District I 1825 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170 District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico **Energy, Minerals and Natural Resources** Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form C-101 August 1, 2011

Permit 179307

| APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE |
|--|
|--|

| Operator Name and Address MACK ENERGY CORP | | 2. OGRID Number 13837 |
|--|------------------------------|-------------------------------|
| PO Box 960 Artesia, NM 88211 | | 3. API Number 30-015-41922 |
| 4. Property Code 40312 | Property Name Marvel Fee | 6. Well No. 001 |

7. Surface Location

| UL - Le | .ot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---------|-----|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| | F | 1 | 238 | 27E | | 1650 | N | 1650 | W | Eddy |

8. Proposed Bottom Hole Location

| UL | - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|----|-------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| | F | 1 | 238 | 27E | F | 1650 | N | 1650 | W | Eddy |

9. Pool Information

| CASS DRAW;BONE SPRING | 10380 |
|-----------------------|-------|

Additional Well Information

| 11. Work Type New Well | 12. Well Type OIL | 13. Cable/Rotary | 14. Lease Type Private | 15. Ground Level Elevation 3061 |
|---------------------------|----------------------------|--------------------------------------|---------------------------|------------------------------------|
| 18. Multiple N | 17. Proposed Depth 9500 | 18. Formation Bone Spring | 19. Contractor | 20. Spud Date 1/10/2014 |
| Depth to Ground water | | Distance from nearest fresh water we | ell | Distance to nearest surface water |

☑ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sads of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|----------------|---------------|
| Surf | 17.5 | 13.375 | 48 | 400 | 470 | 0 |
| Int1 | 12.25 | 8.625 | 32 | 2000 | 1000 | 0 |
| Prod | 7.875 | 5.5 | 17 | 9500 | 1210 | 0 |

Casing/Cement Program: Additional Comments

Mack Energy Corporation proposes to drill a 17 1/2" hole to 400', run 13 3/8" casing and cement. Drill a 12 1/4" hole to 2000', run 8 5/8" casing and cement. Drill a 7 7/8" hole to 9500', run 5 1/2" casing and cement. Put well on production.

22. Proposed Blowout Prevention Program

| Туре | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 3000 | 3000 | 7 |

| knowledge and b | elief. | bove is true and complete to the best of my 4.9 (A) NMAC ⊠ and/or 19.15.14.9 (B) NMAC | | OIL CONS | ERVATION DIVISION |
|-----------------|-------------------------------|---|------------------|------------------------------------|-------------------|
| Printed Name: | Electronically filed by Jerr | y Sherrell | Approved By: | Randy Dade | |
| Title: | Production Clerk | | Title: | District Supervisor | |
| Email Address: | Email Address: jerrys@mec.com | | | 1/6/2014 Expiration Date: 1/6/2016 | |
| Date: | 1/6/2014 | Phone: 505-748-1288 | Conditions of Ap | proval Attached | • |

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State of New Mexico **Energy, Minerals and Natural Resources** Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form C-102 August 1, 2011

Permit 179307

WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1. API Number | 2. Pool Code | 3. Pool Name |
|------------------|------------------|-----------------------|
| 30-015-41922 | 10380 | CASS DRAW;BONE SPRING |
| 4. Property Code | 5. Property Name | 6. Well No. |
| 40312 | Marvel Fee | 001 |
| 7. OGRID No. | 8. Operator Name | 9. Elevation |
| 13837 | MACK ENERGY CORP | 3061 |

10 Surface Location

| | | | | 10. 3 | dilace Location | | | | ALC: NO PERSON NAMED IN COLUMN |
|----------|---------|----------|-------|---------|-----------------|----------|-----------|----------|--|
| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
| F | 1 | 238 | 27E | | 1650 | N | 1650 | W | Eddy |

11. Bottom Hole Location If Different From Surface

| UL - Lot | Section | Township | Range | Lot Idn | Feet From | N/S Line | Feet From | E/W Line | County |
|---------------------|---------|----------|---------------------|---------|------------------------|----------|-----------|---------------|--------|
| 12. Dedicated Acres | 5 | | 13. Joint or Infill | | 14. Consolidation Code | | | 15. 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

| OPERATOR 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(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. |
|--|
| E-Signed By: Jerry Sherrell |
| Title: Production Clerk |
| Date: 1/6/2014 |
| 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. |
| Surveyed By: Filimon Jaramillo |
| Date of Survey: 12/27/2013 |
| Certificate Number: 12797 |

Form APD Comments

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-8161 Fax:(575) 393-0720

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State of New Mexico **Energy, Minerals and Natural Resources** Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Permit 179307

PERMIT COMMENTS

| Operator Name and Address: | API Number: |
|----------------------------|-----------------|
| MACK ENERGY CORP [13837] | 30-015-41922 |
| PO Box 960 | Well: |
| Artesia, NM 88211 | Marvel Fee #001 |

| Created By | Comment | Comment Date |
|------------|---|--------------|
| DWEAVER | H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required. | 1/3/2014 |
| CSHAPARD | Land p/P | 1/6/2014 |

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State of New Mexico **Energy, Minerals and Natural Resources** Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form APD Conditions

Permit 179307

PERMIT CONDITIONS OF APPROVAL

| Operator Name and Address: | API Number: |
|----------------------------|-----------------|
| MACK ENERGY CORP [13837] | 30-015-41922 |
| PO Box 960 | Well: |
| Artesia, NM 88211 | Marvel Fee #001 |

| OCD | Condition |
|----------|--|
| Reviewer | |
| CSHAPARD | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the |
| | fresh water zone or zones and shall immediately set in cement the water protection string |