

OCD-ARTESIA

RECEIVED

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

F-06-27  
3/13/06

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MAY 04 2006

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
NM 96850  
6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

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. <35634>  
Pudge Federal #1

2. Name of Operator

Marbob Energy Corporation

9. API Well No.

30-015-34836

3a. Address

P.O. Box 227, Artesia, NM 88211-0227

3b. Phone No. (include area code)

505-748-3303

10. Field and Pool, or Exploratory

Under Brushy Draw ; Delaware

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

At surface 660' FSL & 910' FEL

At proposed prod. zone

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

Sec. 6, T26S - R29E

14. Distance in miles and direction from nearest town or post office\*

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)

16. No. of Acres in lease

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

9300

20. BLM/BIA Bond No. on file

NM 2056

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

2918'

22. Approximate date work will start\*

April 10, 2006

23. Estimated duration

21 Days

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

Nancy Bratcher

Name (Printed/Typed)

Nancy Bratcher

Date

3/10/06

Title

Land Department

Approved by (Signature)

/s/ James Stovall

Name (Printed/Typed)

/s/ James Stovall

APR 26 2006

Title

ACTING

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. Controlled Controlled Water Basin

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 reverse)

Witness Surface Casing

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico  
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 October 12, 2005**

**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 8086	Pool Name Brushy Draw ; Delaware
Property Code	Property Name PUDGE FEDERAL		Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION		Elevation 2918'

### 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	6	26-S	29-E		660	SOUTH	910	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

LOT 1		<b>OPERATOR CERTIFICATION</b>  <i>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  <u>Nancy T. Bratcher</u> 3-10-06 Signature Date  <u>Nancy T. Bratcher</u> Printed Name
LOT 2	<b>GEODETIC COORDINATES NAD 27 NME</b>  Y=387901.5 N X=597857.6 E  LAT.=32°03'57.83" N LONG.=104°01'02.76" W	
LOT 3	2908.2' 2900.0' 600' 600' 2899.3' 2916.4' DETAIL	<b>SURVEYOR CERTIFICATION</b>  <i>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.</i>  FEBRUARY 24, 2006  Date Surveyed DSR Signature & Seal of Professional Surveyor  <u>Gary B. Edson</u> 2/28/06 06.11.0219  Certificate No. GARY EDSON 12641
LOT 4	SEE DETAIL 910' 660'	

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

**Pudge Federal #1**  
**660' FSL & 910' FEL, Unit P**  
**Section 6, T26S, 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:

Top Salt	950'	Bone Springs	6505'
Bottom Salt	2539'	TD	9300'
Delaware	2729'		

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

Top Salt	950'	Oil
Bone Springs	6505'	Oil

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 500' 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 500' above.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade	
17 1/2"	0-500'	13 3/8"	48#	H-40	WITNESSES
12 1/4"	500-2700'	8 5/8"	29#	J-55	
7 7/8"	2700-9300'	5 1/2"	17#	J-55	

**Proposed Cement Program:**

17 1/2" Surface Casing: Cement w/ 500 sx. Circulate to surface.

12 1/4" Intermediate Casing: Cement w/ 600 sx. Circulate to surface.

7 7/8" Production Casing: Cement w/450 sx. 500' above all oil & gas zones.

5. Pressure Control Equipment:

See Exhibit #1. Marbob proposes to nipple up on the 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	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 – 500'	Fresh Water	8.5	28	N.C.
500-2700'	Brine	9.8-10.2	40-45	N.C.
2700-9300'	Cut Brine	8.6-9.4	28-36	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**

**Pudge Federal #1**  
**660' FSL & 910' FEL, Unit P**  
**Section 6, T26S, 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 U.S. Highway # 285 and Eddy County Rd. #725, go east-northeast along Eddy County Rd. 725 approx. 3.0 miles. (Past the EPNG Plant) through a cattle guard to a proposed road survey and two track road on the left. Follow road survey along two track road west-northwest approx. 0.21 miles to this location.

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

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

**3. 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.

**4. 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.

**5. 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.

**6. 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.

**7. 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.

**8. 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

**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.

3/10/06

Date

Nancy Bratcher

Nancy Bratcher  
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.

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**

## 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: March 10, 2006

Lease #: NM-916850  
Pudge Federal #1

Legal Description: SESE Sec. 6-T26S-R29E  
Eddy County, New Mexico

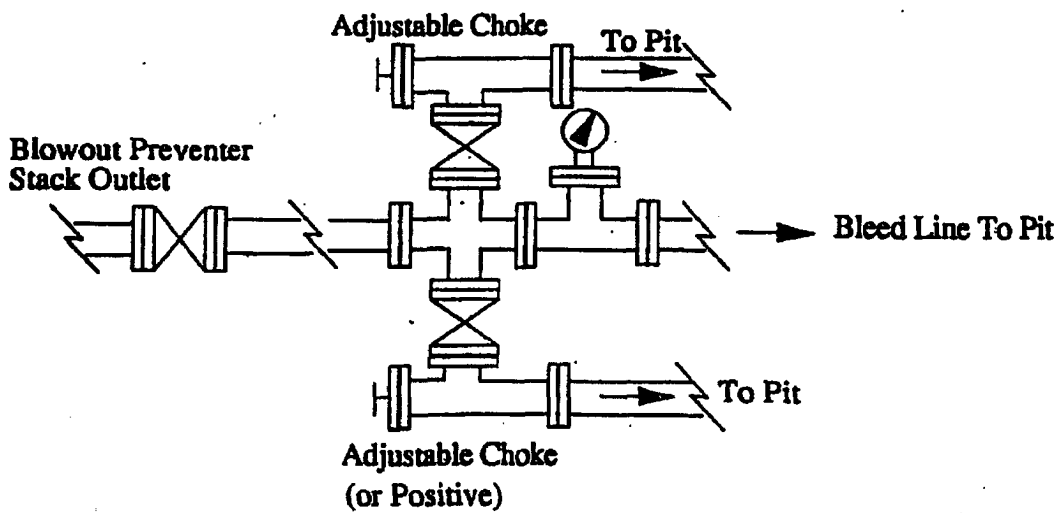
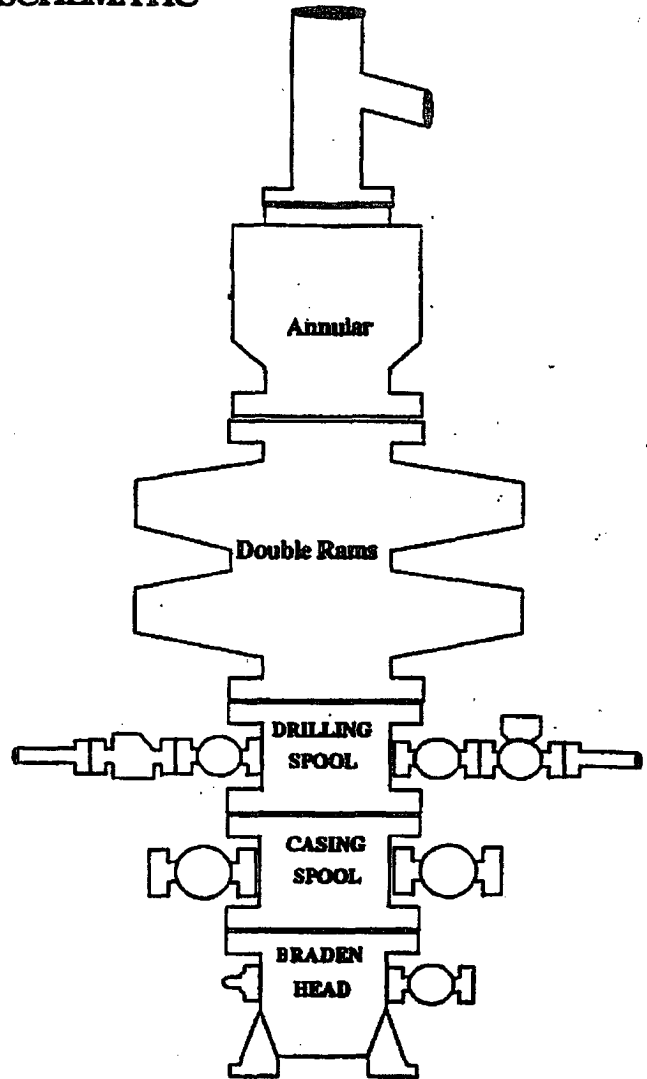
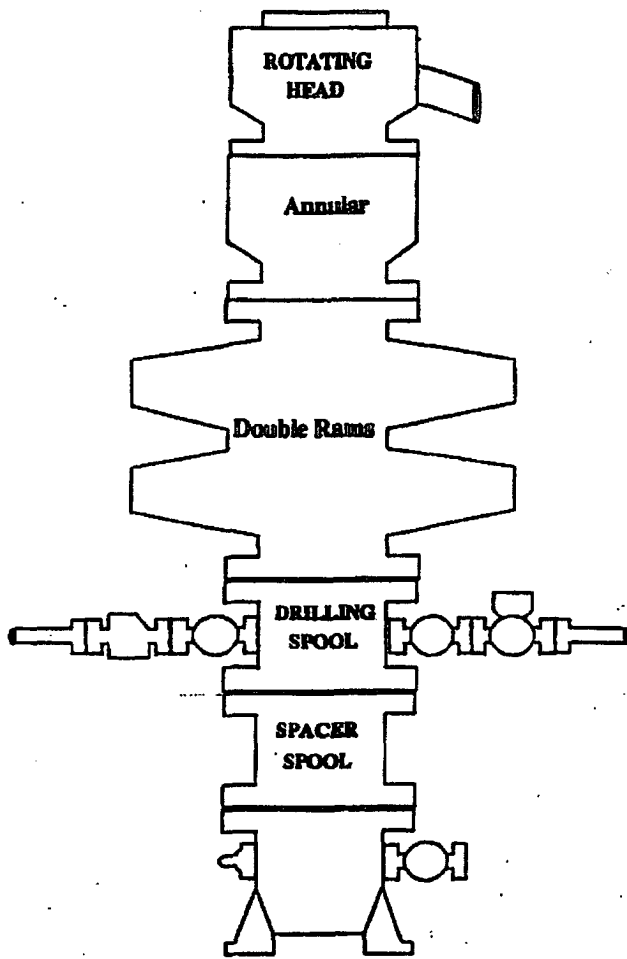
Formation(s): Permian

Bond Coverage: Statewide

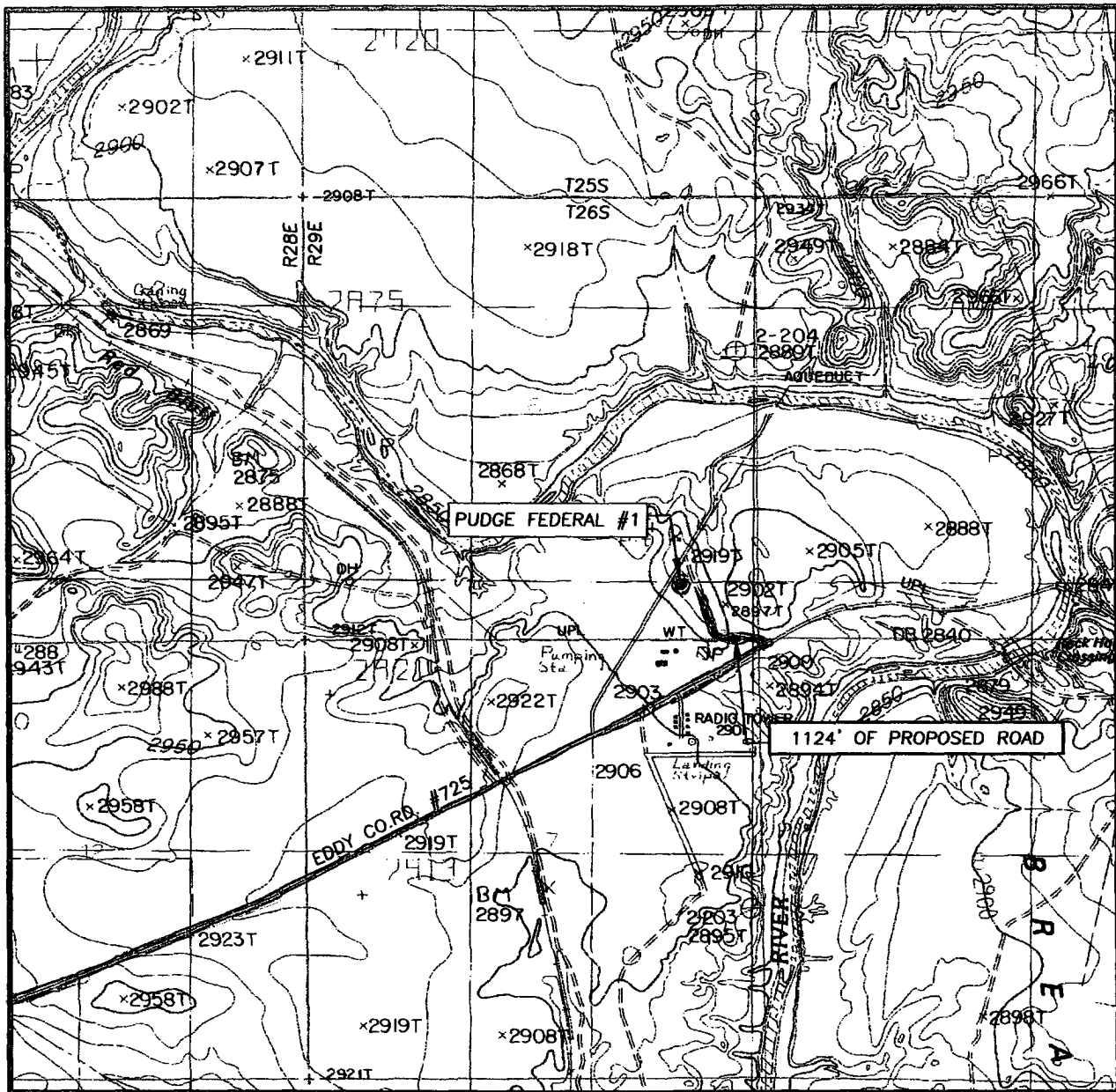
BLM Bond File #: NM 2056

Nancy Bratcher  
Nancy Bratcher  
Land Department

# BOPE SCHEMATIC



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
RED BLUFF, N.M. - 10'

SEC. 6 TWP. 26-S RGE. 29-E

SURVEY \_\_\_\_\_ N.M.P.M.

COUNTY EDDY STATE NEW MEXICO


DESCRIPTION 660' FSL & 910' FEL

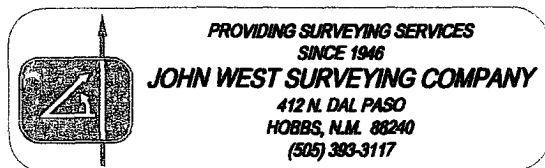
ELEVATION 2918'

OPERATOR MARBOB ENERGY CORPORATION

LEASE PUDGE FEDERAL

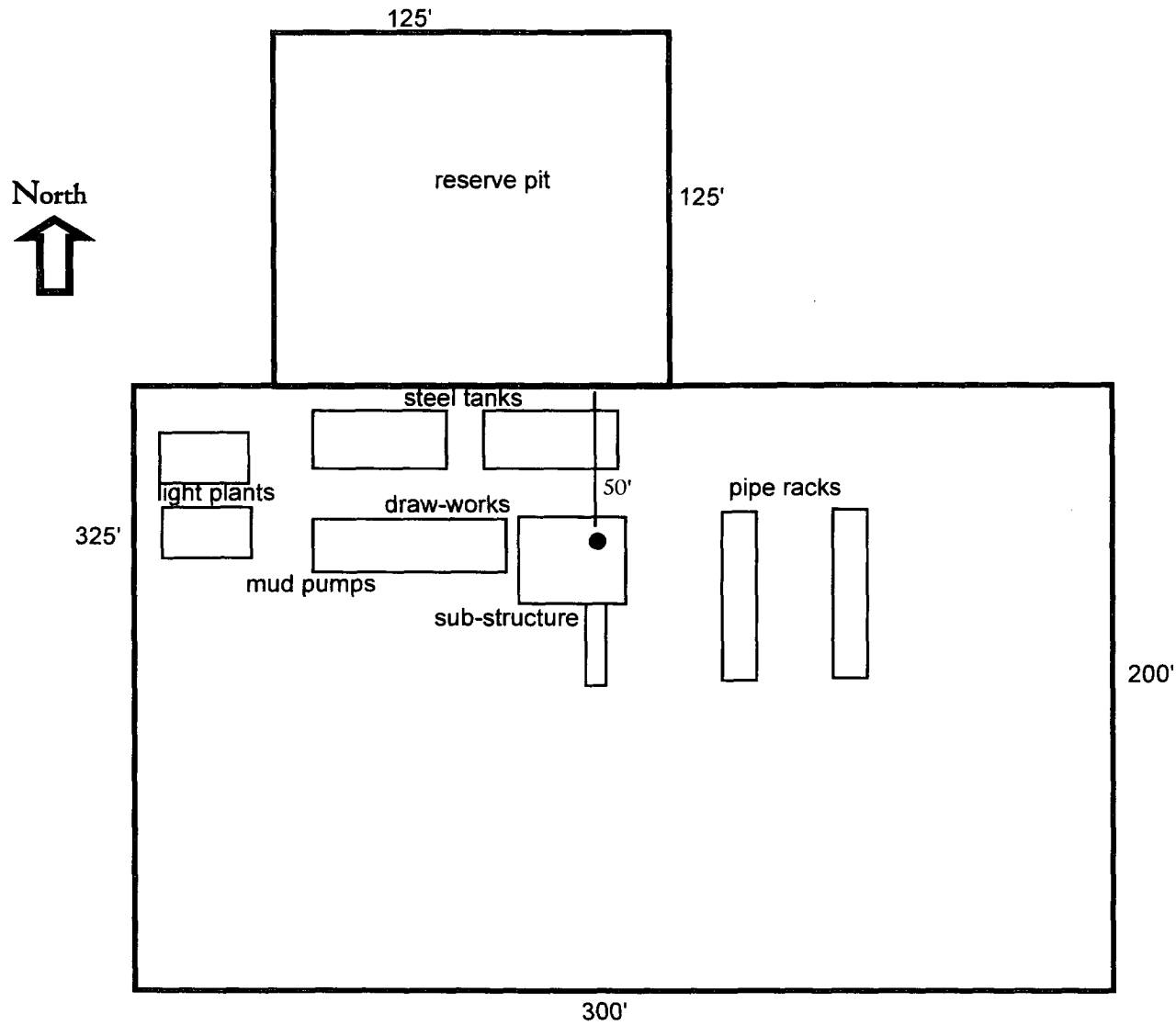
U.S.G.S. TOPOGRAPHIC MAP  
RED BLUFF, N.M.

 Existing Roads



**EXHIBIT #2**

Well Site Lay-Out Plat  
(Deep)



Pudge Federal #1  
660' FSL & 910' FEL Unit P  
Section 6, T26S, R29E  
Eddy County, New Mexico