

ABOVE THIS LINE FOR DIVISION USE ONLY

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



**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

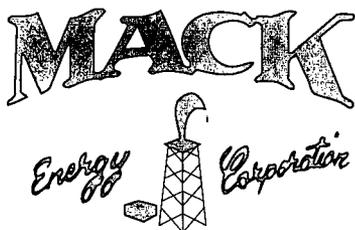
[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[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		Production Clerk	6/04/08
Print or Type Name	Signature	Title	Date
		jerrys@mackenergycorp.com	
		e-mail Address	

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

June 4, 2008

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

Re: Downhole Commingling and Measurement of  
Hydrocarbon Production for:  
Gar State #5  
Section 23, T16S R33E  
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 Hume Queen West and West Hume Grayburg production in the Gar State #5 well (State of NM Lease VB-638). Production of both pools will be measured at the Gar State Tank Battery located in the SE/4 NE/4 Sec. 23 T16S R33E. This lease has common interest in both pools. Notification has been made to all parties owning an interest in the lease, including the oil purchaser, of the intent to commingle. Testing will be conducted and allocation percentages will be sent to OCD after completion of this well.*

*Should you require any additional information concerning this application, please call Jerry W. Sherrell at the above number. Thank you for your consideration of this request.*

*Sincerely,*

MACK ENERGY CORPORATION

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

JWS/dw

Enclosures

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**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-102  
Permit 59930

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-38494	2. Pool Code 97444	3. Pool Name HUME;GRAYBURG, WEST
4. Property Code 34770	5. Property Name GAR STATE	6. Well No. 005
7. OGRID No. 13837	8. Operator Name MACK ENERGY CORP	9. Elevation 4187

**10. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
G	23	16S	33E	G	2310	N	1650	E	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.
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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**

	<b>OPERATOR CERTIFICATION</b>
	<p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p>E-Signed By: Jerry Sherrell Title: Production Clerk Date: 8/28/2007</p>
	<b>SURVEYOR CERTIFICATION</b>
	<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: Gary Eidson Date of Survey: 7/11/2005 Certificate Number: 12641</p>

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**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-102  
Permit 59930

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-38494	2. Pool Code 33560	3. Pool Name HUME;QUEEN, WEST
4. Property Code 34770	5. Property Name GAR STATE	6. Well No. 005
7. OGRID No. 13837	8. Operator Name MACK ENERGY CORP	9. Elevation 4187

**10. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
G	23	16S	33E	G	2310	N	1650	E	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.		

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District I  
1621 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

District II  
1301 W. Grand Avenue, Artesia, NM 88210

**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

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St Francis Dr., Santa Fe, NM 87505

**APPLICATION FOR DOWNHOLE COMMINGLING**

*DHC-4056*

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

Gar State 5 Well No. 5 Unit Letter-Section-Township-Range G-23-16S-33E Lease Lea  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 013837 Property Code 34770 API No. 30-025-38494 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Hume Queen West		West Hume Grayburg
Pool Code	33560		97444
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	(+)(-) 3900-4000'		(+)(-) 4350-4500'
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)	36.8		36.8
Producing, Shut-In or New Zone	New Zone		New Zone
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: _____ Rates: _____	Date: _____ Rates: _____
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past 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 6/4/08

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

E-MAIL ADDRESS jerrys@mackenergycorp.com

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2008 JUL 1 PM 1:46

PATRICK H. LYONS  
COMMISSIONER

State of New Mexico  
Commissioner of Public Lands

310 OLD SANTA FE TRAIL  
P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE

Phone (505) 827-5760

Fax (505) 827-5766

www.nmstatelands.org

June 24, 2008

Mack Energy Corporation  
P.O. Box 960  
Artesia, New Mexico 88211-0960

Attn: Mr. Jerry W. Sherrell

Re: Downhole Commingling Application and Measurement of  
Hydrocarbon Production for:  
Gar State No. 5  
Unit Letter G, Section 23-16S-33E  
Hume Queen West and West Hume Grayburg Pools  
Lea County, New Mexico

Dear Mr. Sherrell:

Thank you for your application to downhole commingle the Hume Queen West and West Hume Grayburg pools from the referenced wells in Lea County, New Mexico.

Since it appears that all the New Mexico Oil Conservation's (OCD) rules and regulations have been complied with, and there will be no loss of revenue to the State of New Mexico as a result of your proposed operation, your application is approved. Any deviation from the substance of your application will be cause for rescinding our approval, and approval is subject to like approval by the OCD.

Please submit a filing fee in the amount of \$30.00.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

PATRICK H. LYONS  
COMMISSIONER OF PUBLIC LANDS

Handwritten signature of Jami Bailey in black ink.

BY:

JAMI BAILEY, Director  
Oil, Gas and Minerals Division

PL/JB/jm

Enclosure

xc: Reader File

OCD—Ed Martin,

-State Land Office Beneficiaries -

Carrie Tingley Hospital • Charitable Penal & Reform • Common Schools • Eastern NM University • Rio Grande Improvement • Miners' Hospital of NM • NM Boys School • NM Highlands University • NM Institute of Mining & Technology • New Mexico Military Institute • NM School for the Deaf • NM School for the Visually Handicapped • NM State Hospital • New Mexico State University • Northern NM Community College • Penitentiary of New Mexico • Public Buildings at Capital • State Park Commission • University of New Mexico • UNM Saline Lands • Water Reservoirs • Western New Mexico University