

# OCD-ARTESIA

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

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM- <b>98157</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>158898 Ameristate Exploration, LLC</b> <i>ATTN: John Houck</i>		7. If Unit or CA Agreement, Name and No.
3a. Address <b>401 Congress Ave. Ste. 2900 Austin, Tx 78701</b>		8. Lease Name and Well No. <b>36135</b> Mental Floss 18 Federal No. 1
3b. Phone No. (include area code) <b>512 623 5500 5535</b>		9. API Well No. <b>30-015-35229</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>1980' FNL &amp; 1470' FEL</b> At proposed prod. zone		10. Field and Pool, or Exploratory <b>Wildcat Mortrow</b>
11. Sec., T. R. M. or Blk. and Survey or Area <b>Sec. 18, T16S, R27E</b>		12. County or Parish
13. State		
14. Distance in miles and direction from nearest town or post office* <b>12.5 miles to Artesia, NM, West of location</b>		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1470'</b>	16. No. of acres in lease <b>558.1</b>	17. Spacing Unit dedicated to this well <b>320</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>3,485'</b>	19. Proposed Depth <b>8,400'</b>	20. BLM/BIA Bond No. on file <b>NMB-00296</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3,423' GL</b>	22. Approximate date work will start* <b>11/01/2006</b>	23. Estimated duration <b>5-6 weeks</b>

#### 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 <i>[Signature]</i>	Name (Printed Typed) <b>Don C. Deck</b>	Date <b>10/04/2006</b>
Title <b>Agent for Ameristate Exploration, LLC</b>		
Approved by (Signature) <i>/s/ James Stovall</i>	Name (Printed Typed) <b>/s/ James Stovall</b>	Date <b>NOV 05 2006</b>
Title <b>ACTING FIELD MANAGER</b>		
Office <b>CARLSBAD FIELD OFFICE</b>		

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 to make any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

**ROSWELL CONTROLLED WATER BASIN**

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED**

Statement Accepting Responsibility for Operations

Operator Name: Ameristate Exploration, LLC  
Street or Box: 401 Congress Avenue, Suite 2900  
City, State: Austin, Texas  
Zip Code: 78701

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. & Legal Description of Land:

NM-~~98157~~ 558.10 acres

~~CA~~

Formation(s):


Wildcat Morrow

Bond Coverage:

BLM Bond File No.:

NMB-000296

Authorized Signature:



Don C. Deck

Title: Agent for Ameristate Exploration, LLC

Date: October 4, 2006

DISTRICT I  
1625 N. FRENCH DR., HOBBS, NM 88240

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

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



Form C-102  
Revised October 12, 2005  
Appropriate District Office  
State Case - 4 Copies  
Fee Case - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT

API Number	Pool Code 96570	Pool Name Wildcat Morrow
Property Code	Property Name MENTAL FLOSS 18 FEDERAL	Well Number 1
OGRID No. 158898	Operator Name AMERISTATE EXPLORATION, LLC	Elevation 3423'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	18	16-S	27-E		1980	NORTH	1470	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 320	Joint or Infill	Consolidation Code	Order No.
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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

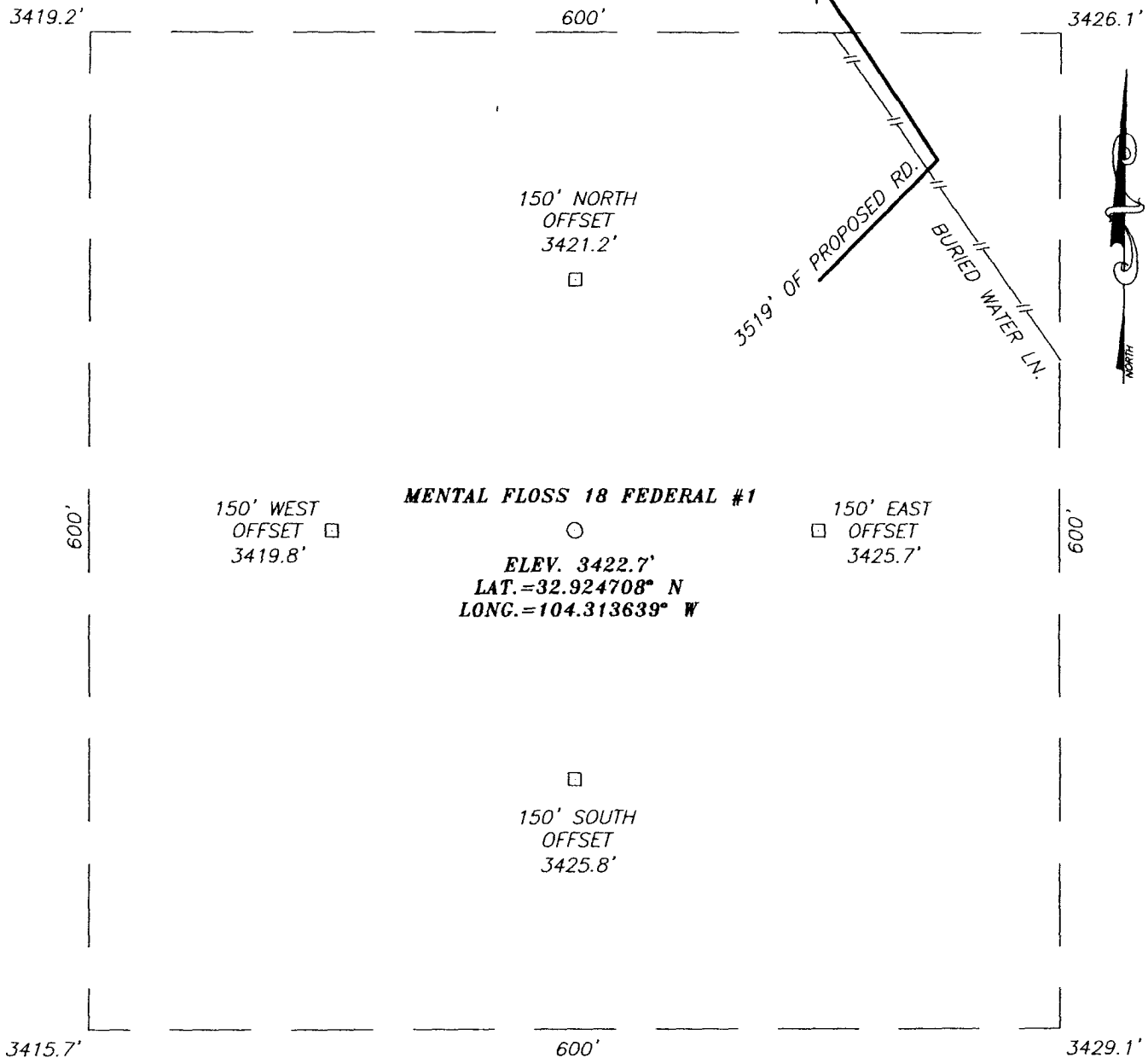
LOT 1									
LOT 2									
LOT 3									
LOT 4									

GEODETIC COORDINATES  
NAD 27 NME  
Y=700121.3 N  
X=506043.2 E  
LAT.=32.924708° N  
LONG.=104.313639° W

OPERATOR CERTIFICATION  
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.  
Signature: *Michael H. Suijo* Date: *8/13/06*  
Printed Name: *Michael H. Suijo*

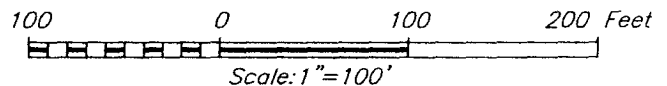
SURVEYOR CERTIFICATION  
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  
Date Surveyed: *AUGUST 31, 2006* MR  
Signature & Seal of Professional Surveyor: *GARY EIDSON*  
Certificate No.: *GARY EIDSON* 12841

**SECTION 18, TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,**  
 EDDY COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

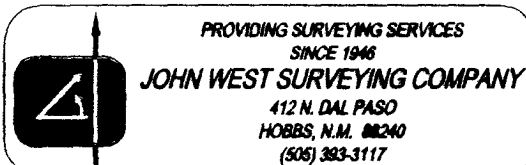
FROM THE INTERSECTION OF U.S. HWY. #82 (LOVINGTON HWY.) AND CO. RD. #200 (KARR RANCH RD.), GO NORTH-NORTHWEST ON KARR RANCH RD. APPROX. 4.5 MILES TO END OF PAVEMENT. CONTINUE NORTH ON CALICHE ROAD APPROX. 2.1 MILES. VEER RIGHT AND GO EAST APPROX. 0.4 MILES TO A BEGIN ROAD SURVEY. FOLLOW ROAD SURVEY EAST-SOUTHEAST APPROX. 0.7 MILES TO THIS LOCATION.



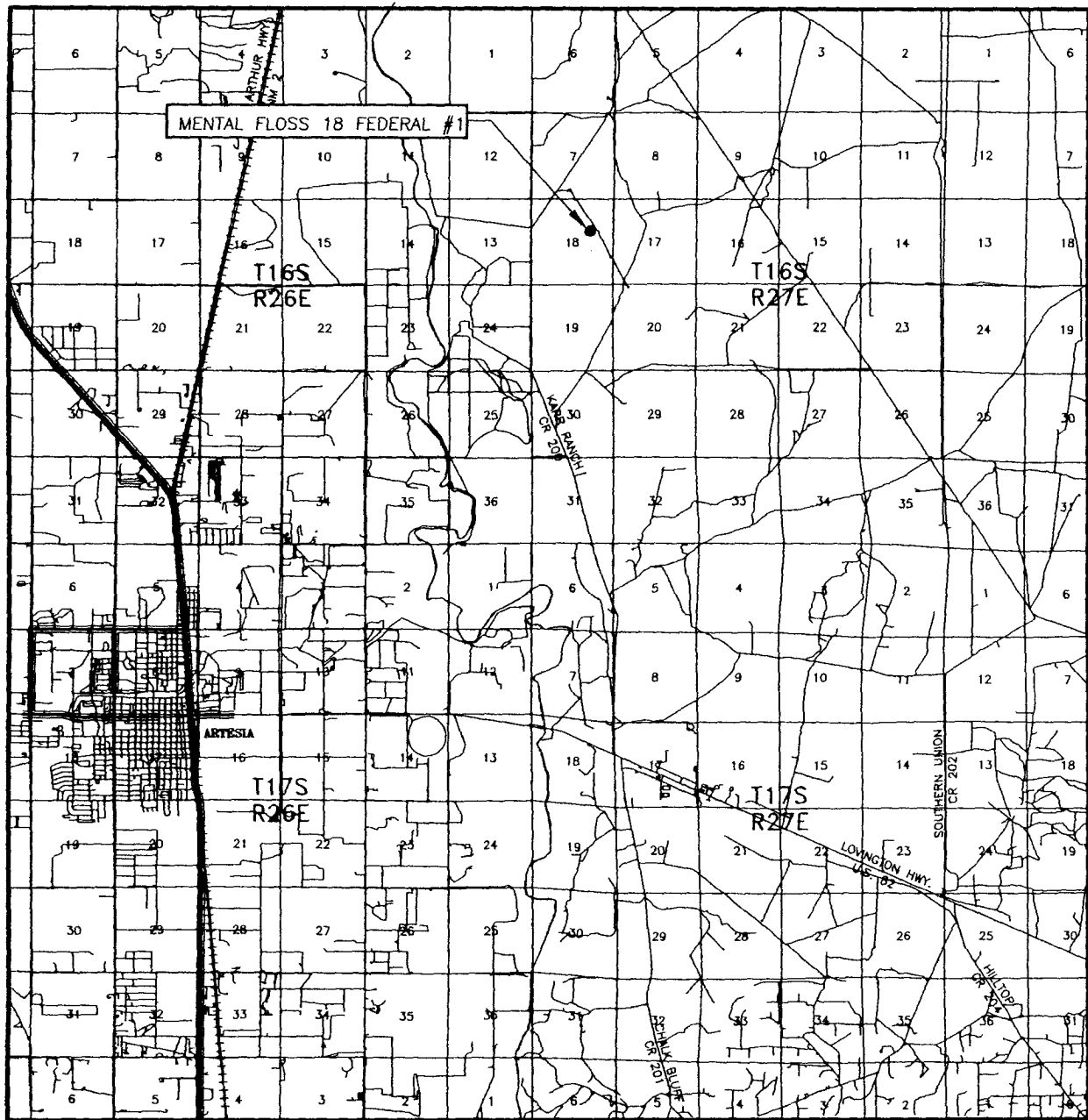
**AMERISTATE EXPLORATION, LLC**

MENTAL FLOSS 18 FEDERAL #1  
 LOCATED 1980 FEET FROM THE NORTH LINE  
 AND 1470 FEET FROM THE EAST LINE OF SECTION 18,  
 TOWNSHIP 16 SOUTH, RANGE 27 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

Survey Date: 08/31/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.1380	Dr By: M.R.
Date: 09/07/06	Disk: CD#6
06111380	Scale: 1"=100'

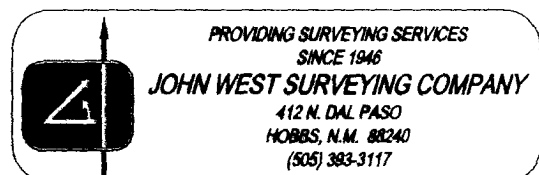


# VICINITY MAP

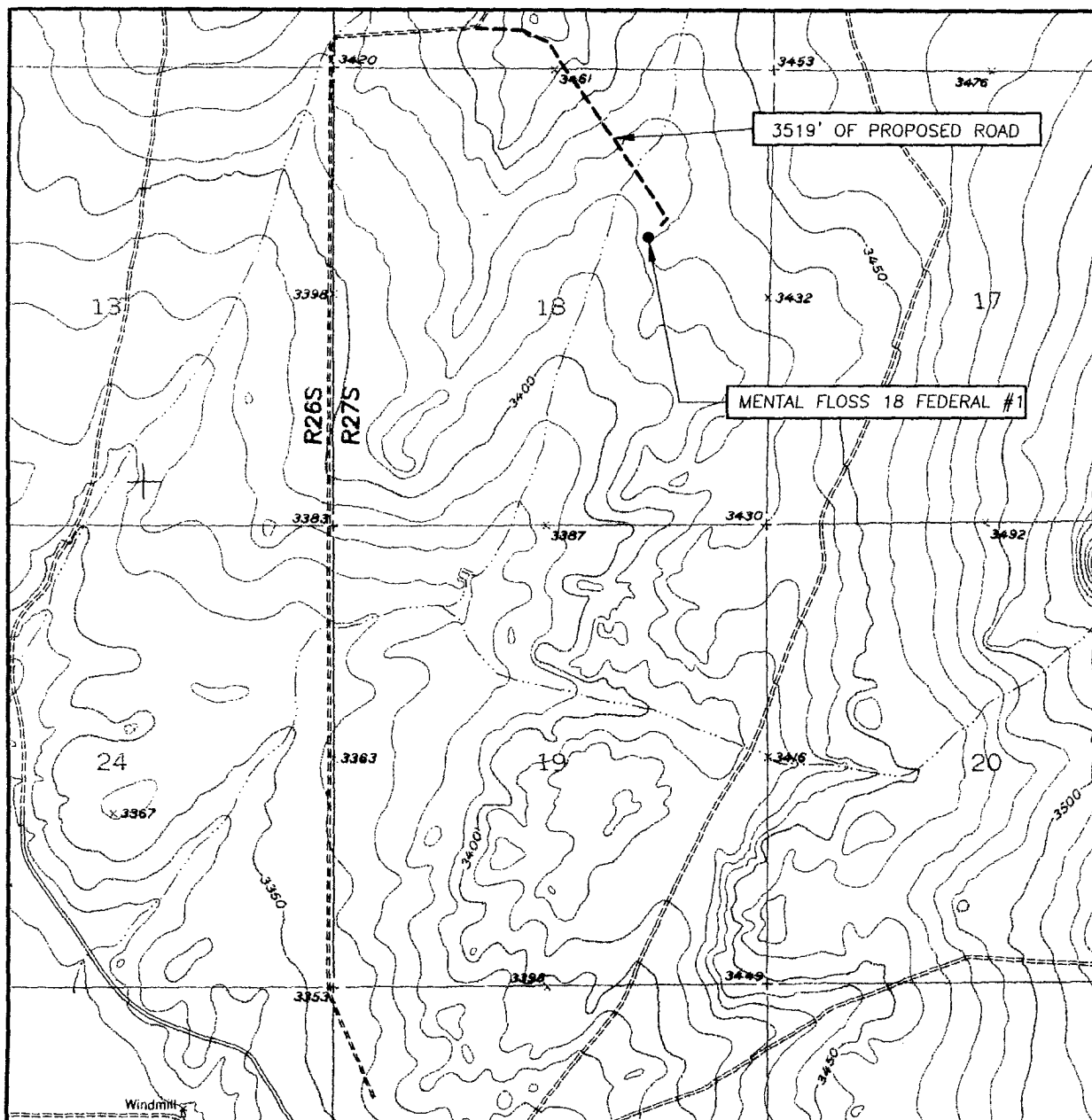


SCALE: 1" = 2 MILES

SEC. 18 TWP. 16-S RGE. 27-E  
 SURVEY N.M.P.M.  
 COUNTY EDDY STATE NEW MEXICO  
 DESCRIPTION 1980' FNL & 1470' FEL  
 ELEVATION 3423'  
 OPERATOR AMERISTATE EXPLORATION, LLC  
 LEASE MENTAL FLOSS 18 FEDERAL



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
ARTESIA NE, N.M. - 10'

SEC. 18 TWP. 16-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1980' FNL & 1470' FEL

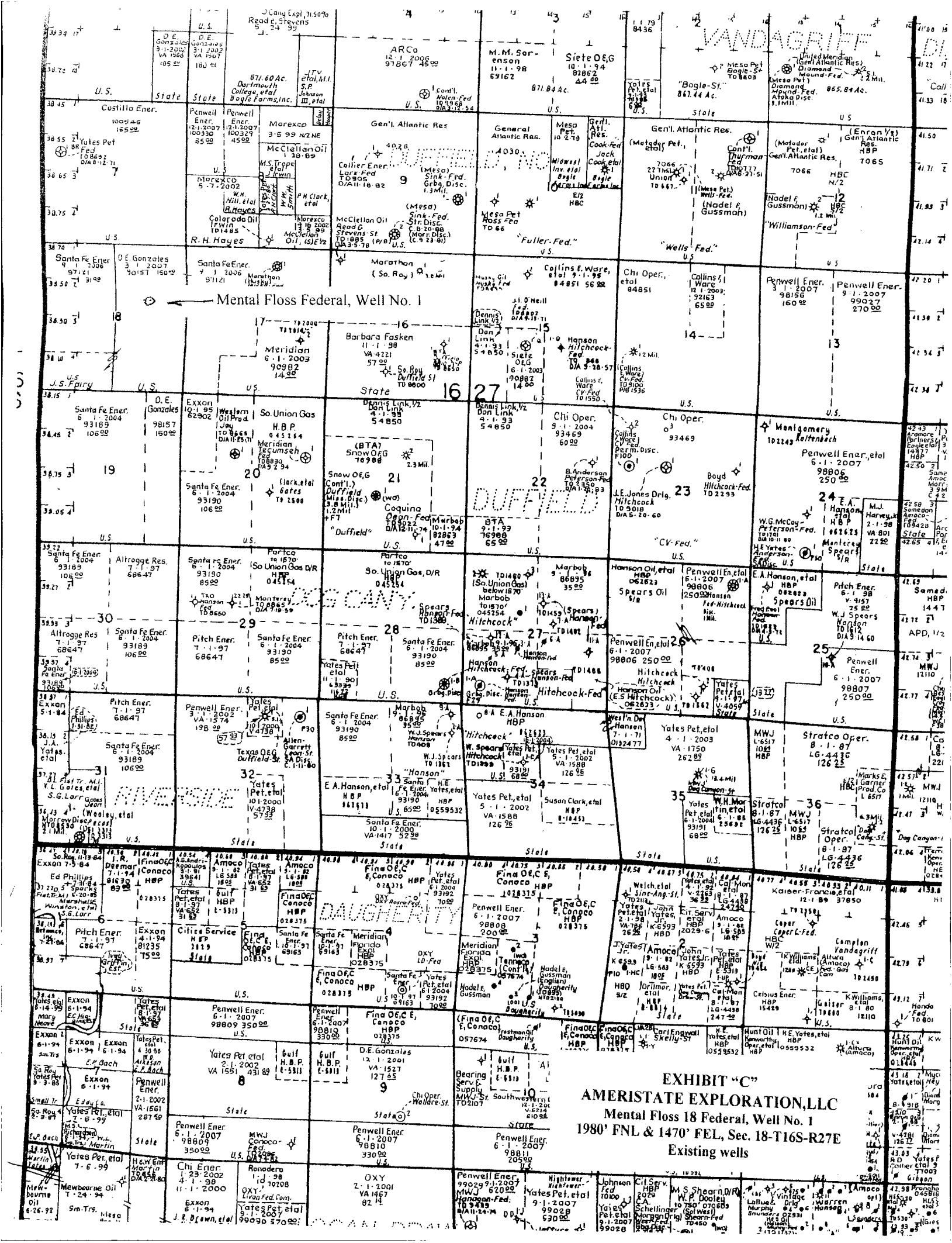
ELEVATION 3423'

OPERATOR AMERISTATE  
EXPLORATION, LLC

LEASE MENTAL FLOSS 18 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
ARTESIA NE, N.M.

**EXHIBIT "A"**  
**AMERISTATE EXPLORATION, LLC**  
Mental Floss 18 Federal, Well No. 1  
1980' FNL & 1470' FEL, Sec. 18-T16S-R27E  
Existing Access Roads: ==  
Proposed Access Road: ---



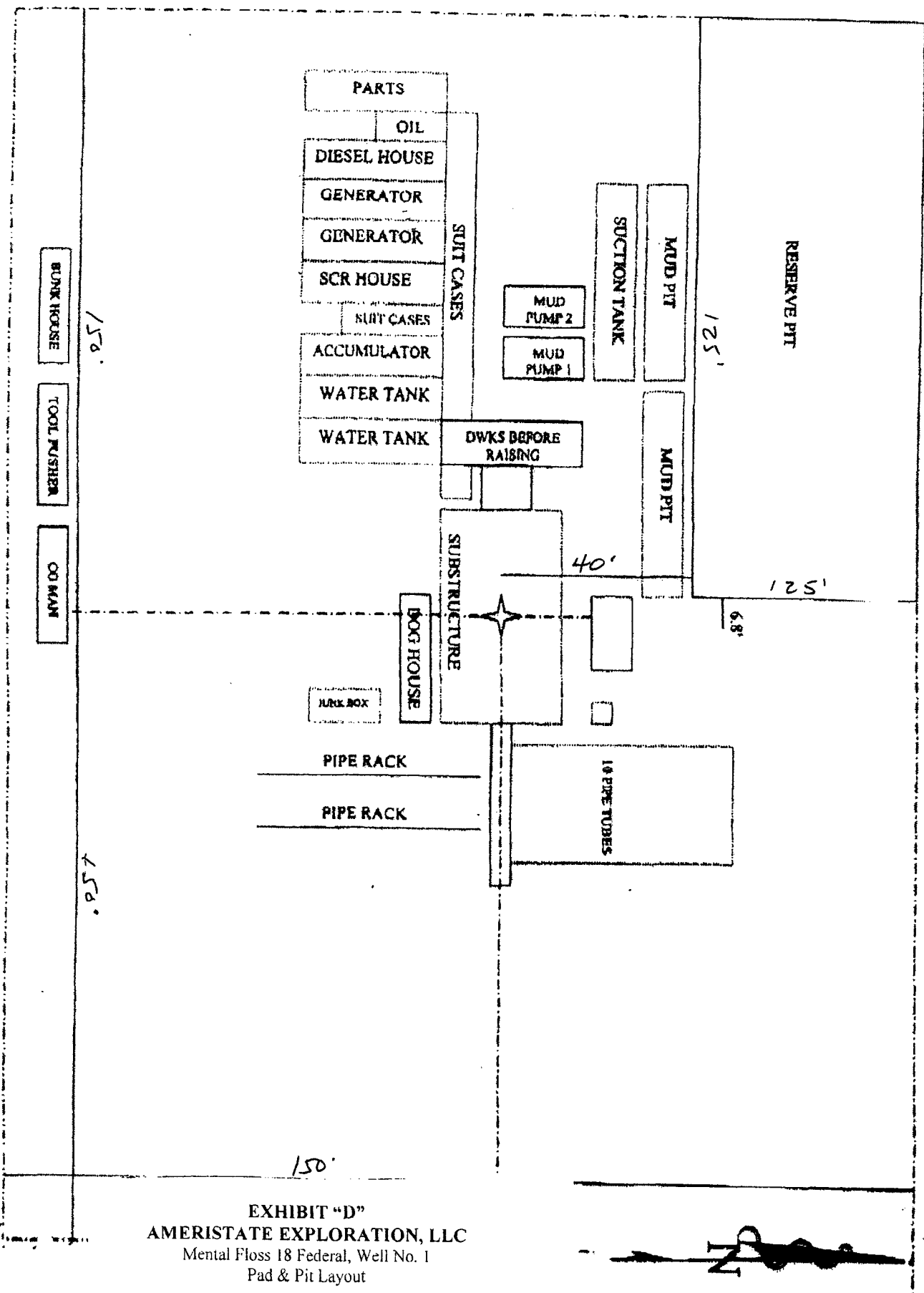


EXHIBIT "D"

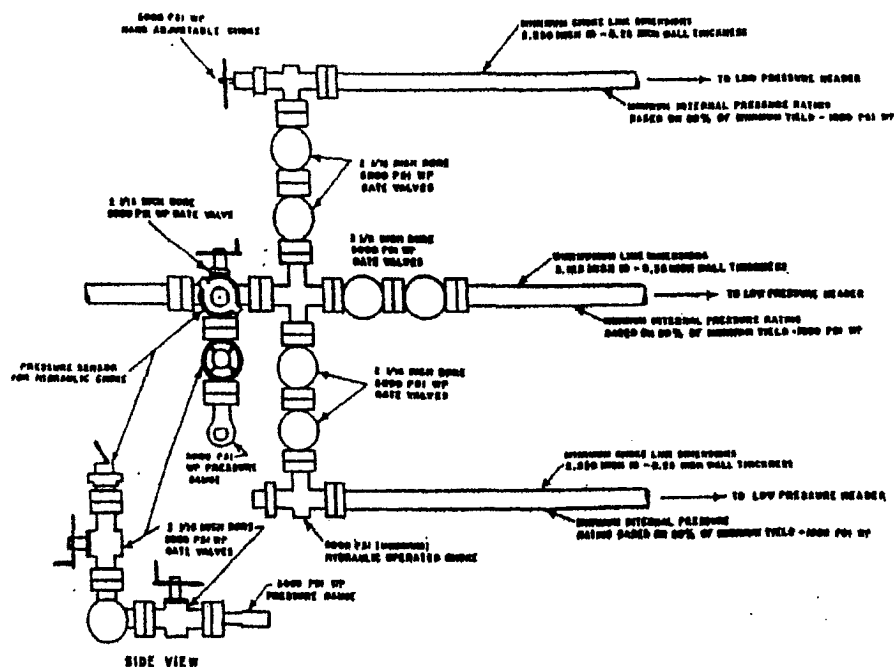
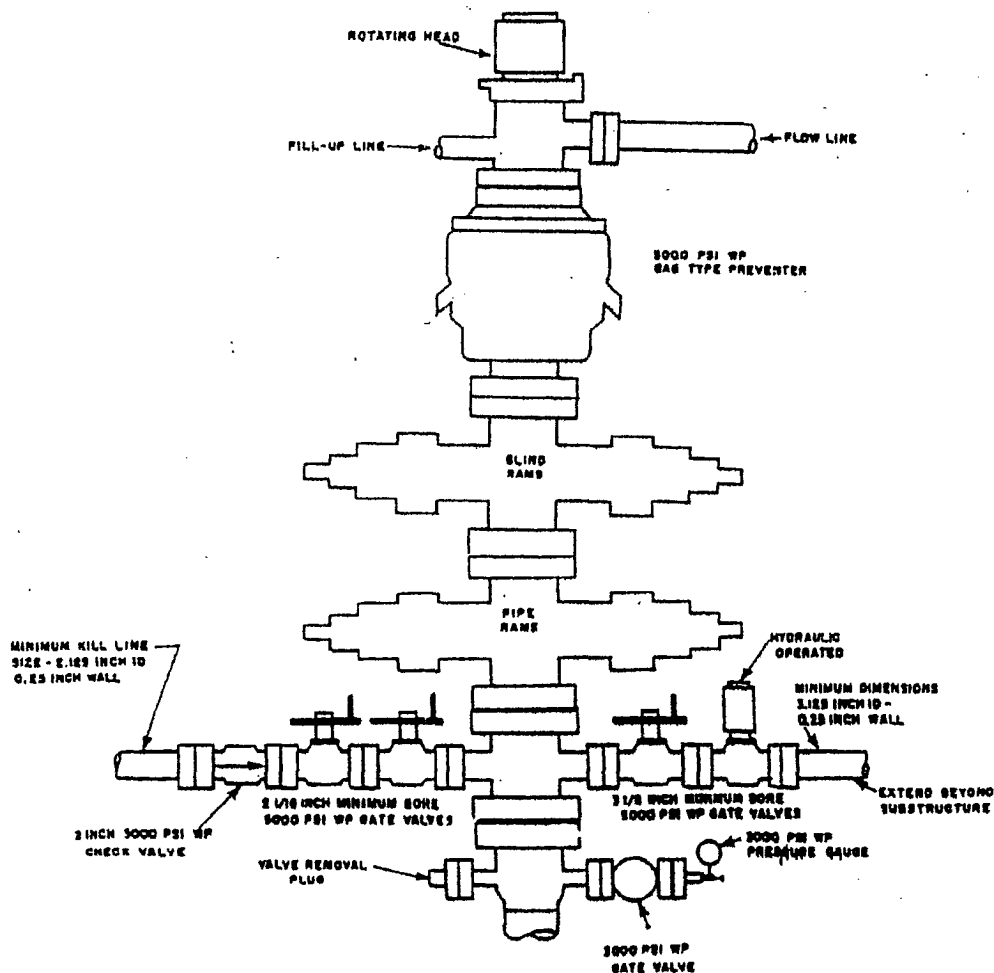
AMERISTATE EXPLORATION, LLC

Mental Floss 18 Federal, Well No. 1

Pad & Pit Layout



## EXHIBIT C-1

**EXHIBIT C-2**

**EXHIBIT "E"**  
**AMERISTATE EXPLORATION, LLC**  
**Mental Floss 18 Federal, Well No. 1**  
**BOP Specifications**

**APPLICATION FOR DRILLING  
AMERISTATE EXPLORATION, LLC**

Mental Floss 18 Federal, Well No. 1  
1980' FNL & 1470' FEL, Sec. 18-T16S-R27E  
Eddy County, New Mexico  
Lease No. NM-098157  
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Ameristate Exploration, LLC submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

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

San Andres	960'	Canyon	6875'
Glorieta	2,260'	Strawn	7240'
Drinkard	3610'	Atoka	7460'
Abo	4315'	Morrow	7785'
Wolfcamp	5525'	Chester	8070'
Cisco	6570'	T.D.	8400'

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

Water: Surface water in the Triassic between 80' - 230'.and possible in lower formations to 800'.  
Oil: Possible in the San Andres & Premier below 1,260'.  
Gas: In the Morrow below 7,785'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
24"	20"				40'	Cement to surface
17 1/2"	13 3/8"	54.5#	J-55	ST&C	425'	Circ. 465 sx Prem + to surface
12 1/4"	9 5/8 "	40.0#	J-55	ST&C	1,200'	220 sx "C"+ 200 sx Prem
8 3/4"	5 1/2"	17.0#	N-80	LT&C	8400'	940 sx "C" + 230 sx Super "H", TOC 800'

5. Proposed Control Equipment: A 13 3/8" 3000 psi wp annular preventer will be installed on 13 3/8" and tested to 2000 psi. Install 11"5000 psi Shaffer Type "LWS" BOP with 11" annular on the 9 5/8" casing. Casing and BOP will be tested as per Onshore Oil & Gas Order No. 2 before drilling out with 8 3/4". See Exhibit "E".

MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
0' - 425':	Fresh water/gel mud:	8.4 - 9.5 ppg	35 - 34	No W/L control
425' - 1,200':	Fresh water	8.4 - 8.6 ppg	28	No W/L control
1,200' - 4,200':	Fresh water mud:	8.4 ppg	28	No W/L control
4,200' - 5,400':	Cut Brine	9.0 - 9.2 ppg	28	No W/L control
5,400' - 7,400':	Cut Brine	9.0 - 9.4 ppg	30 - 31	W/L control 25 ppg +/-
7,400' - 7,600':	Cut Brine	9.0 - 9.3 ppg	30 - 32	W/L control 8 ppg +/-
7,600' - 8,150':	Cut Brine	9.0 - 9.5 ppg	32 - 40	W/L control 6 ppg +/-

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:  
Drill Stem Tests: None planned.  
Logging: T.D -Int. Casing: Triple Combo  
T.D. to surface: G/R, CNL  
Coring: None planned.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated Surface Pressure = 1793 psi (evac. hole) and BHP of 3586 psi (evac) with temperature of 142°.
10. H<sub>2</sub>S: None expected. None encountered in previously drilled wells.
11. Anticipated starting date: November 1, 2006.  
Anticipated completion of drilling operations: Approx. 6 weeks.

## **MULTI POINT SURFACE USE AND OPERATIONS PLAN**

### **AMERISTATE EXPLORATION, LLC**

Mental Floss 18 Federal, Well No. 1  
1980' FNL & 1470' FEL Sec. 18-T16S-R27E  
Eddy County, New Mexico  
Lease No. NM-098157  
(Exploratory Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

#### **1. EXISTING ROADS:**

- A. Exhibit "A" is a portion of a BLM topo map showing the location of the proposed well as staked. The well site location is approximately 13 road miles east of Artesia, NM. Traveling east of Artesia on U.S. Hwy 82 there will be approximately 7 miles of existing paved road and 5.5 miles of gravel oil field roads
- B. Directions: Travel east of U.S. Hwy 285 in Artesia on U.S. Hwy 82 for 5 miles to Karr Rd., a paved County Rd. Turn north on Karr Rd., CR 200 for 4.1 miles to end of pavement. Continue north on gravel road for 2.4 miles to a road to the east. Turn east on road for .3 miles and pass through a cattleguard. The proposed new access road starts at this point and runs east for 500' and then turns southeast for 3,000' to the proposed well pad.

#### **2. PLANNED ACCESS ROAD:**

- A. Length and Width: The existing and proposed new access road will be approximately 4080 feet long. The proposed and existing roads are color coded on Exhibits "A".
- B. Construction: The proposed and existing access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: Several (possibly three) turnouts on the existing and proposed new access road will be required; increasing the width to 20 feet for passing.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: One cattle guard will be required.
- G. Off lease right of way: None required. See Right of Way No. 112857.

#### **3. LOCATION OF EXISTING WELLS:**

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

**AMERISTATE EXPLORATION, LLC**

Mental Floss 18 Federal, Well No. 1

Page 2

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

- A. Ameristate Exploration, LLC has no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if required, will be installed on the drilling pad.

**5. LOCATION AND TYPE OF WATER SUPPLY:**

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

**6. SOURCE OF CONSTRUCTION MATERIALS:**

- A. Caliche for surfacing the proposed access road and well site pad will be obtained from the approved Federal pit in the SW4SW4 Sec. 6-T16S-R27E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the steel tanks of the closed loop mud system.
- B. Drilling fluids will be trucked to an authorized disposal area.
- C. There will be no mud pits to be fenced.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

**8. ANCILLARY FACILITIES:**

- A. None required.

9. **WELL SITE LAYOUT:**

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.
- B. Mat Size: 290' X 175', plus Pits 125' x 125'
- C. Cut & Fill: The location will require a 3- foot cut on the northwest with fill to the northeast.
- D. The surface will be topped with compacted caliche.

10. **PLANS FOR RESTORATION OF THE SURFACE:**

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. The location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. There will be no unguarded pits containing fluids.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

11. **OTHER INFORMATION:**

- A. Topography: The proposed well site and access road are located on a 1.5% slope to the east. The location has an elevation of 3452' GL.
- B. Soil: The topsoil at the well site is a tan loam with some surface scatter of gypsum rock and some exposed bedrock outcrops. The soil is part of the Reeves-Gypsum land complex.
- C. Flora and Fauna: The location has a fair to poor grass cover of three awn, sacaton, tobosa and muhly along with plants of mesquite, yucca, broomweed, creosote bush, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, deer, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None except intermittent running draws when it rains.
- E. Residences and Other Structures: None in the immediate vicinity except, a steel water storage tank on a hill 1600 feet to the southwest.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.

11. **OTHER INFORMATION:** cont.

- H. There is no evidence of archaeological, historical or cultural sites in the staked area. Southern New Mexico Archaeological Services Co., P. O. Box 1, Bent, NM 88314 has conducted an archaeological survey and their report has been submitted to the appropriate government agencies.

12. **OPERATOR'S REPRESENTATIVE:**

- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Mike Daniel  
Ameristate Exploration, LLC  
401 Congress Avenue, Suite 2900  
Austin, TX 78701  
Cell Phone: (713) 826 3753

13. **CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 Ameristate Exploration, LLC 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.

October 4, 2006



Don C. Deck  
Agent for: Ameristate Exploration, LLC

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Ameristate Exploration, LLC Well Name & #: Mental Floss 18 Fed. #1  
Location 1980 F N L & 1470 F E L; Sec. 18, T. 16 S., R. 27 E.  
Lease #: NM-98157 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

( x ) The BLM will monitor construction of this drill site. Notify the ( x ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

( x ) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( x ) Other. **V-Door Southwest (Reserve pits to the Southeast).**

III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

( x ) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

( ) A. Seed Mixture 1 (Loamy Sites)  
Side Oats Grama (*Bouteloua curtipendula*) 5.0  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0  
Plains lovegrass (*Eragrostis intermedia*) 0.5

( ) B. Seed Mixture 2 (Sandy Sites)  
Sand Dropseed (*Sporobolus crptandrus*) 1.0  
Sand Lovegrass (*Eragostis trichodes*) 1.0  
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)  
Side oats Grama (*Bouteloua curtipendula*) 5.0  
Green Spangletop (*Leptochloa dubia*) 2.0  
Plains Bristlegrass (*Setaria magrostachya*) 1.0

( x ) D. Seed Mixture 4 (Gypsum Sites)  
Alkali Sacaton (*Sporobolus airoides*) 1.0  
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other



#### RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic.

Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

#### OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

#### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

#### TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

## CONDITIONS OF APPROVAL - DRILLING

Well Name & No.      **1 Mental Floss 18 Federal**  
Operator's Name:    **Ameristate Exploration LLC**  
Location:            **1980FNL, 1470FEL, Section 18, T-16-s, R-27-E**  
Lease:                **NM-098157**

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### **I. DRILLING OPERATIONS REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5972 or (505) 361-2822 (After hours) - for wells in Eddy County in sufficient time for a representative to witness:
  - A. Spudding
  - B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch
  - C. BOP tests
2. No Hydrogen Sulfide (H<sub>2</sub>S) has been reported in this area, but it is always a potential hazard.
3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
4. Submit a Sundry Notice (Form 3160-5, one original and four copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

### **II. CASING:**

1. The 13-3/8 inch surface casing shall be set at 425 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

**Possible lost circulation in the Grayburg and San Andres formations.**

**Possible high pressure water zone in the Grayburg.**

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is circulate cement to the surface.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 200 feet into the intermediate casing with planned TOC at 800 feet.

### **III. PRESSURE CONTROL:**

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 2M psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9-5/8 inch casing shall be 5M psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

Engineer on call phone: (505) 706-2779

**WWI 101706**