Form 3160-3
(February 2005)

OCD-ARTESIA

Month - Year 7/2007 OCD - ARTESIA, NM

ATS-07-310

592

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM 92757

6. If Indian, Allotee or Tribe Name:

7. If Unit or CA Agreement, Name and No.:

1a. Type of work: ☑ DRILL ☐ REENTER

8. Lease Name and Well No.: Goodnight Federal, Well #1 36483

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator: Morexco, Inc. (15262)

9. API Well No.: 30 015- 35601

3a. Address: P.O. Box 1591, Roswell, NM 88202

3b. Phone No. (include area code): 505 627-1290

10. Field and Pool, or Exploratory: Willow Lake; Bone Springs 64450

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

At surface: ~~1980~~ 2080' FNL & 660 FEL (H)

At proposed prod. zone: same per SN of 4/30/07 CK

CARLSBAD CONTROLLED WATER BASIN

11. Sec., T. R. M. or Blk. and Survey or Area: Sec 30, T24S, R28E

14. Distance in miles and direction from nearest town or post office*: 6.5 miles South of Loving, NM

12. County or Parish: Eddy

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
660'	640	40 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
1st well	6900'	NM Bond # 1583
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3063'	04/20/2007	30 days

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.
2. A Drilling Plan.
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).
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 BLM.

25. Signature	Name (Printed/Typed)	Date
Ann E. Ritchie	Ann E. Ritchie	03/13/2007

Title: Regulatory Agent

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ Don Peterson	/s/ Don Peterson	MAY 0 3 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)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

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 & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 pool Name
	64450	Willow Lake; Bone Spring

4 Property Code	5 Property Name	6 Well Number
	GOODNIGHT FEDERAL	1

7 OGRID No.	8 Operator Name	9 Elevation
	MOREXCO, INC.	3062

10 Surface Location

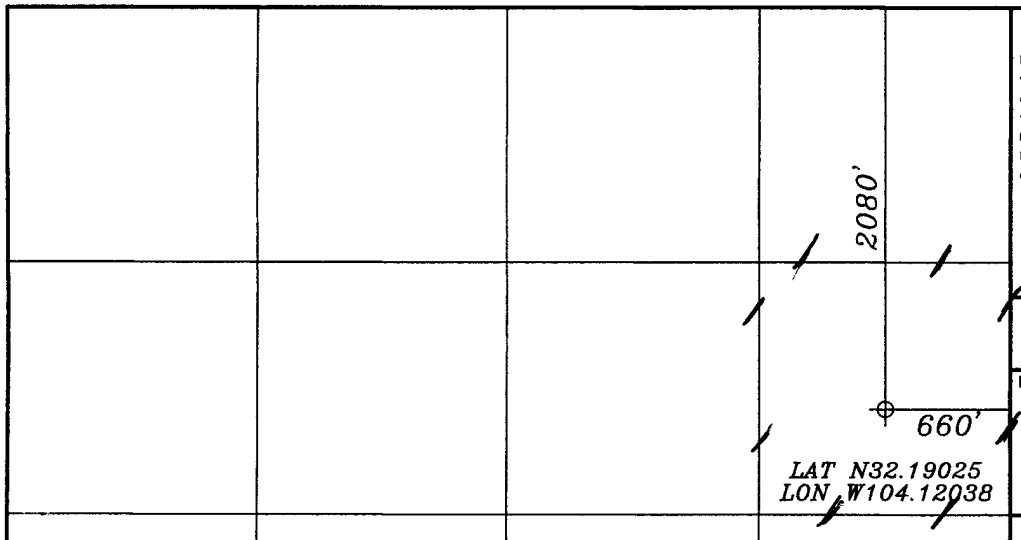
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	30	24-S	28-E		2080'	NORTH	660	EAST	EDDY

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 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.



17 OPERATORS CERTIFICATION

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 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 voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

MAY 2, 2007

Signature Date

Printed Name
DAN R. REDDY: Agent
MOREXCO, INC.

18 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.

APRIL 24, 2007

Date of Survey

Signature and Seal of Professional Surveyor:

DAN R. REDDY NEW MEXICO 5412 REGISTERED PROFESSIONAL ENGINEER LAND SURVEYOR

Certificate Number:
DAN R. REDDY NM PE&PS #5412

Drilling Plan

(Supplement to BLM 3160-3)

Morexco, Inc., P.O. Box 1591, Roswell, NM 88202-1592

Goodnight Federal, Well #1

1980' FNL & 660' FEL (H); Section 30, T24S, R28E, Eddy County, New Mexico

Willow Lake; Bone Spring: Pool Code 64450

NM 92757

1. The geologic surface formation is quaternary alluvium.
2. Name and estimated tops of geologic markers; water, oil or gas:

Lamar	2510'	Oil/Gas
Bell Canyon	2550'	Oil/Gas
Cherry Canyon	3325'	Oil/Gas
Manzanita Marker	3450'	Oil/Gas
Brushy Canyon	4475'	Oil/Gas
Bone Spring Lime	6100'	Oil/Gas

3. No other formations, other than the targeted Bone Springs is anticipated to give up oil, gas or fresh water in measureable quantities. Surface fresh water sands will be protected by setting 8 5/8" casing @ 600' and circulating cement back to surface.

SEE COA

4. **Specifically the casing string referenced in #3 above will consist of the following:**

Surface: 8.625" OD, 24#/ft, J55, STC, new pipe @ 600'+/- in 12.25" hole.

Production: 5.50" OD, 17 & 15.5#/ft, J55, LTC, new pipe @6900'+/- in 7.875" hole

Cementing programs for the above casing strings are:

Surface: 850 sx Interfill C, .25#/sk flocele mixed at 14.8 ppg, and having a yield of 1.34 cu ft/sk, 250 sx PP, 2% CaCl

The above volume represents 100% excess over calculated hole volume, and will be adjusted to actual setting depth of casing. The slurries will be preceded by a fresh water spacer, and displaced with brine water.

SEE COA

Production: Cement w/1800 sx cement slurry determined by borehole volume log calculations to bring TOC to approximately 2000'.

The above are Schlumberger products with 50% excess volume - actual volumes will be adjusted to the open hole caliper of this wellbore. The cement slurries will be preceded by 12 bbls cement wash for mud removal and displaced with fresh water. Equivalent products from another vendor may be substituted for Schlumberger depending on price/availability.

5. *The well control equipment to be employed during the drilling of this well is as illustrated on attached BOP diagram. This equipment includes a pipe and blind rams, an annular preventer and a choke manifold of comparable pressure rating. Equipment will be rated for a minimum of 3000 psi, and will be tested to 80% of that pressure rating prior to drilling out of the 8.625" surface casing.* SEE COA

SEE COMMENTS Exhibit 1

6. It is anticipated that this well will be drilled to TD utilizing the fluids shown below:

SEE COA

0-600': Fresh Water; 8.5 ppg; 40 vis; Waterloss-N.C.

600-6900': Brine/Cut Brine/Polymer, 9.4 ppg; 30 vis; Waterloss- N.C.-15

7. Auxiliary equipment will include an upper kelly cock valve, safety valve to fit drill pipe and pressure gauges.

8. No drill stem testing or coringis planned for this wellbore.

   Electric logging will consist of GR-Dual Laterlog-MSFL and GR-Compenstated Density-Neutron from TD to surface casing and/or surface.

9. The estimated bottom hole temperature (BHT) at TD is 125 degrees F with an estimated maximum bottom hole pressure (BHP) at total depth of 3000 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. It is estimated that this well will be drilled and cased in 21-30 days. Drilling will commence as soon after approval is received and services can be contracted. If the well is production, an additional estimated 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

DRILLING PROGRAM

Morexco, Inc.
Goodnight Federal, Well #1
Eddy County, New Mexico

1. Wear ring to be properly installed in head.

2. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.

3. All fittings to be flanged.

4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi. WP minimum.

5. All choke and fill lines to be securely anchored especially ends of choke lines.

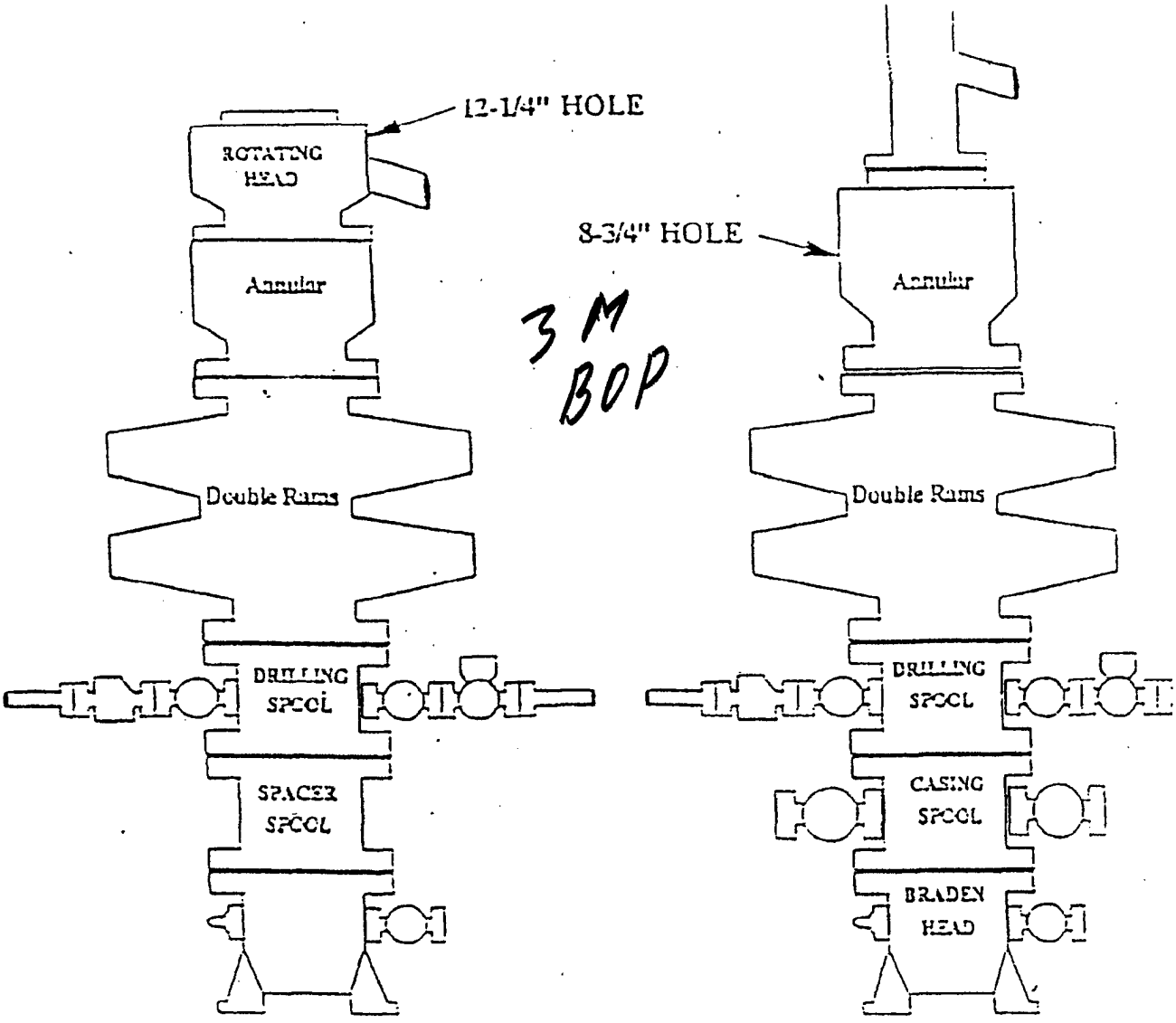
6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilling through.

7. Kelly cock on kelly.

8. Extension wrenches and hand wheels to be properly installed.

9. Blow out preventer control to be located as close to driller's position as feasible.

10. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.



3M BOP

Choke Manifold Requirement (~~3000~~ psi WP)

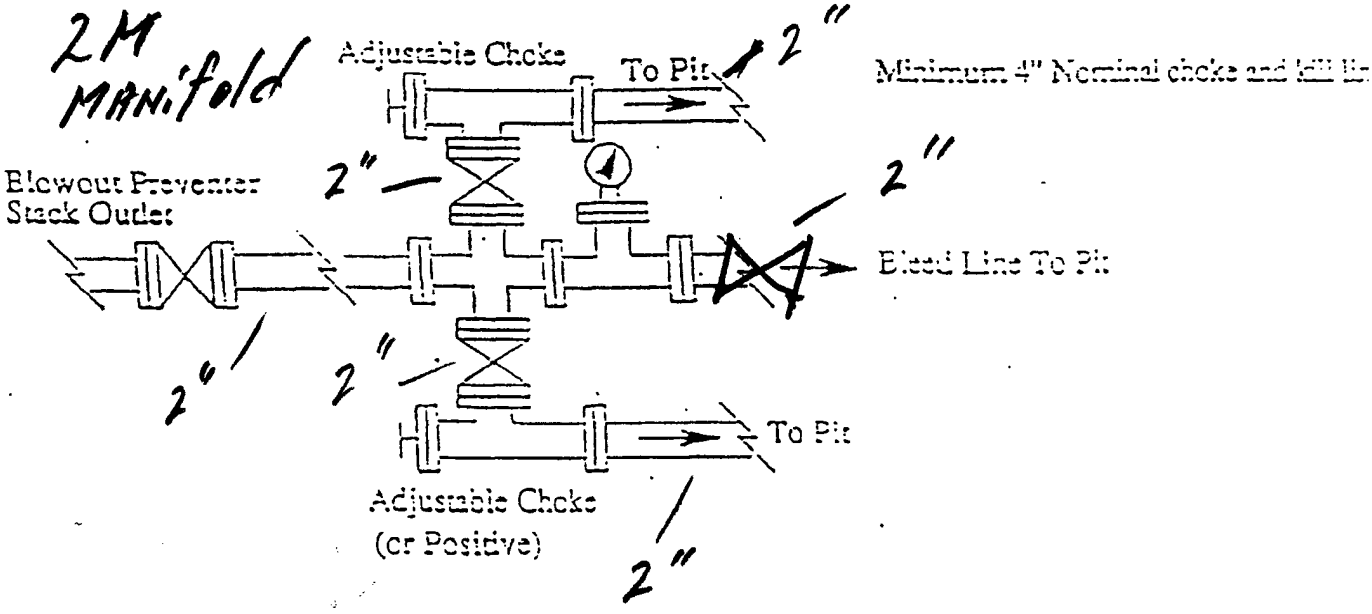
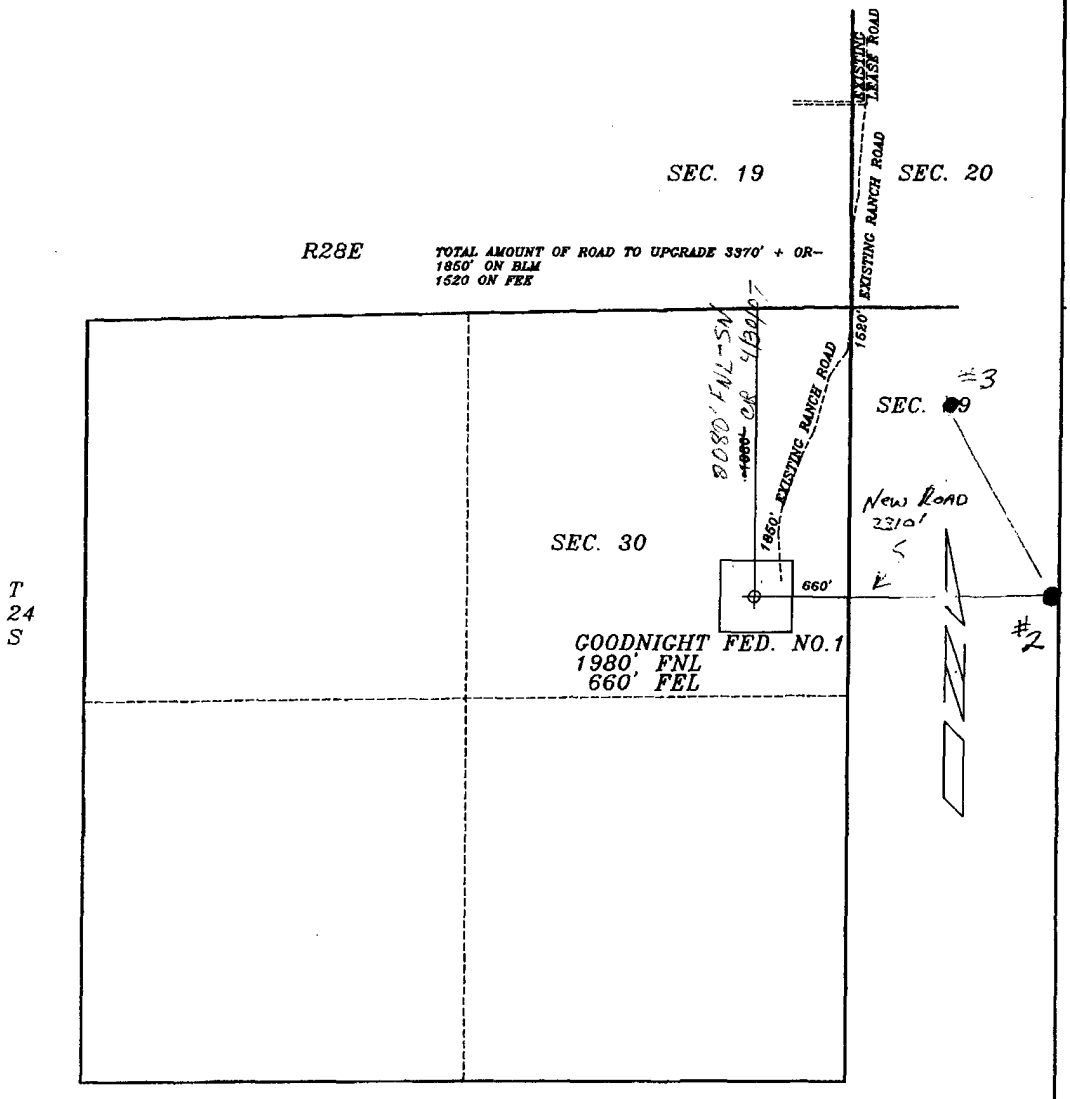


Exhibit I

PROPOSED ROAD SKETCH



1000 0 1000 2000 3000

Scale: 1" = 1000'

for - Todd

From - D.G. Becker

Morexco, Inc.

PREPARED FOR: MOREXCO, INC.
PREPARED BY: DAN R. REDDY, NM PE&PS
FEB 23, 2007

Conditions of Approval
Cave and Karst

EA#: NM-520-07-0592
Lease #: NM-92757
Morexco, Inc.
Goodnight Federal No.1

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.

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 then 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.

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.

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 of 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: Morexco, Inc
Well Name & No. Goodnight Federal # 1
Location: 2080'FNL, 660'FEL, SEC30, T24S, R28E, Eddy County, NM
Lease: NM-92757

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, in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: **13.375** inch, **8.625** inch, **5.5** inch
3. BOP tests

B. A Hydrogen Sulfide (H2S) 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.

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. The **13.375** inch surface casing shall be set at **500 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.
5. **If circulation is lost while drilling the surface casing, Engineering will be notified immediately and the morning reports for all drilling operations on the surface casing will be submitted with the SR Sundry reporting the setting of the surface casing.**

B. The minimum required fill of cement behind the **8.625** inch intermediate casing is **circulate cement to the surface.** If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the **5.5** inch production casing is **cement shall circulate to 500 feet above the shoe of the intermediate casing string the surface casing.**

D. If hard band 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 **13.375** 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 potential for lost circulation in the Triassic Red beds and the Castile group.
2. Our geologist has indicated that there is medium potential for Karst features in this area.

V. Mud:

1. Fresh Water Base mud will be used to drill down to 1120 feet.

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

FWright 4/20/07