

DATE IN 6/19/06	SUSPENSE	WILL JONES ENGINEER	LOGGED IN 6/20/06	TYPE DHC 3734	APP NO. PTD50617138989
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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 \_\_\_\_\_
- [21] **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
- [31] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[41] **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

6/15/2006  
 Date

jerrys@mackenergycorp.com  
 e-mail Address



Post Office Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

June 15, 2006

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:  
JC Federal #4  
Section 22, T17S, R32E  
Lea County, New Mexico

Mack Energy Corporation contract operator for COG Operating LLC respectfully requests administrative approval for down hole commingling and measurement of production.

COG proposes to commingle Baish Wolfcamp and Maljamar Abo production in the JC Federal #4 NMLC-029509B. Production of both pools will be measured at the JC Federal #4 TB located in the SE/4 NW/4, Sec. 22 T17S R32E. This lease has common interest in both pools. Notification has been made to all parties owning an interest in this 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. This well has produced for some time from the Wolfcamp formation. The subtraction method will be used to allocate production based on increased production from the Abo formation.

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  
Production Clerk  
[jerrys@mackenergycorp.com](mailto:jerrys@mackenergycorp.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

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-107A  
Revised June 10, 2003

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

APPLICATION FOR DOWNHOLE COMMINGLING

COG Operating LLC

550 W. Texas, Suite 1300 Midland, TX 79701

Operator

Address

JC Federal

4

F-22-17S-32E

Lea

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 013837 Property Code 302508 API No. 30-025-37656 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Maljamar; Abo oil		Baish Wolfcamp oil
Pool Code	43250		4480
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	7548-9096		9584.5-9840.5'
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)	500#		375#
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38		42.7
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: _____ Rates: _____	Date: 2/15/2006 Rates: 22/125/8
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 ☐  
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: NSL-5334

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 6/15/2006

TYPE OR PRINT NAME Jerry W. Sherrell TELEPHONE NO. ( 505 ) 748-1288

E-MAIL ADDRESS jerrys@mackenergycorp.com

## State of New Mexico

CT I  
KRENCE DR., BOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

W. GRAND AVENUE, ARTESIA, NM 88210

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37656	Pool Code 4480	Pool Name Baish;Wolfcamp
Property Code 302508	Property Name JC FEDERAL	Well Number 4
OGRID No. 229137	Operator Name COG OPERATING LLC	Elevation 4004'

## Surface Location

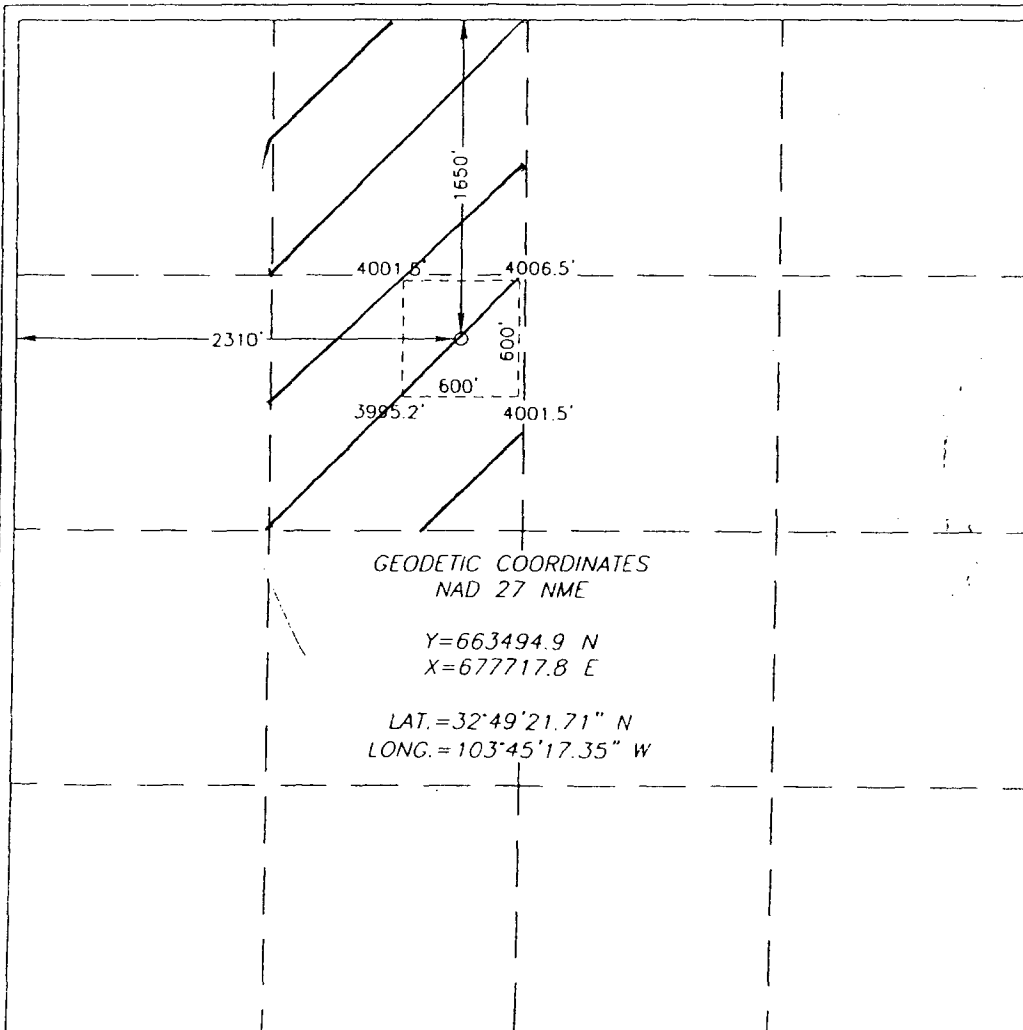
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	22	17-S	32-E		1650	NORTH	2310	WEST	LEA

## 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 80	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



## OPERATOR CERTIFICATION

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

*Jerry W. Sherrell*  
Signature

Jerry W. Sherrell  
Printed Name

Production Clerk  
Title

Title

12/1/2005  
Date

Date

## 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.

NOVEMBER 09, 2005

Date Surveyed JR

Signature & Seal of  
Professional Surveyor

*Ronald J. Edson* 11/14/05  
05.11.1728

Certificate No. GARY EDSON 12841  
RONALD J. EDSON 3239

State of New Mexico

CT I  
FRENCH DR., BOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

DISTRICT II  
W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

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Property Code 302508	Property Name JC FEDERAL	Well Number 4
OGRID No. 229137	Operator Name COG OPERATING LLC	Elevation 4004'

Surface Location

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Bottom Hole Location If Different From Surface

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Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.						

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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>GEODETIC COORDINATES NAD 27 NME Y=663494.9 N X=677717.8 E LAT.=32°49'21.71" N LONG.=103°45'17.35" W</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Jerry W. Sherrell</i> Signature Jerry W. Sherrell Printed Name Production Clerk Title 12/1/2005 Date</p> <p><b>SURVEYOR CERTIFICATION</b></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>NOVEMBER 09, 2005 Date Surveyed JR Signature &amp; Seal of Professional Surveyor <i>Ronald J. Edson</i> 11/14/05 05.11.1728 Certificate No. GARY EDSON 12641 RONALD J. EDSON 3239</p>
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