

State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Susana Martinez**  
Governor

**John Bemis**  
Cabinet Secretary

**Brett F. Woods, Ph.D.**  
Deputy Cabinet Secretary

**Jami Bailey**  
Division Director  
Oil Conservation Division



Administrative Order DHC-4607

Order Date: 2/28/2013

Application Reference Number: pPRG1304655523

Mack Energy Corporation  
PO Box 960  
Artesia, NM 88211-0960

Attention: Jerry Sherrell

Ohio State Well No. 5  
API No: 30-025-40197  
Unit K, Section 7, Township 18 South, Range 35 East, NMPM  
Lea County, New Mexico

Pool	WC-025 G-06 S183518A; BONE SPRING	Oil 97930
Names:	VACUUM; ABO REEF	Oil 61780

Reference is made to your recent application for an exception to 19.15.12.9A NMAC of the Division Rules and Regulations to permit the above-described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of 19.15.12.11A NMAC, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion or otherwise required separation of the zones is hereby placed in abeyance.

In accordance with 19.15.12.11A.(6) NMAC, the production attributed to any commingled pool within the well shall not exceed the allowable applicable to that pool.

As per the application, the assignment of allowable and allocation of production from the well shall be based on the subtraction method. The total well production minus the Abo Reef production shall be assigned to the Wildcat 025 G-06 S183518A Bone Spring Pool.

**REMARKS:** The operator shall notify the Division's district office upon implementation of commingling operations.

Pursuant to 19.15.12.11B NMAC, the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.



JAMI BAILEY  
Director

JB/prg

cc: Oil Conservation Division – Artesia  
State Land Office – Oil, Gas, and Minerals Division

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



30-025-40197-0000  
Onio State #5  
Mack Energy  
RECEIVED OCD

## ADMINISTRATIVE APPLICATION CHECKLIST

2013 JAN 22 P 1:45

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]  
 [A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD  
 Check One Only for [B] or [C]  
 [B] Commingling - Storage - Measurement  
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM  
 [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR  
 [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☒ Does Not Apply  
 [A] ☒ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☒ Offset Operators, Leaseholders or Surface Owner  
 [C] ☐ Application is One Which Requires Published Legal Notice  
 [D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F] ☐ Waivers are Attached
- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Jerry W. Sherrell  
Print or Type Name

*Jerry W. Sherrell*  
Signature

Production Clerk  
Title

1/15/13  
Date

jerrys@mec.com  
e-mail Address



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

January 15, 2013

Oil Conservation Division  
Attn: Will Jones  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Re: Down hole Commingling, and measurement of  
Hydrocarbon Production for:  
Ohio State #5  
Section 7, T18S, R35E  
Lea County, New Mexico

Mack Energy Corporation as operator of the aforementioned well respectfully requests administrative approval for down hole commingling and measurement of production.

Mack Energy proposes to commingle Vacuum; Abo Reef and Vacuum; Bone Springs, South production in the Ohio State #5(State of NM Lease VO-7048). Production of both pools will be measured at the TB located in the NE/4 SW/4, Sec. 7 T18S R35E. This lease has common interest in both pools. Mack Energy Corporation owns all interest in this lease. The oil purchaser has been notified of the intent to commingle. Allocation will be done using the subtraction method based on increased production from the Bone Springs formation. This well has consistent daily production from the Vacuum;Abo Reef formation.

Should you require any additional information concerning this application, please call Jerry W. Sherrell at 575-748-1288. Thank you for your consideration of this request.

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk  
[jerrys@mec.com](mailto:jerrys@mec.com)

JWS/  
Enclosures

District I  
1621 N. French Drive, 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 Department

Form C-107A  
Revised June 10, 2003

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505  
APPLICATION FOR DOWNHOLE COMMINGLING

APPLICATION TYPE  
☒ Single Well  
☒ Establish Pre-Approved Pools  
EXISTING WELLBORE  
☐ Yes ☒ No

Mack Energy Corporation P.O. Box 960, Artesia, NM 88211-0960  
Operator Address  
Ohio State 5 K-7-18S-35E Lea  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 013837 Property Code 34432 API No. 30-025-40197 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<del>Wildcat 025 G-06</del> Vacuum; Bone Spring, South	<del>31835184; Bone Spring</del> Vacuum; Abo Reef	
PoolCode	<del>61900</del> 97930	61780	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	7288-8490'	8484-8909'	
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	36.6	36.8	
Producing, Shut-In or New Zone	New Zone	Producing	
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: _____ Rates: _____	Date: 1/13/2013 Rates: 33/25/90	Date: _____ Rates: _____
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or put production, supporting data or explanation will be required.)	Oil _____ Gas _____ % %	Oil _____ Gas _____ % %	Oil _____ Gas _____ % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No ☐  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☐ No ☐  
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐  
Will commingling decrease the value of production? Yes ☐ No ☒  
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☐ No ☐  
NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

Attachments:  
C- 1 02 for each zone to be commingled showing its spacing unit and acreage dedication.  
Production curve for each zone for at least one year. (If not available, attach explanation.)  
For zones with no production history, estimated production rates and supporting data.  
Data to support allocation method or formula.  
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.  
Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools  
List of all operators within the proposed Pre-Approved Pools  
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.  
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief  
SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 1/15/13  
TYPE OR PRINT NAME Jerry W. Sherrell TELEPHONE NO. ( 575 ) 748-1288  
E-MAIL ADDRESS jerrys@mec.com



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

January 15, 2013

Oil Conservation Division  
Attn: Will Jones  
1220 South St. Francis Dr.  
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Re: Down hole Commingling, and measurement of  
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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk  
[jerrys@mec.com](mailto:jerrys@mec.com)

JWS/  
Enclosures

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## MEMO

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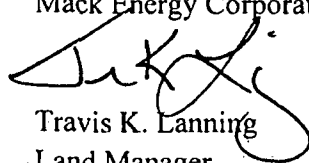
DATE: June 19, 2012  
TO: NMOCD  
FROM: Travis K. Lanning  
RE: Ohio State #1, #2 & #3  
V-7048-1  
T18S, R35E  
Section 7: E/2SW/4,  
Lea County, New Mexico

Mack Energy Corporation respectfully requests approval to surface commingle production in our Ohio State Lease (V-7048-1). The Ohio State #1, #2 and #3 currently produce from the Blinebry formation. The Ohio State #5 will produce from the Blinebry, Abo and or Bone Springs formations. Production would be commingled at the Ohio State #1 tank battery. ✓

All wells have identical working and revenue interests in the zones being commingled.

Please do not hesitate to contact me should you require any further information.

Sincerely,  
Mack Energy Corporation

  
Travis K. Lanning  
Land Manager

RECEIVED

JUL 21 2011

Form C-102

Revised July 16, 2010

Submit to Appropriate  
District Office

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  
11885 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, New Mexico 87505

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-40197</b>	Pool Code <b>61900</b>	Pool Name <b>Vacuum; Bone Spring, South</b>
Property Code <b>34432</b>	Property Name <b>OHIO STATE</b>	Well Number <b>5</b>
OGRID No. <b>013837</b>	Operator Name <b>MACK ENERGY CORPORATION</b>	Elevation <b>3969'</b>

## Surface Location

UL or lot No. <b>K</b>	Section <b>7</b>	Township <b>18-S</b>	Range <b>35-E</b>	Lot Idn	Feet from the <b>1920</b>	North/South line <b>SOUTH</b>	Feet from the <b>2130</b>	East/West line <b>WEST</b>	County <b>LEA</b>
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## 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
Dedicated Acres <b>40</b>	Joint or Infill	Consolidation Code	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

LOT 1			
37.72 AC. LOT 2			
37.80 AC. LOT 3			
37.88 AC. LOT 4			
37.96 AC.			

GEODETIC COORDINATES  
NAD 27 NME  
SURFACE LOCATION  
Y=641314.5 N  
X=756823.2 E  
LAT.=32.760281° N  
LONG.=103.497903° W

2130'

1920'

**OPERATOR CERTIFICATION**

I hereby certify that the information 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 by the division.

*Jerry W. Sherrell* 1-15-2013  
Signature Date

*Jerry W. Sherrell*  
Printed Name

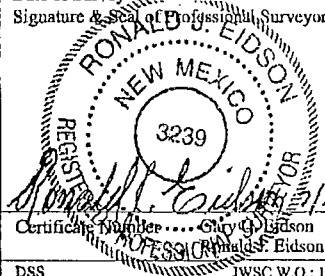
*jerry45@mcc.com*  
E-mail Address

**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.

JULY 11, 2011

Date of Survey

Signature & Seal of Professional Surveyor:  


Certificate Number... 12641  
Professional Surveyor... Ronald S. Eidson 3239

DSS JWSC W.O.: 11.11.1479



RECEIVED

JUL 21 2011

Form C-102

Revised July 16, 2010

Submit to Appropriate District Office

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  
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

HOBBS OGD

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

APR 23 2012

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-40197</b>	Pool Code <b>61780</b>	Pool Name <b>Vacuum; Abo Reef</b>
Property Code <b>34432</b>	Property Name <b>OHIO STATE</b>	Well Number <b>5</b>
OGRID No. <b>013837</b>	Operator Name <b>MACK ENERGY CORPORATION</b>	Elevation <b>3969'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	7	18-S	35-E		1920	SOUTH	2130	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	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

<p>LOT 1</p> <p>37.72 AC LOT 2</p> <p>37.80 AC LOT 3</p> <p>37.88 AC LOT 4</p> <p>37.96 AC</p> <p>2130'</p> <p>1920'</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>SURFACE LOCATION Y=641314.5 N X=756823.2 E</p> <p>LAT.=32 760281" N LONG.=103 497903" W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 by the division.</p> <p><i>Jerry W. Sherrell</i> 4-20-2012 Signature Date</p> <p>Jerry W. Sherrell Printed Name</p> <p>jerry.s@mec.com E-mail Address</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JULY 11, 2011</p> <p>Date of Survey</p> <p>Signature &amp; Seal of Professional Surveyor:</p> <p>RONALD EIDSON NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 3239</p> <p>Certificate Number 3239</p> <p>DSS JWSC W.O. 11.11.1479</p>
--	--

SCANNED

Submit 3 Copies To Appropriate District Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., 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 and Natural Resources

Form C-103

June 19, 2008

HOBBS OCD

OIL CONSERVATION DIVISION

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

JAN 18 2013

WELL API NO. 30-025-40197
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. VO-7048
7. Lease Name or Unit Agreement Name Ohio State
8. Well Number 5
9. OGRID Number 013837
10. Pool Name or Wildcat Vacuum; Bone Spring, South
11. Elevation (Show whether DR, RKB, RT, GR etc.) 3730' GR

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	
2. Name of Operator Mack Energy Corporation	
3. Address of Operator P.O. Box 960 Artesia, NM 88210	
4. Well Location Unit Letter <u>NK</u> <u>1920</u> feet from the <u>South</u> line and <u>2130</u> feet from the <u>West</u> line Section <u>19</u> Township <u>15N</u> Range <u>35E</u> NMPM County <u>Chaves</u>	
11. Elevation (Show whether DR, RKB, RT, GR etc.) 3730' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☒

SUBSEQUENT REPORT OF:

REMEDIALWORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Mack Energy proposes to Downhole Commingle the existing Vacuum; Abo Reef and new Vacuum; Bone Spring, South as follows:

1. POH w/rods and tubing.
2. Perforate from 7288-8490'. Frac perfs from 7288-8490'.
3. Put well back on production. DHC has been submitted to OCD-Santa Fe.

Spud Date:

Rig Release Date:

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

SIGNATURE

Jerry W. Sherrell

TITLE Production Clerk

DATE 1/17/13

Type or print name Jerry W. Sherrell

E-mail address: jerrys@mec.com

PHONE: (575)748-1288

For State Use Only

APPROVED BY:

[Signature]

TITLE

Petroleum Engineer

DATE

JAN 18 2013

Conditions of Approval (if any):