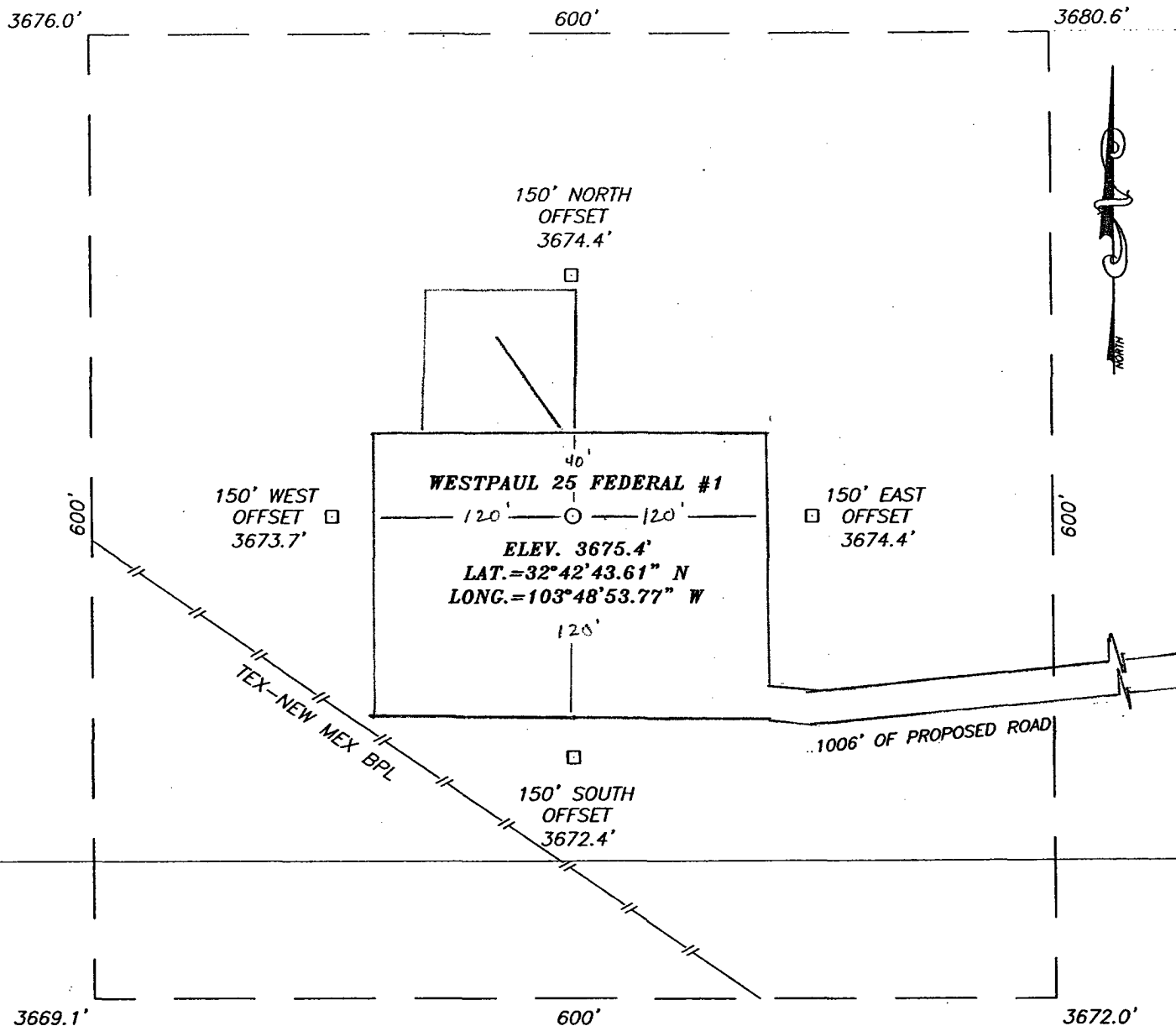
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			
40									

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

<p>GEODETTIC COORDINATES NAD 27 NME</p> <p>Y=623167.7 N X=659446.7 E</p> <p>LAT.=32°42'43.61" N LONG.=103°48'53.77" W</p>		<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Dora Lara</i></p> <p>Signature</p> <p>Dora Lara</p> <p>Printed Name</p> <p>Engr Asst</p> <p>Title</p> <p>3-15-05</p> <p>Date</p>	
<p>DETAIL</p> <p>3676.0' 3680.6'</p> <p>600'</p> <p>600'</p> <p>3669.1' 3672.0'</p>		<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JANUARY 5, 2005</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Cary Edson</i> 1/10/05</p> <p>05-11-0008</p> <p>Certificate No. CARY EDSON 12641</p>	
<p>SEE DETAIL</p> <p>330'</p> <p>330'</p>			

EXHIBIT #2

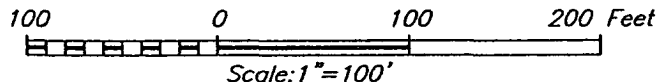
SECTION 25, TOWNSHIP 18 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #529 AND CO. RD. #126 (MALJAMAR RD.) GO S/SW ON CO. RD. #126 FOR APPROX. 5.8 MILES TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT (SW) AND GO APPROX. 0.8 MILES TO A ROAD ON THE RIGHT. TURN RIGHT (NW) AND GO APPROX. 0.2 MILES TO WHERE THE ROAD BENDS LEFT. VERE LEFT (WEST) AND GO APPROX. 0.2 MILES TO A PROPOSED ROAD SURVEY AT THE SEC OF PAD ON THE SOUTHPAW 30 FED. #1 WELL. FOLLOW PROPOSED ROAD SURVEY FOR APPROX. 1000' WEST TO PROPOSED LOCATION.

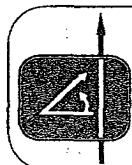
EXHIBIT #3



**PECOS PRODUCTION COMPANY**

WESTPAUL 25 FEDERAL #1 WELL  
LOCATED 330 FEET FROM THE SOUTH LINE  
AND 330 FEET FROM THE EAST LINE OF SECTION 25,  
TOWNSHIP 18 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.

Survey Date: 1/5/04	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0008	Dr By: J.R.
Date: 01/7/04	Disk: CD#5
05110008	Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1948  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBBS, N.M. 88240  
(505) 393-3117



## **PECOS PRODUCTION COMPANY**

### **HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

#### **I. HYDROGEN SULFIDE TRAINING**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. Proper alarm response procedures and the proper techniques for first aid and rescue procedures.

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

1. The effects of H<sub>2</sub>S 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 H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection 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.

#### **II. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS**

Note: All H<sub>2</sub>S 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 H<sub>2</sub>S.

1. Well Control Equipment:
  - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - B. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

2. Protective Equipment For Essential Personnel:
  - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H2S Detection and Monitoring Equipment:
  - A. Minimum of 2- portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
4. Visual Warning Systems:
  - A. Wind direction indicators as shown on well site diagram.
  - B. 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.
5. Mud Program:
  - A. The mud program has been designated to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
  - B. If abnormal pressures anticipated. A mud-gas separator will be utilized.
6. Communication:
  - A. Cellular telephones in company vehicles.
  - B. Land line (telephone) communications at field office.
7. Well Testing:
  - A. 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. If necessary the drill stem testing will be conducted during daylight hours. A thorough check of all monitors, safety equipment, and drill floor conditions will be made before all drill stem testing operations conducted in an H2S environment.
8. Alarm Response:
  - A. If, during any drilling or production operations, an alarm sounds, move immediately upwind of the source. Count heads before proceeding with assessment and corrective actions.