Form 3160-3 (September 2001)

OCD-HOBES

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

| ATS 07-52 | 3 |
|--------------------------|---|
| FORM APPROVED 68 | |
| OMB No. 1004-0136 | |
| Expires January 31, 2004 | |

5. Lease Serial No.

NM-036852

6 If Indian Allottee or Tribe Name

| APPLICATION FOR PERMIT TO D | DRILLYOR R | EENTER | (| | , , , , , , , , , , , , , , , , , , , | or Tribe Name |
|---|--------------------------------------|---|--------------|----------------|--|---------------------------|
| la. Type of Work: DRILL REENT | ER (S) | Receive Holds OCD | od . | | 7. If Unit or CA Agre | |
| 1b. Type of Well: 🖸 Oil Well 🔲 Gas Well 🔲 Other | . ♥ | ingle Zone | Multip | le Zone | 8. Lease Name and We Larry Federal #2 | II No. <3654 |
| 2. Name of Operator | | | | 2 | 9. API Well No. | |
| Marbob Energy Corporation | Tal mi | | 404 | 9> | 30.025- | 38444 |
| 3a. Address | |). (include are | a code) | | 10. Field and Pool, or E | |
| P.O. Box 227, Artesia, N.M. 88211-0227 4. Location of Well (Report location clearly and in accordance with | 505-748-33 | | | | Young Wolfcamp | Blk. and Survey or Area |
| A. S. 0001 FOL 0 0001 FF1 | ntrolled Wate | | : 4 F |)) | | |
| 14. Distance in miles and direction from nearest town or post office* | | UN | 111 | | Section 34, T17S - R 12. County or Parish | 13. State |
| | | | | | Lea County | NM |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) | 16. No. of A | Acres in lease | | | g Unit dedicated to this w | |
| 18. Distance from proposed location* | 19. Propose | d Depth | | | IA Bond No. on file | |
| to nearest well, drilling, completed, applied for, on this lease, ft. | 9800' | | | NM 2058 | 2. 111.1567.24 i | C BA |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) | | imate date wo | rk will sta | ırt* | 23. Estimated duration | |
| 3920' | April 27, 20 | | | | 25 Days | |
| | 24. Attac | | | | | |
| The following, completed in accordance with the requirements of Onsh | ore Oil and Gas | Order No.1, sl | nall be atta | ched to this | form: | |
| Well plat certified by a registered surveyor. A Drilling Plan. | | | cover the | operations | unless covered by an e | xisting bond on file (see |
| 3. A Surface Use Plan (if the location is on National Forest Syster SUPO shall be filed with the appropriate Forest Service Office). | n Lands, the | 5. Operator6. Such otl | r certificat | ecific info | rmation and/or plans as | may be required by the |
| 25. Signature | Name | (Printed Type | d) | - | | Date |
| 1 lancey i laneus | | Agnew | , | | 3 | 3-27-07 |
| Title | | | | | | |
| Approved by (Signature) | | | | | | |
| Approved by (signature) Isl James Stovall | Name | (Printed Type | iames | Stoval | I | Date JUN 1 1 2007 |
| Title ACTING FIELD MANAGER | Office | CARI | SBAL |) FIELI | D OFFICE | |
| Application approval does not warrant or certify that the applicant holds operations thereon. | s legal or equitab | le title to those | rights in | the subject l | ease which would entitle | the applicant to conduct |
| Conditions of approval, if any, are attached. | | | | | A 14 | THE YEAR |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make States any false, fictitious or fraudulent statements or representations as | it a crime for ar to any matter w | ny person knov ithin its jurisdi | vingly and | l willfully to | make to any departmen | t or agency of the United |
| *(Instructions on reverse) | | | | | | |

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL CURIECT TO

GENERAL CURIENTS

AND SERVICE DEPOLATIONS

ATTRICTED

4m

State of New Mexico

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

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

Fee Lease - 3 Copies

DISTRICT IV

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

| 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 | WELL LOCATION AND | ACKEAGE DEDICATION THAT | ☐ AMENDED REPORT |
|---|-------------------|-------------------------|------------------|
| API Number | Pool Code | Pool Name | |
| 30-025-38444 | 65580 | YOUNG WOLFCAMP | |
| Property Code | Prop | erty Name | Well Number |
| 36545 | LARRY | FEDERAL | 2 |
| OGRID No. | | ator Name | Elevation |
| 14049 | MARBOB ENER | GY CORPORATION | 3920' |

Surface Location

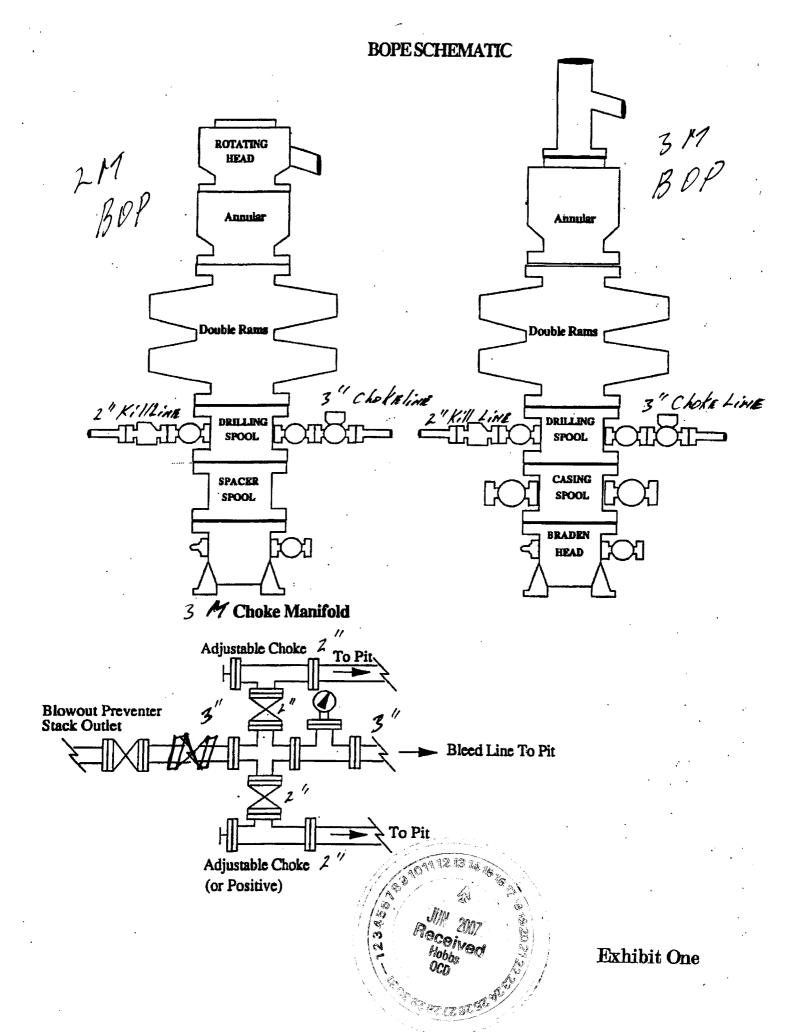
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County | |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|--|
| Р | 34 | 17-S | 32-E | | 330 | SOUTH | 330 | EAST | LEA | |

Bottom Hole Location If Different From Surface

| | | | Doctom | HOLE BOX | batton it bill | nome from bur | Luce | | |
|----------------|---------|-------------|-------------|----------|----------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| | | | | | | | | | |
| Dedicated Acre | Joint o | r Infill Co | nsolidation | Code Or | der 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

| OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and helief, and that this mean is mortised and the state of my knowledge and helief, and that this mand including the proposed bottom hole location or has a right to drill this well at this owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the direction. CEODETIC COORDINATES NAD 27 NME Name Name Name | | |
|--|--------|--|
| herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an an owner of auch mineral or working interest, compulsory pooling order heretofore entered by the division. CEODETIC COORDINATES NAD 27 NME | | OPERATOR CERTIFICATION |
| Nancy Agnew Printed Name 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. LAI.=32.784600' N LONG.=103.746207' W DETAIL 3920.6' 3916.5' DETAIL SEE DETAIL 330' Certificate No. GARY EIDSON 12841 | | 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 |
| SURVEYOR CERTIFICATION SURVEYOR CERTIFICATION | | Signature Date |
| GEODETIC COORDINATES NAD 27 NME Y=649649.1 N X=680440.5 E LAT.=32.784600' N LONG.=103.746207' W DETAIL 3920.6' 3916.5' DETAIL SEE DETAIL 330' SEE DETAIL 330' Certificate No. GARY EIDSON 12641 | | |
| NAD 27 NME Y=649649.1 N X=680440.5 E LAT.=32.784600' N LONG.=103.746207' W DETAIL 3920.6' 3916.5' DETAIL SEE DETAIL 330' SEE DETAIL 330' SEE DETAIL 330' Certificate No. GARY EIDSON 12641 | | SURVEYOR CERTIFICATION |
| X=680440.5 E | | NAD 27 NME shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is |
| Detail D | · | =049049.1 N |
| DETAIL Signature & Seal of Professional Surveyor Professional Surveyor | | 2-103 746207° W |
| 0 8 07.11.0231 SEE DETAIL 330' Certificate No. GARY EIDSON 12641 | DETAIL | Signature & Seal of |
| SEE DETAIL 330' Certificate No. GARY EIDSON 12641 | | - han h Elm 3/6/07 |
| | 600, | SEE DETAIL 330' Certificate No. GARY EIDSON 12641 |



CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No.

Marbob Energy Corp

well Name

Larry Federal # 2

Location:

330'FSL, 330'FEL, SEC34, T17S, R32E, Lea County, NM

Lease:

NM-036852

I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
 - 1. Spudding well
 - 2. Setting and/or Cementing of all casing strings
 - 3. BOPE tests
 - Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612
- **B.** A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the N/A formation.
- 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.** 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 <u>13.375 inch</u> surface casing shall be set at <u>400</u> feet and cemented 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, whichever is greater. (This is to include the lead cement)
 - 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 - 4. If cement falls back, remedial action will be done prior to drilling out that string.
- **B.** The minimum required fill of cement behind the <u>9.625</u> inch intermediate casing is cement shall circulate to the surface. If cement does not circulate see A.1 thru 4.

- C. The minimum required fill of cement behind the <u>5.5</u> inch production casing is cement shall extend upward a minimum of 200 feet above the base of the 9.625" intermediate casing string.
- **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 I 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 (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 psi.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the <u>9.625 inch</u> Intermediate casing shoe shall be 3000 psi.
- **D.** 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 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, section 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - 5. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
 - **6.** A variance to test the surface casing and BOP/BOPE to the reduced pressure of <u>1000</u> psi with the rig pumps is approved.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> formation, and shall be used until production casing is run and cemented.

- 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
- 4. <u>Fresh Water based mud with starch and fluid loss control material will be used to drill from the surface casing to 1080 feet.</u>

V. Hazards:

- Our geologist has indicated that there is potential for flows in the Salado and Artesia groups.
 Our geologist has indicated that there is potential for lost circulation in the Grayburg and San Andres formations.
- 3. Our geologist has indicated that there is potential for abnormal pressure in the Wolfcamp formation.

Engineering can be reached for variances at: 505-706-2779 **FWright 6/7/07**



<u>District I</u> 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**

Form C-144

March 12, 2004

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

| Is pit or be | elow-grade tan | de Tank Registration or C k covered by a "general plan"? Yes or below-grade tank \(\time\) Closure of a pit or b | No □ |
|---|--|--|---|
| Operator: Marbob Energy Corporation Address: PO Box 227, Artesia, NM 88211-0 Facility or well name: Larry Federal #2 | 30. API#: | Telephone: 505-748-3303 | |
| County: Lea Latitude Pit Type: Drilling Production Disposal Workover Emergency Lined Unlined Liner type: Synthetic Thickness 12 mil Clay Vo bbl Fbb/S Cul Depth to ground water (vertical distance from bottom of pit water elevation of ground water.) | lume 1 to seasonal high | NAD: 1927 L 1983 Surf Below-grade tank Volume:bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes Less than 50 feet 50 feet or more, but less than 100 feet [100 feet or more] | 7.6 |
| Wellhead protection area: (Less than 200 feet from a privat water source, or less than 1000 feet from all other water sou | | Yes No | (20 points) (0 points) |
| Distance to surface water: (horizontal distance to all wetlan irrigation canals, ditches, and perennial and ephemeral wate | | Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more | (20 points) (10 points) (0 points) 0 points |
| | | Ranking Score (Total Points) | O points |
| If this is a pit closure: (1) attach a diagram of the facility onsite for offsite for offsite, name of facility date. (4) Groundwater encountered: No for offsite for offsite for onsite for offsite, name of facility for onsite for onsite for onservations and excavations. I hereby certify that the information above is true and complete for onstructed or closed according to NMOCD for onsite for one of one | ete to the best of n guidelines , a Department | (3) Attach a general description of reme w ground surfaceft. and attach my knowledge and belief. I further certify t general permit , or an (attached) alternation of the conference | hat the above-described pit or below-grade tank has ative OCD-approved plan |
| Approval: Date: <u>6/20/07</u> Printed Name/Title <i>CAHRIS WILLI BURS</i> / | DIST. SUBV | Signature Chris 1841 | Um |



March 28, 2007

Oil Conservation Division 1625 N. French Drive Hobbs, NM 88240

Attention: Donna Mull

RE: Larry Federal #1

330' FSL & 1650' FEL 330' FSL & 330' FEL Sec 34, T17S-R32E Lea County Sec 34, T17S-R32E Lea County

Larry Federal #2 Curly Federal #2

1650' FSL & 330' FEL

Sec 34, T17S-R32E Lea County

Dear Donna:

Marbob Energy has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore we do not believe that an H2S Contingency Plan would be necessary.

Please advise us if you feel differently or need further information.

Sincerely,

Nancy Agnew Landman

cricy Ocnew

/na