

ATS-07-276

## OCD-ARTESIA

Form 950-3  
(January 2005)

415

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

 Month - Year  
 MAR 26 2007  
 OCD - ARTESIA, NM
FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC-065928-A
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input 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 GP II Energy, Inc.		7. If Unit or CA Agreement, Name and No. 34290
3a. Address PO Box 50682, Midland, TX 79710		8. Lease Name and Well No. <b>4441</b> Littlefield "BO FED" #8
3b. Phone No. (include area code) 432-684-4748		9. API Well No. 30-015-35489
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 400' FNL & 2141' FEL Lot 6 At proposed prod. zone Vertical		10. Field and Pool, or Exploratory Undes. Brushy Draw Delaware 8080
14. Distance in miles and direction from nearest town or post office 16 air miles South-Southeast of Malaga, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 33, T26S, R29E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 400' FNL	16. No. of acres in lease 419.41 Acres	12. County or Parish Eddy
17. Spacing Unit dedicated to this well 40 Acres	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1529'	13. State NM
19. Proposed Depth 5100'	20. BLM/BIA Bond No. on file NM - 1913	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2865 GL	22. Approximate date work will start* 03/15/2007	23. Estimated duration 30 Days

CARLSBAD CONTROLLED WATER BASIN

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature <i>Joe L Compton</i>	Name (Printed/Typed) Joe L Compton	Date 01/18/2007
Title Agent		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed)	Date MAR 22 2007
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.

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 page 2)

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

**DISTRICT I**  
1325 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 August 15, 2000

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 8080	<sup>3</sup> Pool Name Brushy Draw; Delaware
<sup>4</sup> Property Code	<sup>5</sup> Property Name LITTLEFIELD FEDERAL "BO"	<sup>6</sup> Well Number 8
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name GP II ENERGY, INC.	<sup>9</sup> Elevation 2865'

**<sup>10</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
6	33	26 SOUTH	29 EAST, N.M.P.M.		400'	NORTH	2141'	EAST	EDDY

**<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 Acres 4c	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div><p><sup>16</sup></p><p>NEW MEXICO STATE LINE TEXAS STATE LINE</p></div>	<div><p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p><i>Joe L Compton</i> Signature JOE L Compton Printed Name AGENT Title JAN. 25, 2007 Date</p><p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p><p>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.</p><p>MAY 3, 2004 Date of Survey Signature and Seal of Professional Surveyor <i>V. L. Bezner</i> Certificate Number V. L. BEZNER R.P.S. #7920 JOB #94744 / 23 SW / J.C.P.</p></div>
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DRILLING PLAN  
GP II ENERGY, INC.  
LITTLEFIELD FEDERAL "BO" #8  
Sec. 33, T26S, R29E  
Eddy County, New Mexico

1. SURFACE FORMATION: Quaternary
2. ESTIMATED GEOLOGIC TOPS:  
  
Bell Canyon 2825  
Ramsey Sand 2860  
Cherry Canyon 3920  
Brushy Canyon 4970
3. ANTICIPATED HYDROCARBON BEARING ZONES:  
  
Delaware Sand (oil)  
Cherry Canyon (oil)
4. PROPOSED CASING AND CEMENTING PROGRAM:

Hole size	CASING SIZE	FROM	TO	WEIGHT	GRADE	JOINT
12 1/4	8 5/8" <b>WITNESS</b>	0	375'	24#	K-55	STC
7 7/8	4 1/2"	0	5100	9.5#	K-55	STC
	or 5 1/2"	0	5100'	14#	K-55	STC

Production casing will be either 4 1/2" OD or 5 1/2" OD depending on shows encountered while drilling.

8 5/8" casing will be cemented with approximately 150 sacks of Class "C" with 2% CaCl. Cement will be circulated.

5 1/2" casing will be cemented with sufficient Light cement, tailed in with 200 sacks of POZMIX A, to fill back to the base of the salt section at approximately 2675'.

5. PRESSURE CONTROL EQUIPMENT:

A 3000 psi working pressure, double ram blow out preventer will be used while drilling below the surface casing. (see Exhibit "E")

6. CIRCULATING MEDIUM:

Surface to 375 feet:

Fresh water with lime or gel as needed to maintain a viscosity of 28 to 30.

375 feet to 4800 feet:

Brine conditioned to control seepage, pH, and maintain a viscosity of 28 to 32.

4800 feet to 5100 feet:

Brine conditioned to control seepage, pH, and maintain a viscosity of 35 to 40.

7. AUXILIARY EQUIPMENT:

Drill string safety valves will be maintained on the rig floor while drilling operations are in progress.

8. TESTING, LOGGING, AND CORING PROGRAMS:

No drillstem tests are planned.

Electric logs will include GR-CNL-FDC GR-DLL with MSFL.

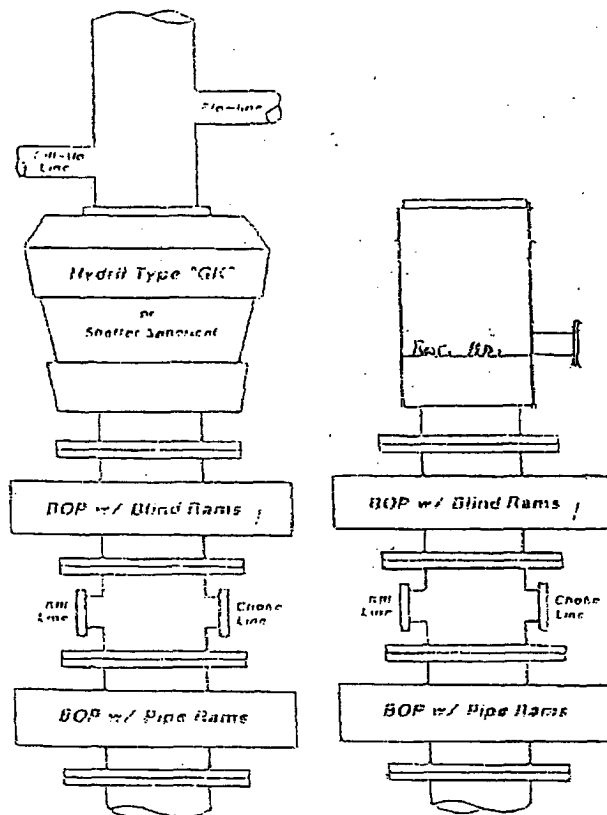
No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURE, OR HYDROGEN SULFIDE GAS:

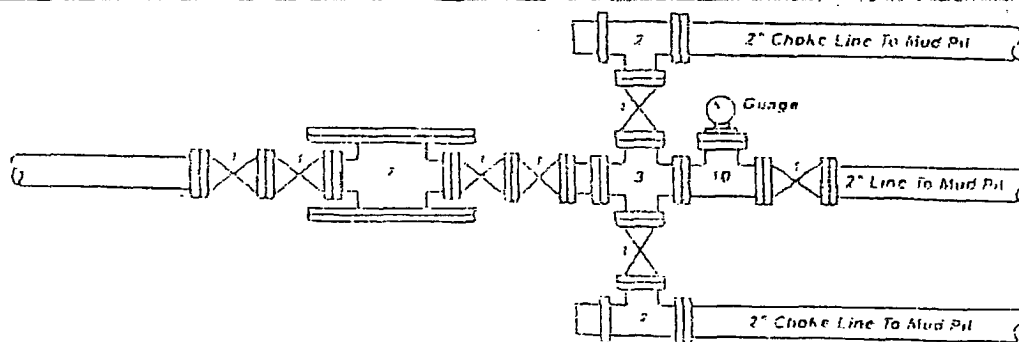
No abnormal pressures or temperatures are anticipated.

10. ANTICIPATED START DATE:

The well is anticipated to commence on or about March 15, 2007 with drilling, completion, and testing operations to last about 30 days.



A 1" valve will be installed on the closing line to the Hydril  
This valve will be on a short nipple next to the Hydril  
The closing line must be equipped w/ a 1"-3000 psi VPI plug  
valve on the nipple into the Hydril.



Legend

- 1 2" flanged all steel valve must be either Cameron "E" Multiburst Low Torque, or Shatter Flo-Seal
- 2 2" flanged adjustable chokes, min. 1" full opening & equipped w/ hard trim
- 3 4" x 2" flanged steel cross
- 4 4" flanged steel tee
- 5 4" flanged all steel valve (Type as in no. 1)
- 6 Drilling snout w/ 2" x 4" flanged steel outlet
- 7 Drilling snout w/ 2" x 2" flanged outlet
- 8 2" x 2" flanged steel cross
- 9 1" pressure operated gate valve
- 10 2" flanged steel tee

EXHIBIT E

BOP ARRANGEMENT  
ROD-RIC DRILLING - RIG 9 OR 10

SURFACE USE AND OPERATIONS PLAN  
GP II ENERGY, INC.  
LITTLEFIELD FEDERAL "BO" #8  
Sec. 33, T26S, R29E  
Eddy County, New Mexico

LOCATED: 16 air miles south-southeast of Malaga, NM

FEDERAL LEASE NUMBER: LC-065928-A

DATE OF ISSUE: Lease issued July 1, 1951

LEASE AREA: 419.41 Acres

SURFACE OWNERSHIP: Federal

POOL DESIGNATION: Brushy Draw Delaware

POOL RULES: Statewide - 40 Acre spacing for oil

EXHIBITS:

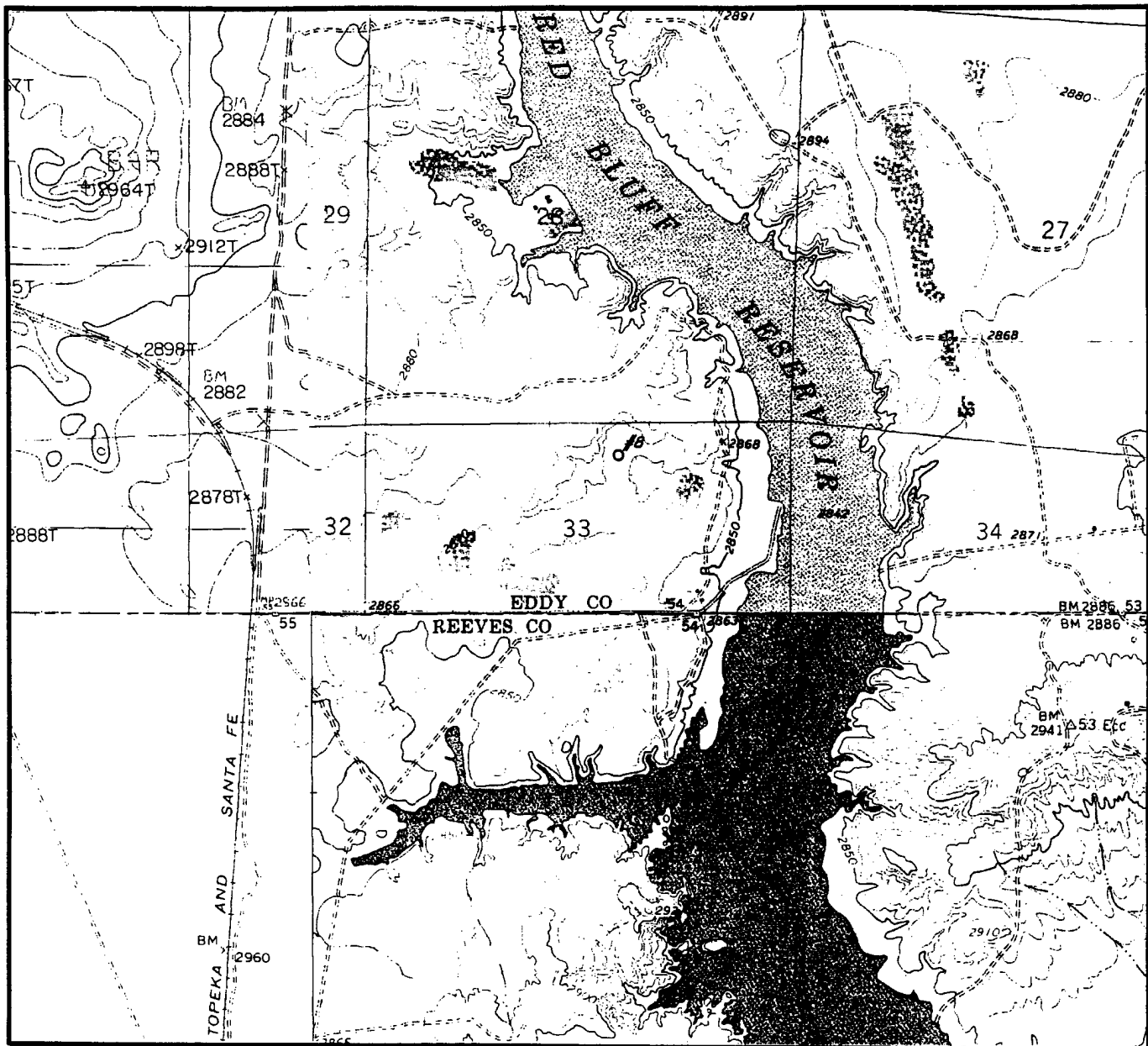
- A. Road Map
- B. Plat with existing wells and roads
- C. Drilling Rig Layout
- D. Topographic Plat
- E. BOP Arrangement

EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. Point "A" on the plat is on US 285 at a point near the Texas -New Mexico state line where a county maintained caliche road (Eddy County 726) goes east. From the intersection of US 285 and Eddy County 726 go east 2.6 miles. The location is about 1976 feet north of this point

B. Exhibit "B" is a plat showing existing and proposed roads in the vicinity of the proposed well site.

# LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 33 TWP 26-S RGE 29-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 400' FNL & 2141' FEL

ELEVATION 2865'

OPERATOR GP II ENERGY, INC.

LEASE LITTLEFIELD FEDERAL "BO" #8

U.S.G.S. TOPOGRAPHIC MAP

ROSS RANCH, NEW MEXICO

SCALED LAT. LAT.: N 32°00'19"

LONG. LONG.: W 103°59'15"



EXHIBIT "D"

**TOPOGRAPHIC LAND SURVEYORS**

*Surveying & Mapping for the Oil & Gas Industry*

2903 N. BIG SPRING  
MIDLAND, TX. 79705  
(800) 767-1653

## **Conditions of Approval Cave and Karst**

EA#: NM-080-07-0415

Lease #: LC-065928A

**GP II Energy, Inc.**

**Littlefield BO Fed. #7 & #8**

### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

#### **Closed Mud System with Cuttings Pit and Cuttings Removed:**

A closed mud system or steel tanks will be utilized to drill the well. All fluids and cuttings will be hauled off site for disposal.

### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

#### **Casing:**

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

#### **Cementing:**

All casing strings will be cemented to the surface. A third casing string will be added from surface to the beyond the cave bearing units, if lost circulation (75 percent loss of drilling fluid) occurs.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.



Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Delayed Blasting:**

Any blasting will be a phased and time delayed.

**Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Pressure Tests:**

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

**Differential Shut-off Systems:**

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

**Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence or absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: GP II Energy, Inc.  
Well Name & No. Littlefield BO Fed # 8  
Location: 400'FNL, 2141'FEL, SEC33, T26S, R29E, Eddy County, NM  
Lease: LC-065928-A

### I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 8.625 inch 4.5 or 5.5 inch; alternatively 9.625 inch, 7 inch, 4.5 or 5.5 inch
3. BOP tests

B. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is N/A.

C. 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.

D. 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. (R-111-P area only)

E. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### II. CASING:

A. Because this well is located in a high cave / karst potential area and close to the Red Bluff Reservoir, **it may become necessary to run a third casing string if circulation is lost while drilling the surface well bore. If this situation does occur, the alternative 9.625 inch and 7 inch casing strings will be run. The 8.625 or alternative 9.625 inch surface casing shall be set at 375 feet and cement circulated to the surface.**

1. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.

B. The minimum required fill of cement behind the alternative 7 inch intermediate casing is **circulate cement to the surface. If this casing string becomes necessary it will be set below the salt @ approximately 2700 feet.** If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the 5.5 or 4.5 inch production casing is **cement shall circulate to the surface, or if the alternative casing program is run, cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.**

D. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

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

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **8.625 or alternative 9.625** inch casing shall be **2000** psi.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
1. The tests shall be done by an independent service company.
  2. The results of the test shall be reported to the appropriate BLM office.
  3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.
  4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.
  5. A variance to test the \_\_\_\_\_ to the reduced pressure of \_\_\_\_psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

### **IV. Hazards:**

1. Our geologist has indicated that there is a high potential for cave / karst features at this location.
2. Our geologist has indicated that there is potential for lost circulation in the Redbeds, Delaware, Castile and Bone Spring.

**Engineering may be contacted at 505-706-2779 for variances if necessary.**

**FWright 3/6/07**