

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

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

1. Operator Name and Address MACK ENERGY CORP PO Box 960 Artesia, NM 88211		2. OGRID Number 13837
		3. API Number 30-025-38203
4. Property Code 34657	5. Property Name RAVEN STATE	6. Well No. 004

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	9	18S	34E	E	2310	N	330	W	LEA

**8. Pool Information**

VACUUM;BONE SPRING, WEST	61910
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**Additional Well Information**

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 4052
14. Multiple N	15. Proposed Depth 9300	16. Formation 3rd Bone Spring Carbonate	17. Contractor	18. Spud Date 12/6/2006
Depth to Ground water 129		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 _____ miles thick Clay <input type="checkbox"/> Pit Volume: 3000 _____ bbls Drilling Method: Closed Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	24	1800	800	0
Prod	7.875	5.5	17	9300	1500	0

**Casing/Cement Program: Additional Comments**

Mack Energy proposes to drill a 12 1/4 hole to 1800' run 8 5/8 casing and cement. Drill a 7 7/8 hole to 9300' run 5 1/2 casing and cement. Note: On production string a fluid caliper will be run and will figure cement with 25% excess, attempt to circ.

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that the drilling pit will be constructed according to NMOCB guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Printed Name: Electronically filed by Jerry Sherrell

Title: Production Clerk

Email Address: jerrys@mackenergycorp.com

Date: 12/5/2006

Phone: 505-748-1288

**OIL CONSERVATION DIVISION**

Approved By: Chris Williams

Title: District Supervisor

Approved Date: 12/7/2006

Expiration Date: 12/7/2007

Conditions of Approval Attached

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(505) 393-6161 Fax:(505) 393-0720

**District II**  
 1301 W. Grand Ave., Artesia, NM 88210  
 Phone:(505) 748-1283 Fax:(505) 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

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Form C-102  
 Permit 42744

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-38203	2. Pool Code 61910	3. Pool Name VACUUM;BONE SPRING, WEST
4. Property Code 34657	5. Property Name RAVEN STATE	6. Well No. 004
7. OGRID No. 13837	8. Operator Name MACK ENERGY CORP	9. Elevation 4052

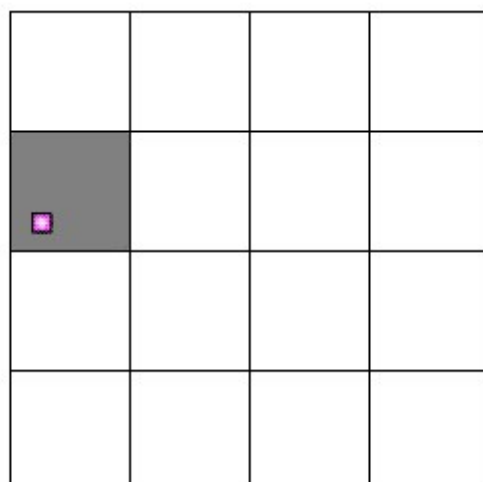
**10. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	9	18S	34E		2310	N	330	W	LEA

**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 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**



**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: 12/5/2006

**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: Gary Eidson  
 Date of Survey: 12/4/2006  
 Certificate Number: 12641

## Permit Comments

Operator: MACK ENERGY CORP , 13837

Well: RAVEN STATE #004

API: 30-025-38203

Created By	Comment	Comment Date
JWSHERRELL	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	12/4/2006

# Permit Conditions of Approval

Operator: MACK ENERGY CORP , 13837

Well: RAVEN STATE #004

API: 30-025-38203

OCD Reviewer	Condition
DMULL	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines