

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-8181 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 177413

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

|                                                                                     |  |                               |
|-------------------------------------------------------------------------------------|--|-------------------------------|
| 1. Operator Name and Address<br>MACK ENERGY CORP<br>PO Box 960<br>Artesia, NM 88211 |  | 2. OGRID Number<br>13837      |
| 4. Property Code<br>40236                                                           |  | 3. API Number<br>30-005-64173 |
| 5. Property Name<br>Tornado State                                                   |  | 6. Well No.<br>001            |

**7. Surface Location**

|               |               |                 |              |         |                   |               |                   |               |                  |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|------------------|
| UL - Lot<br>K | Section<br>36 | Township<br>14S | Range<br>28E | Lot Idn | Feet From<br>1650 | N/S Line<br>S | Feet From<br>1650 | E/W Line<br>W | County<br>Chaves |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|------------------|

**8. Proposed Bottom Hole Location**

|               |               |                 |              |              |                   |               |                   |               |                  |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|------------------|
| UL - Lot<br>K | Section<br>36 | Township<br>14S | Range<br>28E | Lot Idn<br>K | Feet From<br>1650 | N/S Line<br>S | Feet From<br>1650 | E/W Line<br>W | County<br>Chaves |
|---------------|---------------|-----------------|--------------|--------------|-------------------|---------------|-------------------|---------------|------------------|

**9. Pool Information**

|                                 |       |
|---------------------------------|-------|
| WC-005 G-01 S142835D;SAN ANDRES | 98054 |
|---------------------------------|-------|

**Additional Well Information**

|                           |                            |                                        |                         |                                    |
|---------------------------|----------------------------|----------------------------------------|-------------------------|------------------------------------|
| 11. Work Type<br>New Well | 12. Well Type<br>OIL       | 13. Cable/Rotary                       | 14. Lease Type<br>State | 15. Ground Level Elevation<br>3655 |
| 16. Multiple<br>N         | 17. Proposed Depth<br>3500 | 18. Formation<br>San Andres            | 19. Contractor          | 20. Spud Date<br>11/26/2013        |
| Depth to Ground water     |                            | Distance from nearest fresh water well |                         | 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 | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 12.25     | 8.625       | 24               | 450           | 450             | 0             |
| Prod | 7.875     | 5.5         | 17               | 3500          | 425             | 0             |

**Casing/Cement Program: Additional Comments**

|                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mack Energy proposes to drill a 12 1/4" hole to 450', run 8 5/8" casing and cement. Drill a 7 7/8" hole to 3500', run 5 1/2" casing and cement. Put well on production. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**22. Proposed Blowout Prevention Program**

| Type       | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 3000             | 3000          |              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.<br>I further certify I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable.<br><br>Signature:<br>Printed Name: Electronically filed by Jerry Sherrell<br>Title: Production Clerk<br>Email Address: jerrys@mec.com<br>Date: 11/19/2013 | <b>OIL CONSERVATION DIVISION</b><br><br>Approved By: Randy Dade<br>Title: District Supervisor<br>Approved Date: 11/20/2013<br>Expiration Date: 11/20/2015<br>Conditions of Approval Attached |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

Form C-102  
August 1, 2011  
Permit 177413

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                               |                                      |                                                 |
|-------------------------------|--------------------------------------|-------------------------------------------------|
| 1. API Number<br>30-005-64173 | 2. Pool Code<br>98054                | 3. Pool Name<br>WC-005 G-01 S142835D;SAN ANDRES |
| 4. Property Code<br>40236     | 5. Property Name<br>Tornado State    | 6. Well No.<br>001                              |
| 7. OGRID No.<br>13837         | 8. Operator Name<br>MACK ENERGY CORP | 9. Elevation<br>3655                            |

**10. Surface Location**

|               |               |                 |              |         |                   |               |                   |               |                  |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|------------------|
| UL - Lot<br>K | Section<br>36 | Township<br>14S | Range<br>28E | Lot Idn | Feet From<br>1650 | N/S Line<br>S | Feet From<br>1650 | E/W Line<br>W | County<br>Chaves |
|---------------|---------------|-----------------|--------------|---------|-------------------|---------------|-------------------|---------------|------------------|

**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<br>40.00 |         |          |       | 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**

|                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 20px; color: red;"> </div> </div> | <p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>E-Signed By: Jerry Sherrell<br/>Title: Production Clerk<br/>Date: 11/19/2013</p> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>Surveyed By: Filimon Jaramillo<br/>Date of Survey: 10/23/2013<br/>Certificate Number: 12797</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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Form APD Comments  
Permit 177413

**PERMIT COMMENTS**

|                                                                                           |                                                                                                                     |                             |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Operator Name and Address:<br>MACK ENERGY CORP [13837]<br>PO Box 960<br>Artesia, NM 88211 |                                                                                                                     | API Number:<br>30-005-64173 |
|                                                                                           |                                                                                                                     | Well:<br>Tornado State #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. | 11/19/2013                  |
| CSHAPARD                                                                                  | Land p/S                                                                                                            | 11/20/2013                  |

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Form APD Conditions  
Permit 177413

**PERMIT CONDITIONS OF APPROVAL**

|                                                                                           |  |                             |
|-------------------------------------------------------------------------------------------|--|-----------------------------|
| Operator Name and Address:<br>MACK ENERGY CORP [13837]<br>PO Box 960<br>Artesia, NM 88211 |  | API Number:<br>30-005-64173 |
|                                                                                           |  | Well:<br>Tornado State #001 |

| OCD<br>Reviewer | Condition                                                                                                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |