

ABOVE THIS LINE FOR DIVISION USE ONLY

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NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -



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

2013 OCT 10 P 1:51

ADMINISTRATIVE APPLICATION CHECKLIST

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

Mack Energy
 30-025-40128
 OIS
 Razorback Fed #5

[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

10-8-2013
 Date

jerrys@mec.com
 e-mail Address

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

APPLICATION FOR DOWNHOLE COMMINGLING

Mack Energy Corporation P.O. Box 960, Artesia, NM 88211-0960
Operator Address

Razorback Federal 5 E-3-18S-31E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 013837 Property Code 38891 API No. 30-025-40928 Lease Type: Federal State Fee
30-015-40120

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Tamano; San Andres ✓	Tamano; Delaware ✓	
PoolCode	58060 ✓	97270 ✓	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	4200-4300'	4601-4681'	
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: <u>N/A</u> Rates: <u>N/A</u>	Date: <u>9/29/2013</u> Rates: <u>6/16/88</u>	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?
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: PC-1256

- 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 _____ TITLE Production Clerk DATE 10-8-2013

TYPE OR PRINT NAME Jerry W. Sherrell TELEPHONE NO. (575) 748-1288

E-MAIL ADDRESS jerrys@mec.com

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-9720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40928	Pool Code 97270	Pool Name Tamano; Delaware
Property Code 38891	Property Name RAZORBACK FEDERAL	Well Number 5
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3747'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	3	18-S	31-E		1650	NORTH	330	WEST	EDDY

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 40	Joint or Infill	Consolidation Code	Order No.
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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>40.05 AC. 40.09 AC. 40.11 AC. 40.15 AC.</p> <p>1650'</p> <p>330' S.L. SEE DETAIL</p> <p>DETAILED: 3747.6', 3746.2', 600', 600', 3746.7', 3741.4'</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>SURFACE LOCATION Y=647481.2 N X=644121.5 E</p> <p>LAT.=32 779139" N LONG.=103 864411" 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 in 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>Deana Weaver</i> 5/28/12 Signature Date</p> <p>Deana Weaver Printed Name</p> <p>dweaver@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>JUNE 6, 2012 Date of Survey</p> <p><i>Ronald J. Eidson</i> Signature & Seal of Professional Surveyor</p> <p>RONALD J. EIDSON NEW MEXICO 3239 Professional Surveyor</p> <p>Certificate Number Gary G. Hildner 1264 Ronald J. Eidson 5739</p>

RECEIVED
JUL 13 2012
MAILROOM

DISTRICT I
1625 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
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1000 Rio Brazos Road, Aztec, NM 87410
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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Property Code 38891	Property Name RAZORBACK FEDERAL	Well Number 5
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3747'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	3	18-S	31-E		1650	NORTH	330	WEST	EDDY

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UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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	<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> 10/3/12 Signature Date</p> <p>Jerry W. Sherrell Printed Name</p> <p>jerrys@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>JUNE 6, 2012</p> <p>Date of Survey</p> <p>Signature & Seal of Professional Surveyor:</p> <p><i>Ronald J. Eidson</i> 6/12/2012</p> <p>Certificate Number... Ronald J. Eidson 12641 Professional Surveyor... Ronald J. Eidson 3239</p> <p>AF JWSC W.O.: 12.11.1204</p>

M E M O

DATE: May 24, 2013
TO: NMOCD
FROM: STACI SANDERS
MACK ENERGY CORPORATION
RE: RAZORBACK FEDERAL LEASE
NMNM-89882
T18S, R31E
SECTION 3: LOTS 3, 4, S/2NW/4
EDDY COUNTY, NEW MEXICO

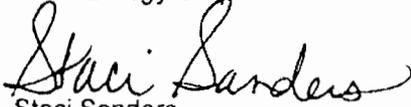
Mack Energy Corporation respectfully requests approval to surface commingle production from our Razorback Federal Lease. The Razorback Federal Lease has production from the Delaware and San Andres formations and we would like to commingle the production at the Tank Battery. Allocation for the oil and gas will be done using periodic well tests at the Tank Battery.

All wells going into the Tank Battery have identical working and revenue interests.

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

Sincerely,

Mack Energy Corporation


Staci Sanders
Land Department

Razorback Federal – Interest Owners

Office of Natural Resources
P.O. Box 25627
Denver, CO 80225-0627

Marathon Oil Company
P.O. Box 2069
Houston, TX 77252-2069

Chase Oil Corporation
P.O. Box 1767
Artesia, NM 88211

Robert C. Chase
P.O. Box 297
Artesia, NM 88211

Ventana Minerals LLC
P.O. Box 359
Artesia, NM 88211

DiaKan Minerals LLC
P.O. Box 693
Artesia, NM 88211



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

October 8, 2013

VIA CERTIFIED MAIL 7013 0600 0001 7892 4341

Commissioner of Public Lands
PO Box 1148
Santa Fe, NM 87504-1148

Dear Sir or Madam:

Mack Energy Corporation is requesting administrative approval from the NMOCD for approval to Downhole Commingle the Tamano; San Andres (58060), Tamano; Delaware (97270) production in the Razorback Federal #5. Production will be commingled at a tank battery located in the NW/4 NW/4 Sec. 3 T18S R31E. There is currently a surface commingling order in place for this lease.

Ownership is common between the Razorback Lease.

Allocation for oil and gas will be done using the subtraction method. The Razorback Federal #5 has been producing for some time and production is steady. Each well will be tested periodically to insure accuracy. Should you have any questions please contact me @ 575-748-1288.

Sincerely,

A handwritten signature in black ink that reads "Jerry W. Sherrell".

Jerry W. Sherrell
Production Clerk
jerrys@mec.com

JWS/

Enclosures



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

October 8, 2013

VIA CERTIFIED MAIL 7013 0600 0001 7892 4358

Marathon Oil Company
PO Box 2069
Houston, TX 77252-2069

Dear Sir or Madam:

Mack Energy Corporation is requesting administrative approval from the NMOCD for approval to Downhole Commingle the Tamano; San Andres (58060), Tamano; Delaware (97270) production in the Razorback Federal #5. Production will be commingled at a tank battery located in the NW/4 NW/4 Sec. 3 T18S R31E. There is currently a surface commingling order in place for this lease.

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Sincerely,

A handwritten signature in black ink that reads "Jerry W. Sherrell".

Jerry W. Sherrell
Production Clerk
jerrys@mec.com

JWS/

Enclosures



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

October 8, 2013

VIA CERTIFIED MAIL 7013 0600 0001 7892 4365

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

Dear Sir or Madam:

Mack Energy Corporation is requesting administrative approval from the NMOCD for approval to Downhole Commingle the Tamano; San Andres (58060), Tamano; Delaware (97270) production in the Razorback Federal #5. Production will be commingled at a tank battery located in the NW/4 NW/4 Sec. 3 T18S R31E. There is currently a surface commingling order in place for this lease.

Ownership is common between the Razorback Lease.

Allocation for oil and gas will be done using the subtraction method. The Razorback Federal #5 has been producing for some time and production is steady. Each well will be tested periodically to insure accuracy. Should you have any questions please contact me @ 575-748-1288.

Sincerely,

A handwritten signature in black ink that reads "Jerry W. Sherrell". The signature is written in a cursive, flowing style.

Jerry W. Sherrell
Production Clerk
jerrys@mec.com

JWS/

Enclosures