

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

A-05-26

## APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

FEB 02 2005

OCD-ARTESIA

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM108025
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator MARBOB ENERGY CORPORATION		7. If Unit or CA Agreement, Name and No.
Contact: MELANIE J PARKER E-Mail: LAND2@MARBOB.COM		8. Lease Name and Well No. DOUBLE TROUBLE FEDERAL COM 1
3a. Address P O BOX 227 ARTESIA, NM 88211-0227	3b. Phone No. (include area code) Ph: 505-748-3303 Fx: 505-746-2523	9. API Well No. 30-015-33931
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENE Lot 1 940FNL 791FEL At proposed prod. zone NENW Lot 3 660FNL 1980FWL		10. Field and Pool, or Exploratory SPRINGS MORROW
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area Sec 3 T21S R25E Mer NMP SME: BLM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 11050 MD TVD 10575 TVD MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3298 GL	22. Approximate date work will start 12/01/2004	17. Spacing Unit dedicated to this well 298.00
24. Attachments		20. BLM/BIA Bond No. on file
CARLSBAD CONTROLLED WATER BASIN		23. Estimated duration 21 DAYS

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.<br>2. A Drilling Plan.<br>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).<br>5. Operator certification<br>6. Such other site specific information and/or plans as may be required by the authorized officer. |
|--|--|

25. Signature (Electronic Submission)	Name (Printed/Typed) MELANIE J PARKER Ph: 505-748-3303	Date 10/22/2004
Title LAND DEPARTMENT		
Approved by (Signature) /s/ Tony J. Herrell	Name (Printed/Typed) /s/ Tony J. Herrell	Date FEB - 1 2005
Title 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.

Electronic Submission #50293 verified by the BLM Well Information System  
For MARBOB ENERGY CORPORATION, sent to the Carlsbad  
Committed to AFMSS for processing by LINDA ASKWIG on 10/25/2004 (05LA0040AE)APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

February 9, 2005  
Marbob Energy Corporation  
P.O. Box 227  
Artesia, NM 88210  
Attn: Melanie Parker

**RE: Marbob Energy Corporation: Double Trouble Com. # 1, located in Lot 1  
(940' FNL & 791' FEL, surface location) of Section 3, Township 21 South Range 25 East  
Eddy County, New Mexico.**

Dear Mrs. Parker,

In regards to conditions for approval of the above captioned well, the New Mexico Oil Conservation Division (NMOCD) will require the following only if the drilling of the surface hole of said well is not drilled with an air/mist system.

This is for Marbob Energy Corporation to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from the surface to a depth of @ 1700'.

The results of this data are to be submitted to the NMOCD and the Bureau of Land Management. Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant

PES

CC: Tim Gum-District Supervisor-Artesia  
Bureau of Land Management  
Well File

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

**Double Trouble Federal No. 1**  
**940' FNL and 791' FEL, Lot 1**  
**Section 3-T21S-R25E**  
**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:

Queen	750'	Cisco-Canyon	8050'
San Andres	1000'	Strawn	9350'
Delaware	1750'	Atoka	9800'
Bone Spring	2600'	Morrow	9800'
		TD	10100'

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

Permian	Surface	Fresh Water
Wolfcamp	7700'	Oil
Cisco-Canyon	8050	Gas
Strawn	9350'	Gas
Atoka	9800'	Gas
Morrow	10100'	Gas

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 13 3/8" casing at 330' 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
17 1/2"	0 - 330'	13 3/8"	48#	H-40
12 1/4"	0 - 2800' 1700'	9 5/8"	36#	J-55
8 3/4"	0 - 11050' 555	5 1/2"	17#	S95-P110

Proposed Cement Program:

13 3/8" Surface Casing: Cement w/ 330 sx Class C. Circulate to surface.

WITNESS 9 5/8" Intermediate Casing: Cement w/650 sx Class C. Circulate to surface.

5 1/2" Production Casing: Cement w/ 800 sx Class C. TOC to cover 200' above all oil and gas horizons to tie into surface.

5. Pressure Control Equipment: See Exhibit 1.

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

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – 330'	Fresh Water	8.4 – 9.2	32 - 34	N.C.
330 – 2800'	Brine	10.0	28	
2800 – 10100'	Cut Brine	9.8 – 10.2	40 -45	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 Casing 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**

**Double Trouble Federal No. 1**  
**940' FNL and 791' FEL, Lot 1**  
**Section 3-T21S-R25E**  
**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 283 and County Road 30 go north on County Road 30 approximately 0.2 miles to a lease road on the right. Turn right and go east 0.26 miles. Turn left and go north approximately 0.34 miles to existing Marbob – Dry Land Shiner Federal Com #1 location. This well is 150' west of existing well.

**2. PLANNED ACCESS ROAD:**

- 3.** No new access road of will be necessary.

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

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

**5. 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.

**6. 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.

**7. 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 rehabilitation 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.

**8. 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.

**9. 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.

**10. 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

B. Through Drilling Operations

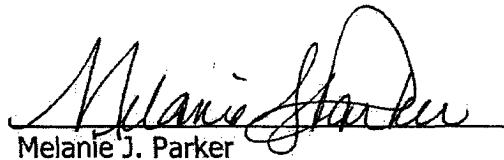
Sheryl Baker, Drilling Supervisor  
Marbob Energy Corporation  
P. O. Box 227  
Artesia, NM 88211-0227  
Phone (505)748-3303  
Cell (505)748-5489

**11. 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.

10/22/04

Date



Melanie J. Parker  
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<sub>2</sub>S).
- 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<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.

### **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.

# **W A R N I N G**

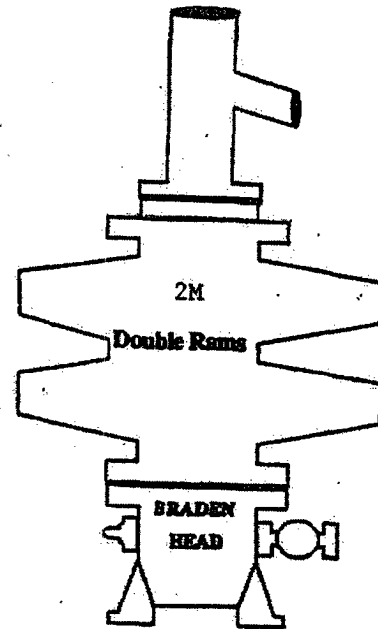
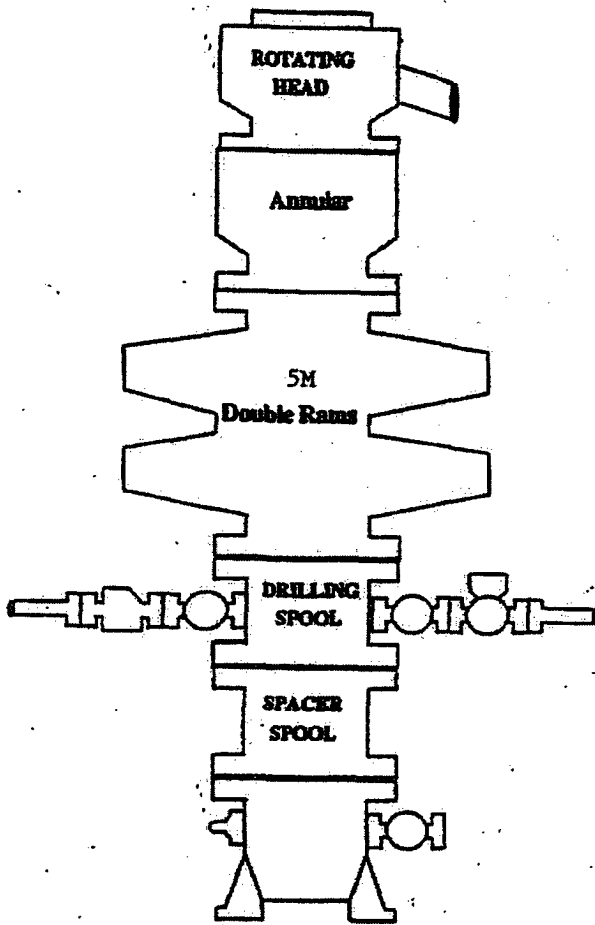
**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 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**

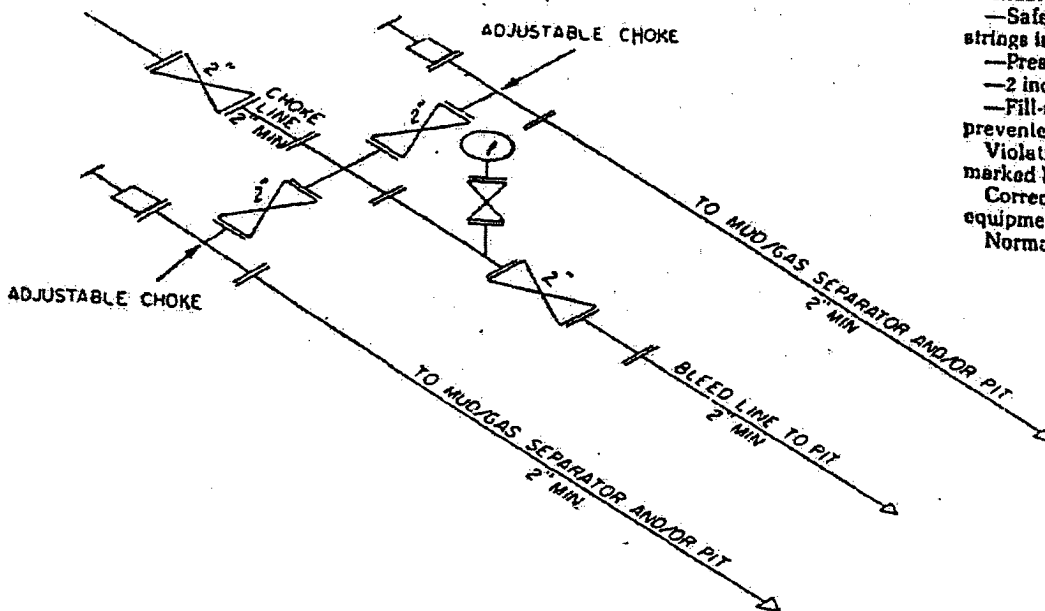
**1-505-748-3303**

# BOPE SCHEMATIC



ONSHORE OIL AND GAS ORDER NO. 2

- 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
  - 2 chokes (refer to diagram in Attachment 1)
  - Upper kelly cock valve with handle available
  - Safety valve and subs to fit all drill strings in use
  - Pressure gauge on choke manifold
  - 2 inch minimum choke line
  - Fill-up line above the uppermost preventer.
- Violation: Minor (all items unless marked by asterisk).  
Corrective Action: Install the equipment as specified.  
Normal Abatement Period: 24 hours.

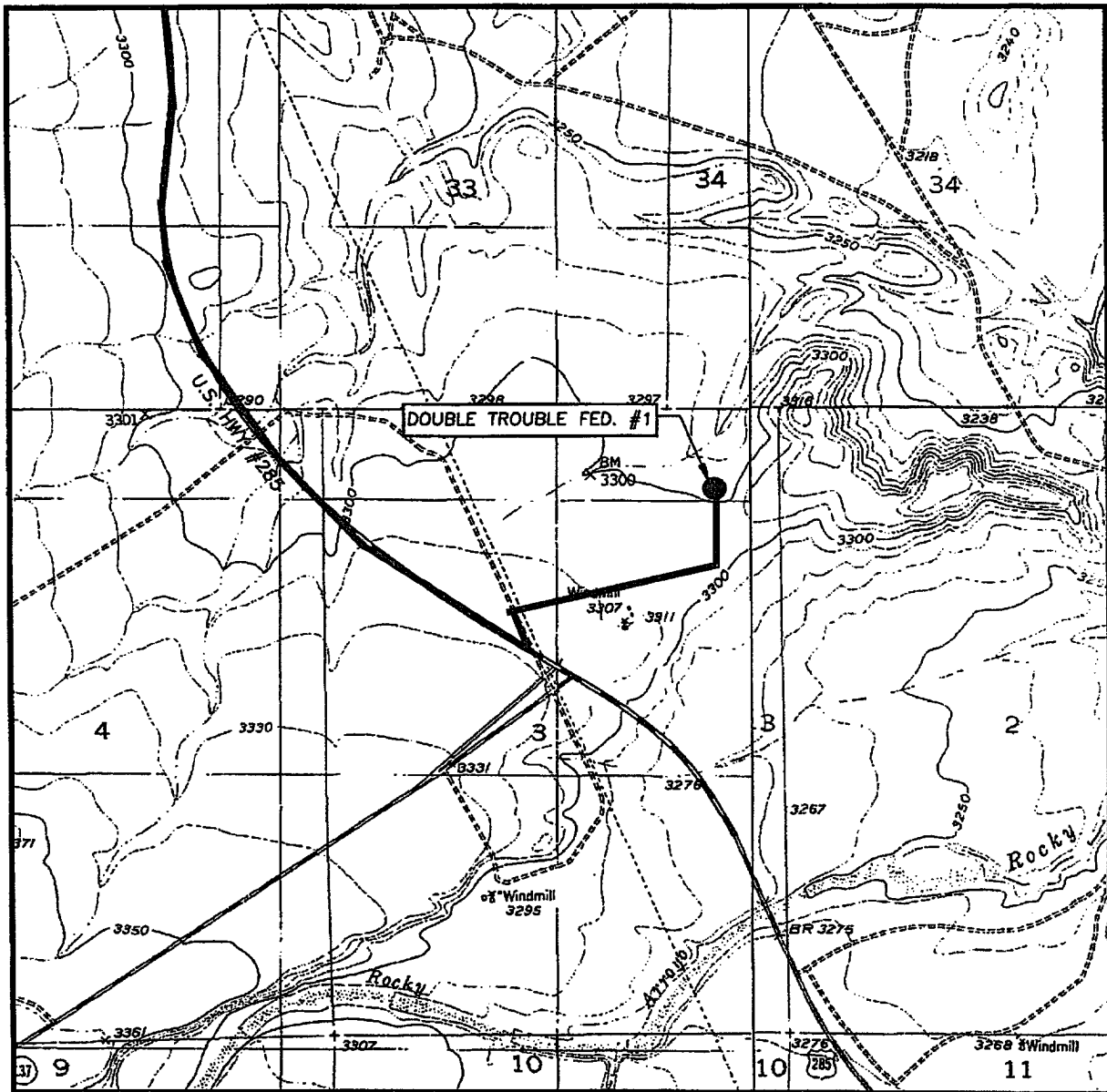


2M CHOKER MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES

MAY VARY

Exhibit One

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 3 TWP. 21-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 940' FNL & 791' FEL

ELEVATION 3298'

OPERATOR MARBOB ENERGY CORPORATION

LEASE DOUBLE TROUBLE FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
SEVEN RIVERS, LAKE MCMILLAN SOUTH, N.M.

CONTOUR INTERVAL:

SEVEN RIVERS, N.M. - 10'

LAKE MCMILLAN SOUTH, N.M. - 10'

— Road

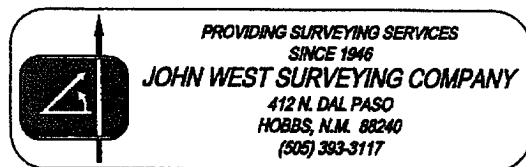
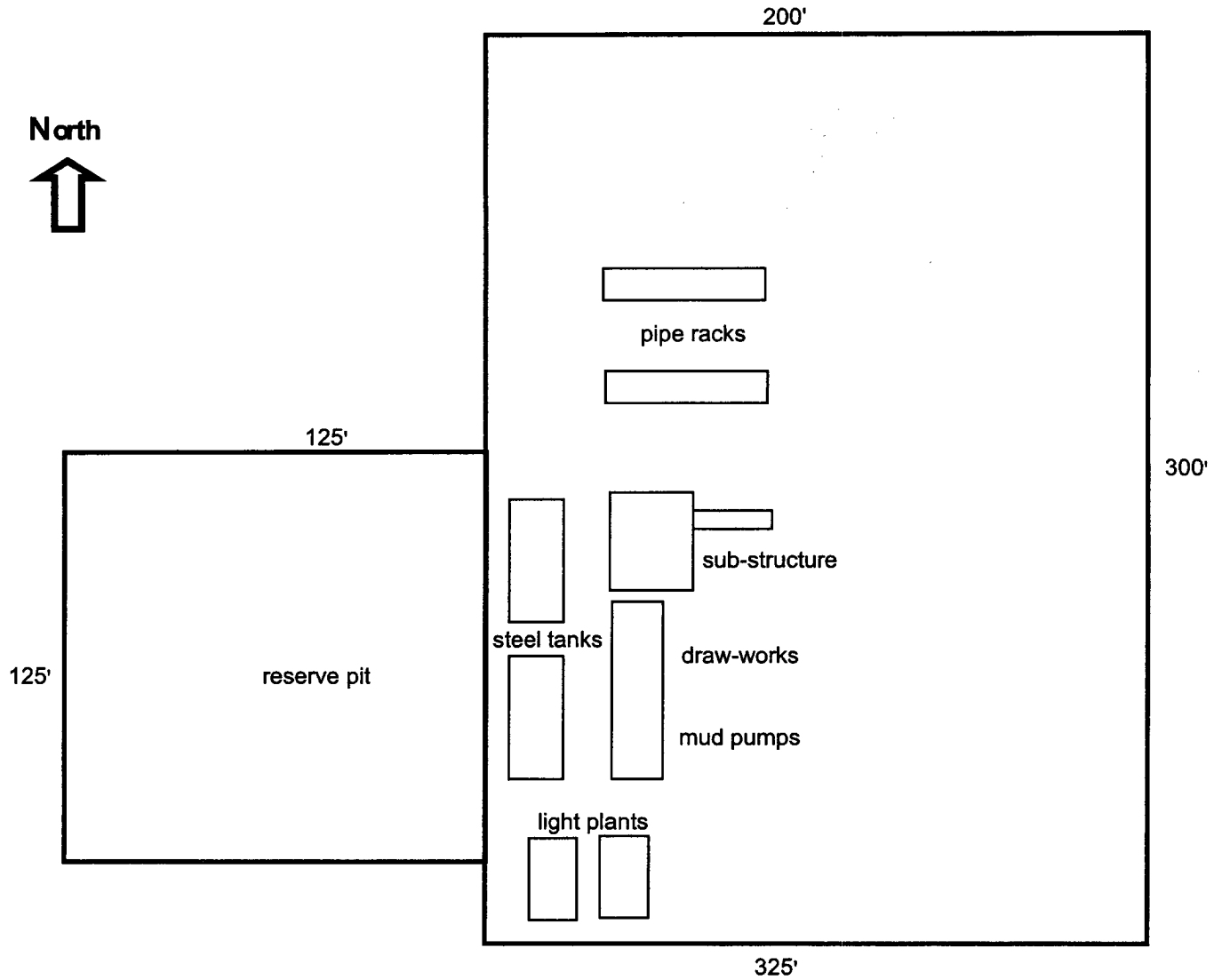


EXHIBIT TWO

# Well Site Lay-Out Plat



Double Trouble Federal Com #1  
940' FNL & 791' FEL Surface  
660' FNL & 1980' FWL Bottom Hole  
Section 3-T2IS-R25E  
Eddy County, New Mexico

EXHIBIT THREE

## 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: October 22, 2004

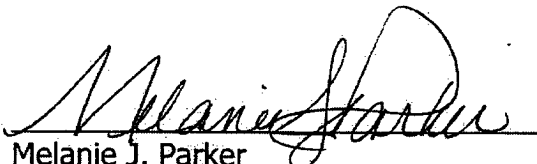
Lease #: **NM-108025**  
Double Trouble Federal

Legal Description: Lots 3, 4, 5, 6, 11, 12, 13, 14 Sec. 3-T21S-R25E  
Eddy County, New Mexico

Formation(s): Morrow

Bond Coverage: Statewide

BLM Bond File #: 585716



Melanie J. Parker  
Land Department