Form 31	60-3
(August	1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

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**BUREAU OF LAND MANAGEMENT** 

	5. Lease Serial No. NMNM0558014
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
е	8. Lease Name and Well No. HUNT FEDERAL 1
	9. API Well No. 30-015 - 33786
	10. Field and Pool, or Exploratory GOLDEN LAKE MORROW
	11. Sec., T., R., M., or Blk. and Survey or Area

DRILL REENTER la. Type of Work: Oil Well Gas Well Other Single Zone 1b. Type of Well: ☐ Multiple Zon 2. Name of Operator Contact: MELANIE J PARKER MARBOB ENERGY CORPORATION E-Mail: LAND2@MARBOB.COM 3b. Phone No. (include area code) Ph: 505-748-3303 3a. Address P O BOX 227 ARTESIA, NM 88211-0227 Fx: 505-746-2523 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) Sec 6 T21S R29E Mer NMP **SWNW Lot 5 1730FNL 660FWL** At surface SME: BLM At proposed prod. zone SWNW Lot 5 1730FNL 660FWL RECEIVED 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13. State **EDDY** NM DEC 2 2 2004 16. No. of Acres in Lease 17. Spacing Unit dedicated to this well 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) OGDIARTERIA 285,20 587.65 20. BLM/BIA Bond No. on file 18. Distance from proposed location to nearest well, drilling, 19. Proposed Depth completed, applied for, on this lease, ft. 12700 MD 12700 TVD 22. Approximate date work will start 12/15/2004 21. Elevations (Show whether DF, KB, RT, GL, etc. 23. Estimated duration 3441 GL 21 DAYS 24. Attachments Confirm Controlled Water Books

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

25. Signature (Electronic Submission)		Name (Printed/Typed) MELANIE J PARKER Ph: 505-748-3303	Date 11/10/2004	
Title LAND DEPARTMEN	Т			
Approved by (Signature)	/s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	1 7 DEC 2004	
FIELD MA	NAGER	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.

Electronic Submission #50872 verified by the BLM Well Information System For MARBOB ENERGY CORPORÁTION, sent to the Carlsbad Committed to AFMSS for processing by LINDA ASKWIG on 11/15/2004 (05LA0095AE)

> APPROVAL SUBJECT TO General requirements and SPECIAL STIPULATIONS ATTACHED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Type of action: Registration of a pit or	k covered by a "general plan"? Yes ⊠ No [ r below-grade tank ⊠ Closure of a pit or below-grad	le tank 🔲			
Operator: Marbob Energy Corporation	Telephone: <b>505-748-3303</b> e-mai	il address: land2@marbob.com			
Address: PO Box 227, Artesia, NM 88211-0227	E				
Facility or well name: <b>Hunt Federal #1</b> API #:	U/L or Qtr/Qtr <b>SWNW</b> See	c 6 T 21S R 29E			
County: <b>Eddy</b> LatitudeLongitude	NAD: 1927 🔲 1983 🔲 Surface Ow	vner Federal ⊠ State □ Private □ Indian □			
Pit  Type: Drilling ⊠ Production □ Disposal □  Workover □ Emergency □  Lined ⊠ Unlined □  Liner type: Synthetic ⊠ Thickness 12 mil Clay □ Volume  bbl	Below-grade tank  Volume:bbl Type of fluid:  Construction material:  Double-walled, with leak detection? Yes	HECEIVED			
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet  100 feet or more	(20 points) (10 points) ( 0 points) <b>0 points</b>			
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) ( 0 points) <b>0 points</b>			
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet  1000 feet or more	(20 points) (10 points) ( 0 points) <b>0 points</b>			
	Ranking Score (Total Points)	0 points			
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  foffsite  foffsite, name of facility  (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No  fee  ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.  I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below grade tank has been/will be constructed or closed according to NMOCD guidelines  a general permit  or an (attached) alternative of D-approved plan  bate: November 10, 2004  Printed Name/Title: Melanie J. Parker / Land Department  Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank cuptaminate 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 EC					

Form C-144 March 12, 2004

#### State of New Mexico

DISTRICT I 1825 N. PRENCH DR., HORRS, NW 88240

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

DISTRICT II 1301 W. CRAND AVENUE, ARTESIA, NM 68210

DISTRICT III

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505 1000 Ric Brazos Rd., Aztec, NM 87410

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA PR. NM 873	well location and acr	EAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code	Pool Name	
	77560	Golden Lake; Morrow	
Property Code	Property I HUNT FE		Well Number
OGRID No. 14049	Operator 1 MARBOB ENERGY		Elevation 3441

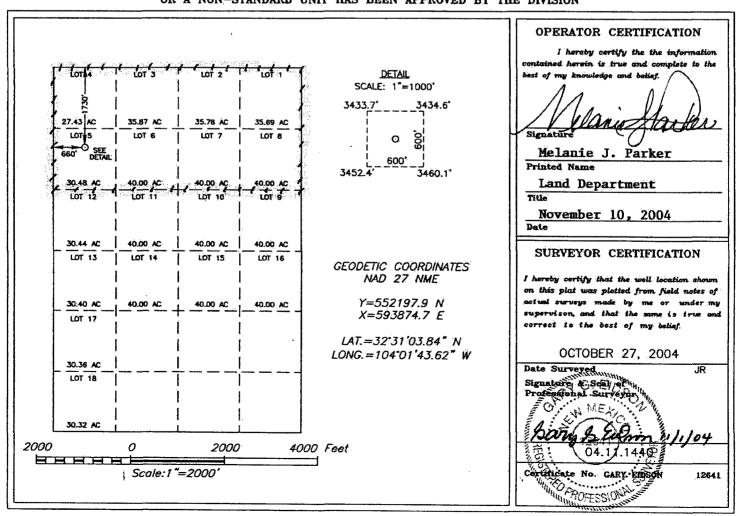
#### Surface Location

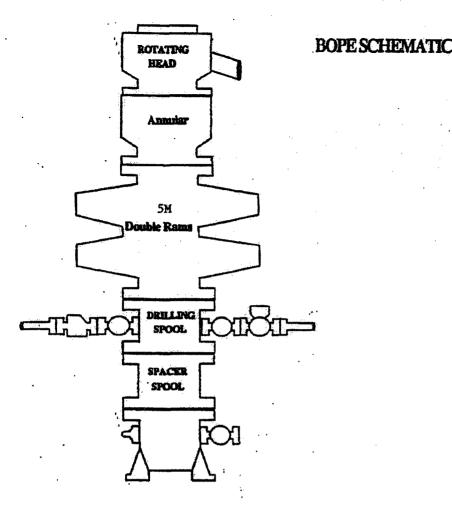
UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County	
5	6	21 <b>–</b> S	29-E		1730	NORTH	660	WEST	EDDY	

#### Bottom Hole Location If Different From Surface

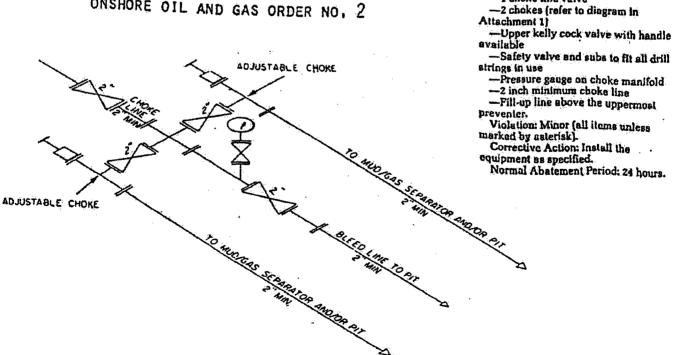
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (	Code Or	der No.				
285.25									

#### 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





ONSHORE OIL AND GAS ORDER NO. 2



2M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

Exhibit One

2M Double Rams

BRADEN

HEAD

2M system:

—Annular preventer, or, double ram, or two rams with one being blind and one

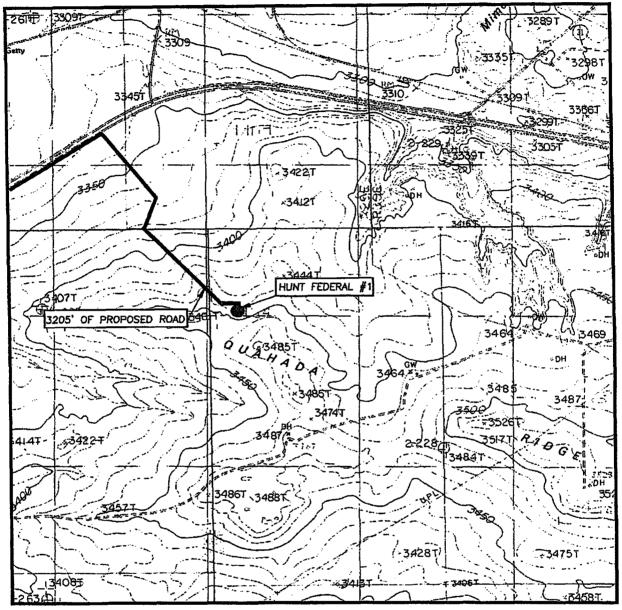
being a pipe ram

—Kill line (2 inch minimum)

—1 kill line valve (2 inch minimum)

-1 choke line valve

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 6 TWP. 21—S RGE. 29—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1730' FNL & 660' FWL

ELEVATION 3441'

MARBOB ENERGY

OPERATOR CORPORATION

LEASE HUNT FEDERAL

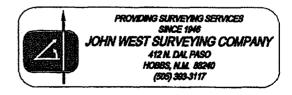
U.S.G.S. TOPOGRAPHIC MAP

ILLINOIS CAMP SE, N.M.

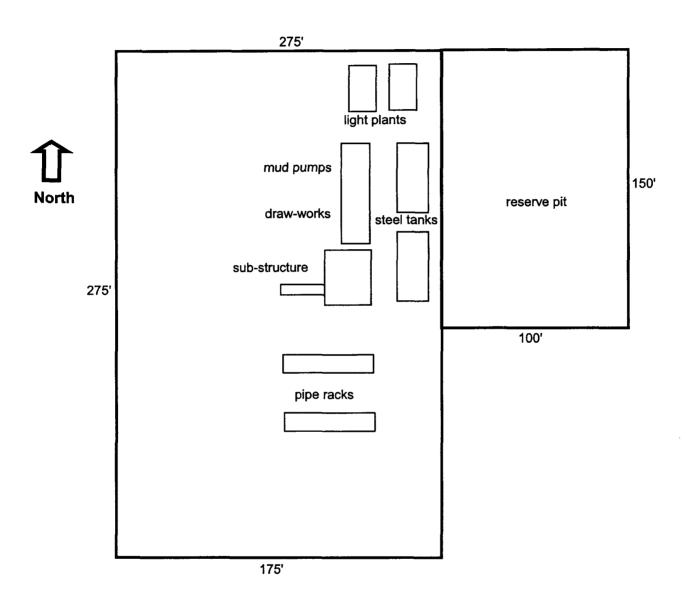
CONTOUR INTERVAL: ILLINOIS CAMP SE, N.M. - 10'

Existing Road

Proposed Access Road



**Exhibit Two** 



Hunt Federal No. 1 1730' FNL & 660' FWL, Lot 5 Section 6-T21S-R29E Eddy County, New Mexico

# MARBOB ENERGY CORPORATION DRILLING AND OPERATIONS PROGRAM

## Hunt Federal #1 1730' FNL & 660' FWL, Lot 5 Section 6, T21S, R29E 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 Permian.
- 2. The estimated tops of geologic markers are as follows:

Rustler	200'	Bone Spring	6500'
Top of Salt	470'	Wolfcamp	10000′
Base of Salt	1550′	Strawn	11000'
Yates	1640'	Atoka	11350′
Seven Rivers	1752'	Morrow	12100'
Reef	2000'	TD	12700'
Delaware	3500'		

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

Reef	2000'	Water
Delaware	3 <b>5</b> 00′	Oil
Wolfcamp	10000'	
Strawn	11000'	Gas
Atoka	11350'	
Morrow	12100'	

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 20" casing at 300' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 5 1/2" production casing which will be run at TD to sufficiently cover all known oil and gas horizons above 200'.

#### 4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
26"	0 - 300'	20"	94#	H-40
17 1/2"	0 – 1650🗀	13 3/8" 125' 8 5/8"	48#	H-40
12 1/4"	0 <b>– 3400'</b> 3	<sup>/25*</sup> 8 5/8"	32#	J-55
	0 - 12700'	5 1/2"	17#	P-110 LT&C

#### Proposed Cement Program:

20" Surface Casing: Cement w/ 400 sx Premium Plus. Circulate to surface.

13 3/8" Intermediate Casing: Cement w/ 900 sx cmt. Circulate to surface.

8 5/8" Intermediate Casing: Cement w/ 900 sx cmt. Attempt to tie in to 13 3/8" csg.

5 1/2" Production Casing: Cement w/ 700 sx cmt. Attempt to tie in to 8 5/8" csg.

5. Pressure Control Equipment: See Exhibit 1. Marbob proposes to nipple up on the 20" and 13 3/8" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 8 5/8" casing with a 5M system, tested to 5000# before drilling out.

6. Mud Program: The applicable depths and properties of this system are as follows:

Depth	Туре	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – 300′	Fresh Wtr	8.4 – 9.2	32 – 36	N.C.
300 - 1650'	Brine	9.9 - 10.2	28 – 32	N.C.
1650 - 3400'	Fresh Wtr	8.4 - 8.6	28 – 32	N.C.
3400 - 12500'	Cut Brine	8.7 - 9.5	28 – 34	N.C.

- 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 starting date: As soon as possible after approval.

# MARBOB ENERGY CORPORATION MULTI-POINT SURFACE USE AND OPERATIONS PLAN

## Hunt Federal #1 1730' FNL & 660' FWL, Lot 5 Section 6, T21S, R29E Eddy County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

#### 1. EXISTING ROADS:

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

#### **DIRECTIONS:**

From the intersection of US Hwy 62-180 and mile marker #49, turn left (south) and go southeast approximately 0.3 miles to a proposed road survey. Follow proposed road survey approximately 0.65 miles south/southeast to proposed location.

#### 2. PLANNED ACCESS ROAD:

A new access road of 3205' will be necessary. The new road will be constructed as follows:

- A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM-approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

F. The proposed access road as shown in Exhibit 2 has been centerline flagged by John West Engineering.

### 3. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on Hunt Federal #1 well pad.

#### 4. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the lined pit.
- B. Drilling fluids will be allowed to evaporate in the lined pit until the pit is dry.
- C. Water produced during completion may be disposed into the lined reserve pit.
- D. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations. All waste material will be contained to prevent scattering by the wind.

#### 5. WELLSITE LAYOUT:

- A. Exhibit 3 shows the relative location and dimensions of the well pad, the pit.
- B. The reserve pit will be lined with high quality plastic sheeting.

#### 6. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Reserve pit will be fenced until they have dried and been leveled.
- C. All rehabitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

#### 7. SURFACE OWNERSHIP:

The well site and lease are located on Federal surface

- A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.
- B. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

#### 8. OTHER INFORMATION:

A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

#### 9. **OPERATOR'S REPRESENTATIVE:**

A. Through A.P.D. Approval:

Dean Chumbley, Landman Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5988

В. Through Drilling Operations

> Sheryl Baker, Drilling Supervisor Marbob Energy Corporation P. O. Box 227 Artesia, NM 88211-0227 Phone (505)748-3303 Cell (505)748-5489

#### 10. **CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 Marbob Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Land Department

#### 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<sub>2</sub>S 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<sub>2</sub>S 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<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  $H_2S$  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. H2S 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.

### 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<sub>2</sub>S detection and monitoring equipment:

2 - portable H<sub>2</sub>S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S 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<sub>2</sub>S 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<sub>2</sub>S service.

#### G. Communication:

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

# WARNING

# YOU ARE ENTERING AN H<sub>2</sub>S AREA AUTHORIZED PERSONNEL ONLY

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

MARBOB ENERGY CORPORATION

1-505-748-3303

#### STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

Date:

November 4, 2004

Lease #:

NM 558014

**Hunt Federal** 

Legal Description: Section 6: Lots 1-8

Township 215 - Range 29E Eddy County, New Mexico

Formation(s): Morrow

Bond Coverage: Statewide

BLM Bond File #: 585716

Melanie J. Parker Land Department



January 3, 2005

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

Attention: Bryan Arrant

Re:

Hunt Federal #1

1730' FNL & 660' FWL, Lot 5

Section 6, T21S, R29E Eddy County, New Mexico

30 -015 - 33786

Dear Bryan:

We plan to complete this well in the Morrow which is sweet and <u>we don't</u> <u>anticipate cutting any formations that contain H2S gas</u> 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