

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-100545
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 Ameristate Exploration, LLC		7. If Unit or CA Agreement, Name and No.
3a. Address 111 Congress Ave., Suite 2700 Austin, TX		8. Lease Name and Well No. 35787 Mental Floss 7 Federal, #1
3b. Phone No. (include area code) 512/ 391-4913		9. API Well No. 30-015-34919
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1500' FSL & 1650' FEL At proposed prod. zone		10. Field and Pool, or Exploratory Wildcat, Marlow
14. Distance in miles and direction from nearest town or post office* 12.5 miles to Artesia, west of location.		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 7-T16S-R27E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1500'	16. No. of Acres in lease 1430.91	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3350'	19. Proposed Depth 8,150'	20. BLM/BIA Bond No. on file NMB-000296
21. Elevations (Show whether DF, KDB, RT, OL, etc.) 3452' GL	22. Approximate date work will start* June 5, 2006	23. Estimated duration 5 - 6 weeks
24. Attachments Roswell Controlled Water Basin		

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>George R. Smith</i>	Name (Printed/Typed) George R. Smith	Date May 4, 2006
Title Agent for Ameristate Exploration, LLC		
Approved by (Signature) <i>Jim Stoval</i>	Name (Printed/Typed) Jim Stoval	Date 6/8/2006
Title Acting FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify the 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.

\*(Instructions on reverse)

Lease Responsibility Statement: Ameristate Exploration, LLC accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

DECLARED WATER BASIN  
CEMENT BEHIND THE 1338" CASING MUST BE CIRCULATED

WITNESS

WITNESS

George R. Smith, agent

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

**District I**  
1635 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 & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number	<sup>2</sup> Pool Code 96070	<sup>3</sup> Pool Name Wildcat; Morrow
<sup>4</sup> Property Code	<sup>5</sup> Property Name MENTAL FLOSS 7 FEDERAL	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 158898	<sup>8</sup> Operator Name AMERISTATE EXPLORATION, LLC	<sup>9</sup> Elevation 3452

<sup>10</sup> Surface Location

UL or lot no. J	Section 7	Township 16-S	Range 27-E	Lot Idn	Feet from the 1500	North/South line SOUTH	Feet from the 1650	East/West line EAST	County EDDY
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<sup>11</sup> 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
<sup>12</sup> Dedicated Acre 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

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.

<sup>16</sup> 	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working 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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>George R. Smith</i> Date: 5/4/06 George R. Smith, agent Printed Name	
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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. NOVEMBER 10, 2005 Date of Survey Signature and Seal of Professional Surveyor: 	

APPLICATION FOR DRILLING  
AMERISTATE EXPLORATION, LLC  
Mental Floss 7 Federal, Well No. 1  
1500' FSL & 1650' FEL, Sec. 7-T16S-R27E  
Eddy County, New Mexico  
Lease No.: NM-100545  
(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.	8150'

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	8,150'	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".

6.	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: June 5, 2006.

Anticipated completion of drilling operations: Approx. 6 weeks.

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

**AMERISTATE EXPLORATION, LLC**  
Mental Floss 7 Federal, Well No. 1  
1500' FSL & 1650' FEL, Sec. 7-T16S-R27E  
Eddy County, New Mexico  
Lease No.: NM-100545  
(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 paving. Continue north on gravel road for 2.4 miles to a two-track road on the east. Turn east on two-track for .3 mile and pass through a gate. The proposed access road starts at this point and runs northeast on east side of the fence for .3 mile and then turns southeast for .15 mi. (900') to the SW corner of 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".

**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 30' X 290' closed loop mud system on the north.
- 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. Mud from the closed system will be disposed of as required.

**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:

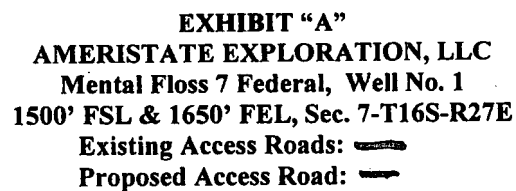
Mickey Davidson  
Ameristate Exploration, LLC  
111 Congress Ave. Suite 2700  
Austin, TX 78701  
Cell Phone: (361) 215-4993

**13. CERTIFICATION:**

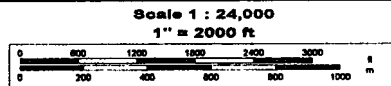
I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will 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.

May 3, 2006

  
George R. Smith  
Agent for: Ameristate Exploration, LLC

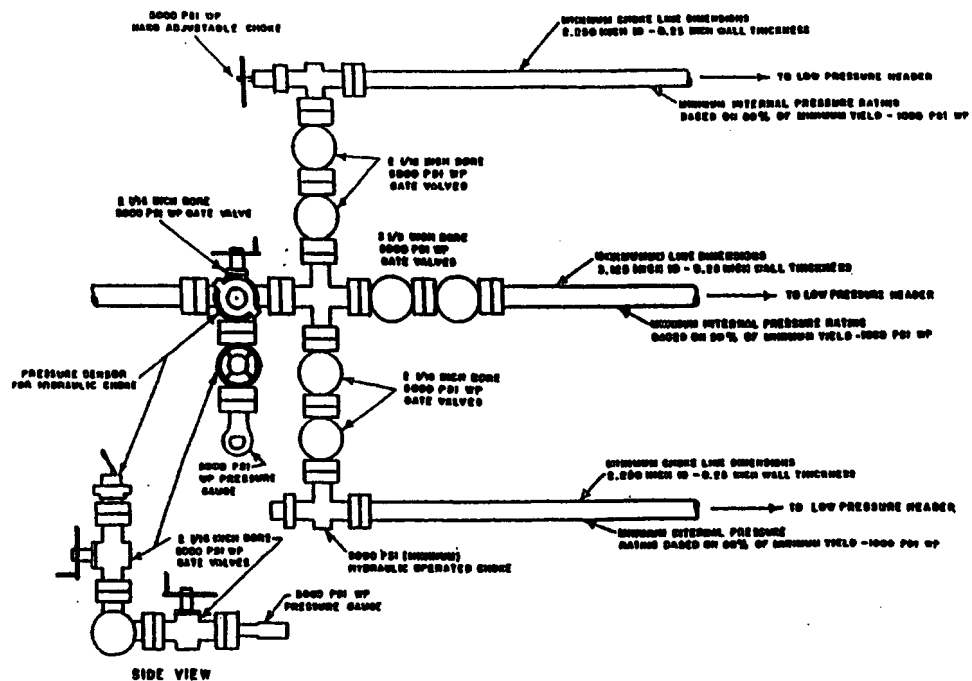
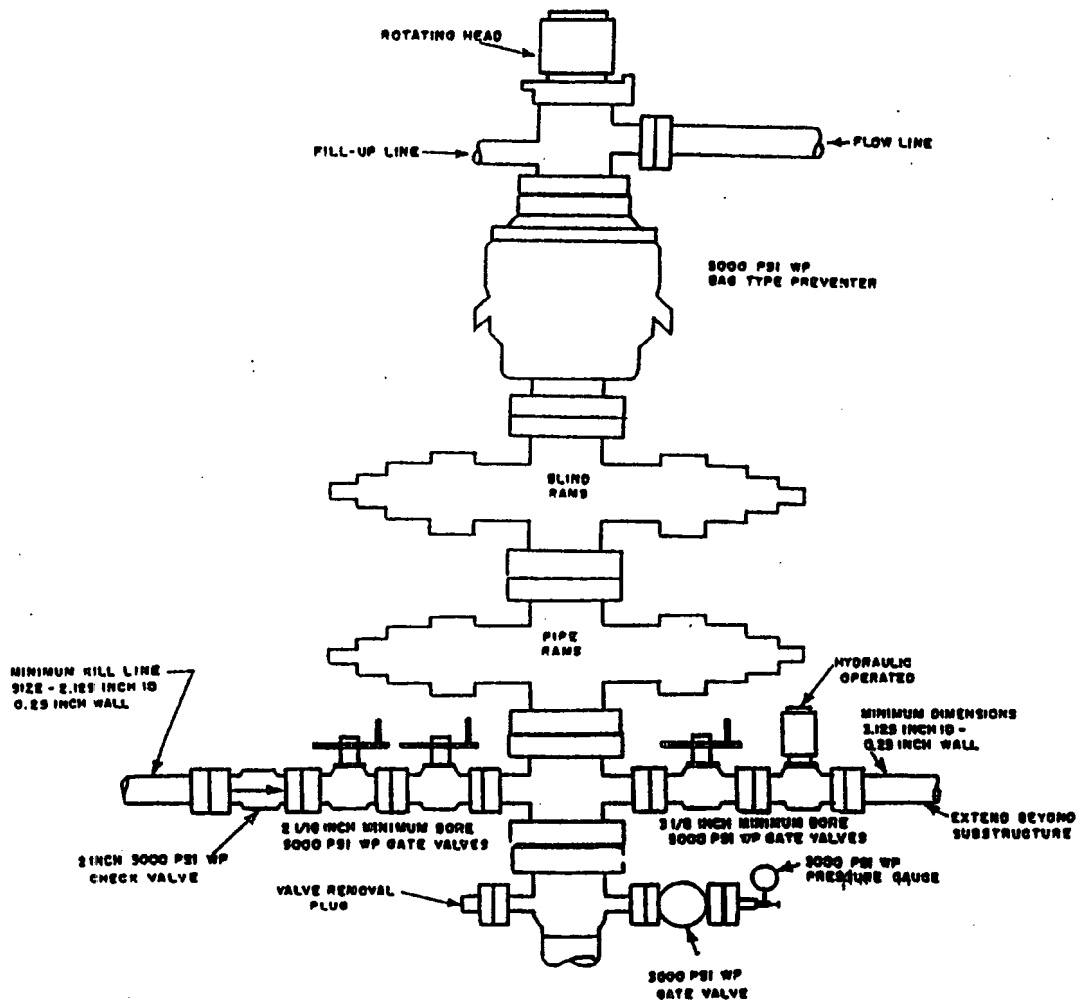


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www.delorme.com



# 5000 PSI WORKING PRESSURE BLOWOUT PREVENTER STACK

EXHIBIT C-1



5000 PSI WORKING PRESSURE CHOKE MANIPULATOR

EXHIBIT C-1

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

Form C-144  
March 12, 2004

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**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Ameristate Exploration, LLC Telephone: Off.: (512) 391-4913 e-mail address: \_\_\_\_\_

Address: 111 Congress Ave., Suite 2700 Austin, TX 78701

Facility or well name: Mental Floss 7 Federal, Well No. 1 API #: \_\_\_\_\_ U/L or Qtr/Qtr MW4SE4Sec\_7 T\_16S R\_27E

County: Eddy Latitude N32.93441 Longitude W104.31470 NAD: 1927 ☐ 1983 X Surface Owner Federal X State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling X Production ☐ Disposal ☐ No Pit being used

Workover ☐ Emergency ☐

Lined ☐ Unlined ☐

Liner type: Synthetic ☐ Thickness \_\_\_\_\_ mil Clay ☐ Volume

bb Using a closed loop system

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes

(20 points)

No

(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

(0 points)

**Ranking Score (Total Points)**

— 0 —

**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 ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ 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 X a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: May 3, 2006

Printed Name/Title George R. Smith, agent Signature George R. Smith

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate 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: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title \_\_\_\_\_ Signature \_\_\_\_\_

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Ameristate Exploration, LLC Well No. 1 – Mental Floss 7 Federal  
Location: 1500' FSL & 1650' FEL sec. 7, T. 16 S., R. 27 E.  
Lease: NM-100545

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### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 234-5972 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. 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.

3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

### II. CASING:

1. 13-3/8 inch surface casing should be set at approximately 425 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface this 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.

2. Minimum required fill of cement behind the 9-5/8 inch intermediate casing is sufficient to circulate to the surface.

3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone.

### III. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 9-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 9-5/8 inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

**CONDITIONS OF APPROVAL - DRILLING (CONTINUED)**

Operator's Name: Ameristate Exploration, LLC Well No. 1 – Mental Floss 7 Federal

Location: 1500' FSL & 1650' FEL sec. 7, T. 16 S., R. 27 E.

Lease: NM-100545

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**III. PRESSURE CONTROL: (CONTINUED)**

3. After setting the 9-5/8 intermediate string and before drilling into the **Wolfcamp** formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The BLM office shall be notified at (505) 234-5972 in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test shall be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

D. 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.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

**IV. DRILLING MUD:**

1. 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:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.