EC

OCD-ARTESIA

Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

0292

# APPLICATION FOR PERMIT TO DRILL OR REENTER

| | |
|---|---|
| 1a. Type of Work: ☒ DRILL ☐ REENTER | 5. Lease Serial No. NMLC029395A |
| | 6. If Indian, Allottee or Tribe Name |
| | 7. If Unit or CA Agreement, Name and No. |
| 1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone | 8. Lease Name and Well No. TONY FEDERAL 21 |
| 2. Name of Operator MARBOB ENERGY CORPORATION Contact: DIANA CANNON E-Mail: production@marbob.com | 9. API Well No. 30-015-33941 |
| 3a. Address P O BOX 227 ARTESIA, NM 88211-0227 | 3b. Phone No. (include area code) Ph: 505.748.3303 Fx: 505.746.2523 |
| | 10. Field and Pool, or Exploratory CEDAR LAKE YESO |
| 4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* RECEIVED FEB 04 2005 OCD-ARTESIA<br>At surface NWNW Lot D 330FNL 330FWL<br>At proposed prod. zone NWNW Lot D 330FNL 330FWL | 11. Sec., T., R., M., or Blk. and Survey or Area Sec 19 T17S R31E Mer NMP |
| 14. Distance in miles and direction from nearest town or post office* SEE SURFACE USE PLAN | 12. County or Parish EDDY / 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 609.43 / 17. Spacing Unit dedicated to this well 40.00 |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. | 19. Proposed Depth 6000 MD / 20. BLM/BIA Bond No. on file |
| 21. Elevations (Show whether DF, KB, RT, GL, etc. 3746 GL | 22. Approximate date work will start 03/20/2003 / 23. Estimated duration |

## 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 (Electronic Submission) | Name (Printed/Typed) DIANA CANNON | Date 01/20/2003 |
| Title AUTHORIZED REPRESENTATIVE | | |
| Approved by (Signature) /s/ James Stovall | Name (Printed/Typed) /s/ James Stovall | Date FEB 02 2005 |
| Title FOR FIELD MANAGER | Office CARLSBAD FIELD OFFICE | |

Application approval does not warrant or certify 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.

**Additional Operator Remarks (see next page)**

**Electronic Submission #17780 verified by the BLM Well Information System**
**For MARBOB ENERGY CORPORATION, sent to the Carlsbad**
**Committed to AFMSS for processing by Armando Lopez on 01/21/2003 (03AL0097AE)**

Keowell Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED **

**Additional Operator Remarks:**

390'-420'

17 1/2" HOLE, 13 3/8" J55 48# CSG SET @ 450', CMT TO SURFACE WITNESS
12 1/4" HOLE, 8 5/8" J55 24# CSG SET @ 1320', CMT W/ 300 SX
7 7/8" HOLE, 5 1/2" J55 17# CSG SET @ 6000', CMT SUFFICIENT TO COVER 200' ABOVE ALL KNOWN OIL & GAS HORIZONS.

PAY ZONE WILL BE SELECTIVELY STIMULATED AND PERFORATED AS NEEDED FOR OPTIMUM PRODUCTION.

ATTACHMENT INCLUDES:

1. WELL LOCATION AND ACREAGE DEDICATION PLAT
2. DRILLING PROGRAM
3. SURFACE USE AND OPERATING PLAN
4. HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
5. ADDITIONAL REQIRED INFORMATION (EXHIBITS #1 - #4)

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
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 |
|---|---|---|
| | 96831 | CEDAR LAKE YESO |

| Property Code | Property Name | Well Number |
|---|---|---|
| 23629 | TONY FEDERAL | 21 |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 14049 | MARBOB ENERGY CORPORATION | 3746' |

### Surface Location

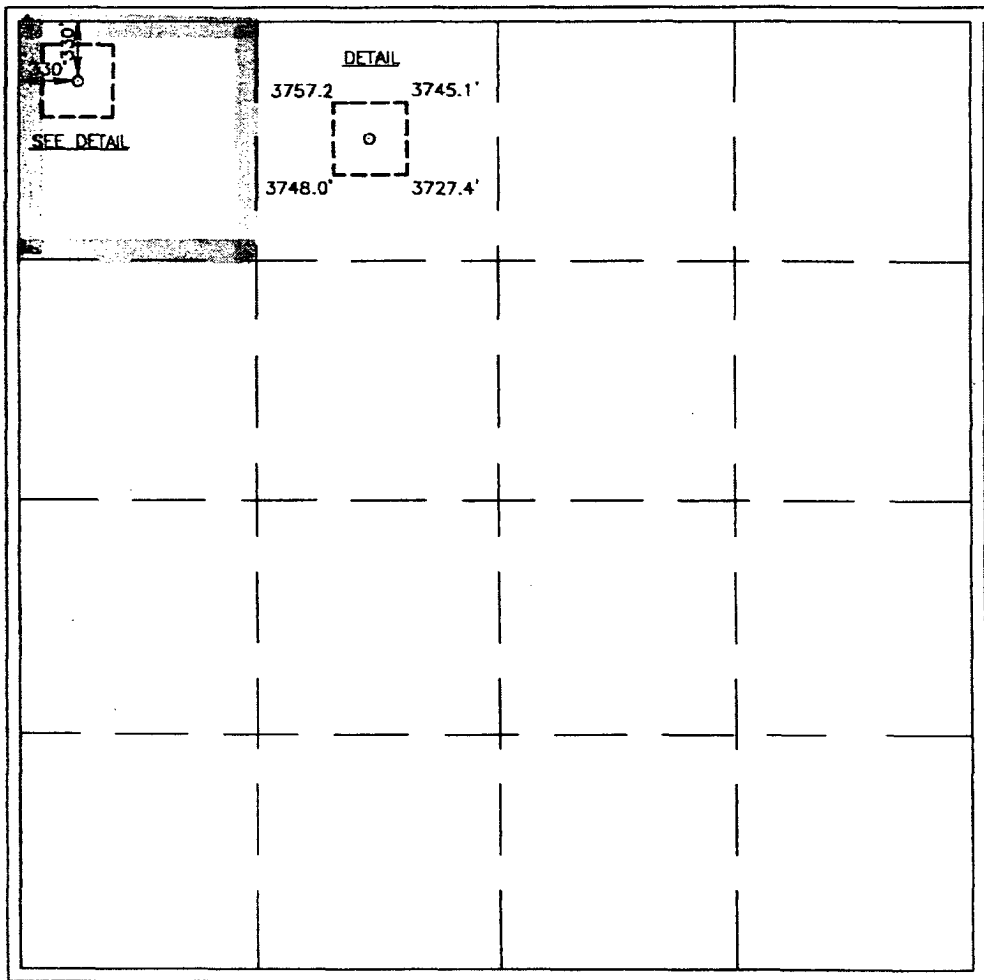
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| D | 19 | 17-S | 31-E | | 330 | NORTH | 330 | WEST | EDDY |

### 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




### OPERATOR CERTIFICATION

*I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.*

Signature

DIANA J. CANNON
Printed Name

PRODUCTION ANALYST
Title

JANUARY 20, 2003
Date

### SURVEYOR CERTIFICATION

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.*

JANUARY 7, 2003
Date Surveyed L.A.

Signature & Seal of Professional Surveyor

1/08/03

02.11.1047

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

**MARBOB ENERGY CORPORATION**
**DRILLING AND OPERATIONS PROGRAM**

**Tony Federal No. 21**
**330' FNL and 330' FWL**
**Section 19-T17S-R31E**
**Eddy County, New Mexico**

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Marbob Energy Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geological surface formation is Alluvium:

2. The estimated tops of geologic markers are as follows:

| | |
|---|---|
| Yates | 1225' |
| Seven Rivers | 1340' |
| Queen | 2430' |
| Grayburg | 2804' |
| San Andres | 3134' |
| Glorieta | 4524' |

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

| | |
|---|---|
| Water: | Approximately 200' |
| Oil or Gas: | Approximately 2078' |

4. Proposed Casing Program: See Form 3160-3.

5. Pressure Control Equipment: See Form 3160-3 and Exhibit 1.

6. Mud Program: See Form 3160-3.

7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.

8. Testing, Logging and Coring Program:

   No drillstem tests are anticipated.
   The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csng Log, and Depth Control Log.
   No conventional coring is anticipated.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated stating date: As soon as possible after approval.

**MARBOB ENERGY CORPORATION**

**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:

A. The hazards and characteristics of hydrogen sulfide ($H_2S$).

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

C. The proper use of $H_2S$ detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

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

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

A. The effects of $H_2S$ on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

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

C. The contents and requirements of the $H_2S$ Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable $H_2S$ zone (within 3 days or 500 feet) and weekly $H_2S$ and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific $H_2S$ 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. $H_2S$ SAFETY EQUIPMENT AND SYSTEMS

Note: All $H_2S$ 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 $H_2S$.

A. Well Control Equipment:

Flare line.

Choke manifold.

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

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

C. $H_2S$ detection and monitoring equipment:

2 - portable $H_2S$ monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when $H_2S$ levels of 20 ppm are reached.

D. Visual warning systems:

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

E. Mud Program:

The mud program has been designed to minimize the volume of $H_2S$ circulated to the surface.

A mud-gas separator will be utilized.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for $H_2S$ service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

# WARNING

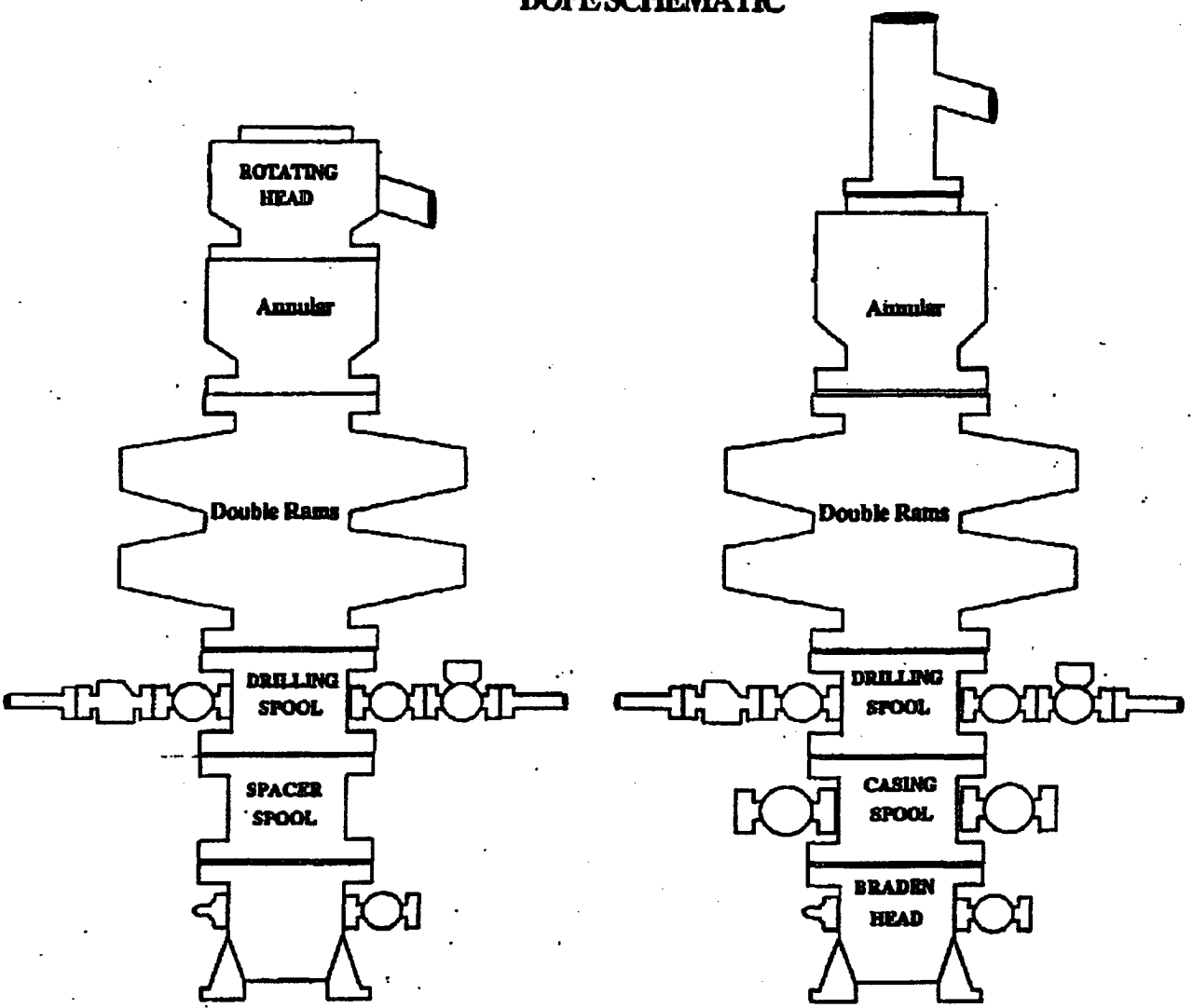
**YOU ARE ENTERING AN $H_2S$ AREA**
**AUTHORIZED PERSONNEL ONLY**

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. ***CK WITH MARBOB FOREMAN AT MAIN OFFICE***

MARBOB ENERGY CORPORATION

1-505-748-3303

# BOPE SCHEMATIC




## Choke Manifold

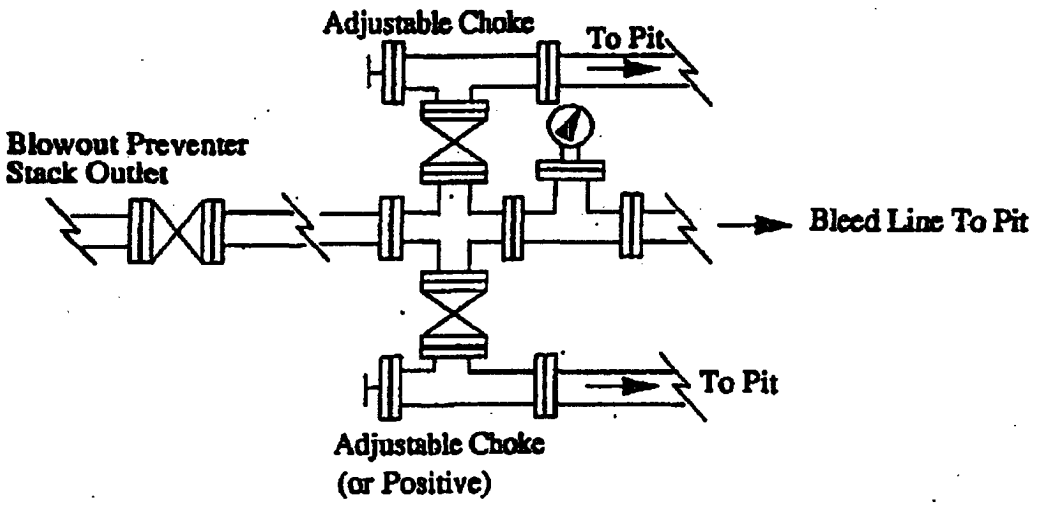
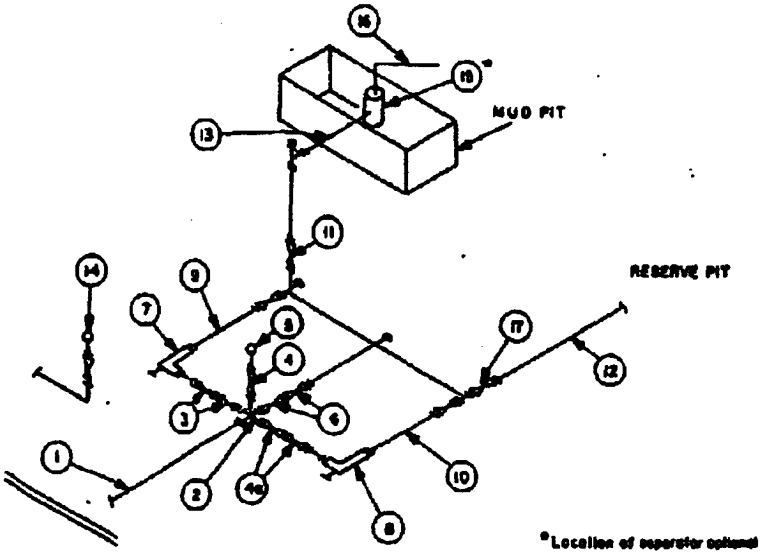



Exhibit One

## MINIMUM CHOKE MANIFOLD
### 3,000, 5,000 and 10,000 PSI Working Pressure

### 3 MWP - 5 MWP - 10 MWP




| MINIMUM REQUIREMENTS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 3,000 MWP | | | 5,000 MWP | | | 10,000 MWP | | |
| No. | | I.D. | NOMINAL | RATING | I.D. | NOMINAL | RATING | I.D. | NOMINAL | RATING |
| 1 | Line from drilling spool | | 3" | 3,000 | | 3" | 5,000 | | 3" | 10,000 |
| 2 | Cross 3"x3"x3"x2" | | | 3,000 | | | 5,000 | | | |
| | Cross 3"x3"x3"x3" | | | | | | | | | 10,000 |
| 3 | Valves(1) Gate ☐ Plug ☐(2) | 3-1/8" | | 3,000 | 3-1/8" | | 5,000 | 3-1/8" | | 10,000 |
| 4 | Valve Gate ☐ Plug ☐(2) | 1-13/16" | | 3,000 | 1-13/16" | | 5,000 | 1-13/16" | | 10,000 |
| 4a | Valves(1) | 2-1/16" | | 3,000 | 2-1/16" | | 5,000 | 3-1/8" | | 10,000 |
| 5 | Pressure Gauge | | | 3,000 | | | 5,000 | | | 10,000 |
| 6 | Valves Gate ☐ Plug ☐(2) | 3-1/8" | | 3,000 | 3-1/8" | | 5,000 | 3-1/8" | | 10,000 |
| 7 | Adjustable Choke(3) | 2" | | 3,000 | 2" | | 5,000 | 2" | | 10,000 |
| 8 | Adjustable Choke | 1" | | 3,000 | 1" | | 5,000 | 2" | | 10,000 |
| 9 | Line | | 3" | 3,000 | | 3" | 5,000 | | 3" | 10,000 |
| 10 | Line | | 2" | 3,000 | | 2" | 5,000 | | 3" | 10,000 |
| 11 | Valves Gate ☐ Plug ☐(2) | 3-1/8" | | 3,000 | 3-1/8" | | 5,000 | 3-1/8" | | 10,000 |
| 12 | Lines | | 3" | 1,000 | | 3" | 1,000 | | 3" | 2,000 |
| 13 | Lines | | 3" | 1,000 | | 3" | 1,000 | | 3" | 2,000 |
| 14 | Remote reading compound standpipe pressure gauge | | | 3,000 | | | 5,000 | | | 10,000 |
| 15 | Gas Separator | | 2'x5' | | | 2'x5' | | | 2'x5' | |
| 16 | Line | | 4" | 1,000 | | 4" | 1,000 | | 4" | 2,000 |
| 17 | Valves Gate ☐ Plug ☐(2) | 3-1/8" | | 3,000 | 3-1/8" | | 5,000 | 3-1/8" | | 10,000 |

*(1) Only one required in Class 3M.*

*(2) Gate valves only shall be used for Class 10M.*

*(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.*

### EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.

marbob
ENERGY CORPORATION
ARTESIA, NEW MEXICO

January 3, 2005

Oil Conservation Division
1301 W. Grand Ave.
Artesia, NM 88210

Attention: Bryan Arrant

Re: Tony Federal #21
330' FNL & 330' FEL, Unit D
Section 19, T17S, R31E
Eddy County, New Mexico

Dear Bryan:

We plan to complete this well in the Yeso and we don't anticipate cutting any formations that contain H2S gas during the drilling of the above referenced well. Therefore, we do not believe that an H2S contingency plan is necessary.

If you have questions or need further information, please call.

Sincerely,

Melanie J. Parker
Land Department

/mp