

DATE IN 4/17/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 4/17/08	DHC 4036	APP NO. PKUR0810854238
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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 _____

[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.

Kanicia Carrillo
 Print or Type Name

Signature

Regulatory Analyst
 Title

04/09/08
 Date

kcarrillo@conchoresources.com
 e-mail Address

RECEIVED
 2008 APR 17 PM 2:03



April 15, 2008

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

Re: Request for Down Hole Commingling and Measurement of Hydrocarbon Production for:

Harvard Federal #5	Harvard Federal #6
Eddy County, NM	Eddy County, NM
API # 30-015-34709	API # 30-015-35124
Harvard Federal #7	Harvard Federal #8
Eddy County, NM	Eddy County, NM
API # 30-015-35055	API # 30-015-35130

Pools:
(96718) Loco Hills; Glorieta-Yeso
(28509) Grayburg Jackson SR; Queen Grayburg SA

Dear Mr. Jones,

COG Operating LLC as operator of the above mentioned wells respectfully requests approval for down hole commingling and measurement of production.

COG proposes to commingle production from the above mentioned pools. Production will be measured at the Harvard Federal battery located in the NE/4 SE/4, Section 11, T17S, R30E. The lease has common interest in both pools. Testing will be conducted and allocation percentages will be sent to OCD after completion of this well. The percentages will be used to allocate production based on increased production from the Grayburg/San Andres formation.

Please contact me at 432-685-4332 or e-mail at kcarrillo@conchoresources.com if you need additional information.

Thank you for your attention in this matter.

Sincerely,

COG Operating LLC

A handwritten signature in black ink, appearing to read "K. Carrillo", written over a horizontal line.

Kanicia Carrillo
Regulatory Analyst

Attachments: C-107A's and C-102's for both formations

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
1220 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, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-34709	² Pool Code 28509	³ Pool Name Grayburg Jackson SR; Queen Grayburg SA
⁴ Property Code 302440	⁵ Property Name Harvard Federal	⁶ Well Number 5
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	⁹ Elevation 3743

¹⁰ Surface Location

UL or lot no. H	Section 11	Township 17S	Range 30E	Lot Idn	Feet from the 2310	North/South line North	Feet from the 990	East/West line East	County Eddy
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¹¹ 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
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¹² Dedicated Acres 40	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

	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> Signature Kanicia Carrillo Printed Name Regulatory Analyst Title and E-mail Address 04/09/08 Date
	¹⁸ SURVEYOR CERTIFICATION <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> Referred Original Plat Date of Survey Signature and Seal of Professional Surveyor:
	Certificate Number

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

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OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-34709	² Pool Code 96718	³ Pool Name Loco Hills; Glorieta-Yeso
⁴ Property Code 302440	⁵ Property Name Harvard Federal	
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	
		⁶ Well Number 5
		⁹ Elevation 3743

¹⁰ Surface Location

UL or lot no. H	Section 11	Township 17S	Range 30E	Lot Idn	Feet from the 2310	North/South line North	Feet from the 990	East/West line East	County 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
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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	¹⁸ SURVEYOR CERTIFICATION <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> Referred Original Plat Date of Survey Signature and Seal of Professional Surveyor:	
	Certificate Number	

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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

COG OPERATING LLC 550 W. Texas, Suite 550 Midland, TX 79701
Operator Address

Harvard Federal 5 Unit H, Sec 11, T-17S, R-30E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 229137 Property Code 302440 API No. 30-015-34709 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Grayburg Jackson SR; Queen Grayburg SA (Oil)	Loco Hills; Glorieta-Yeso (Oil)	
Pool Code	28509	96718	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2725 - 4200	4607 - 5331	
Method of Production (Flowing or Artificial Lift)		Pump	
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)			
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: 04/02/08 Oil/ Gas /Water Rates: 14/ 42 /18	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 Percentages to be determined after completion.	Oil Gas Percentages to be determined after completion.	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-102 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 Regulatory Analyst DATE 04/11/08

TYPE OR PRINT NAME Kanicia Carrillo TELEPHONE NO. (432) 685-4332

E-MAIL ADDRESS kcarrillo@conchoresources.com

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
COG Operating LLC

3a. Address
550 W. Texas Ave., Suite 1300 Midland, TX 79701

3b. Phone No. (include area code)
432-685-4332

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Unit H, 2310 FNL & 990 FEL, Section 11, T17S, R30E

5. Lease Serial No.

LC - 029338B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Harvard Federal #5

9. API Well No.

30-015-34709

10. Field and Pool, or Exploratory Area

Loco Hills;Glorieta-Yeso 96718

11. County or Parish, State

Eddy County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Recomplete to
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	GB/SA &
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	commingle w/ Yeso

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG Operating LLC proposes to recomplete to the GB/SA as follows:

MIRU pulling unit. POOH w/ rods and stand all rods back. NU BOP. POOH w/tbg. Set RBP and RIH on tbg. Set RBP at +/-3800'. POOH w/ tbg. MIRU WLU. RIH and perforate Grayburg and San Andres zones. RDMO WLU. MIRU frac crew. Frac GB/SA perfs with 100, 000# of sand in 22# cross link gel. RDMO Frac crew. RIH w/ tbg and circ well clean to top of RBP. Latch onto RBP and POOH. RIH w/ same tbg configuration as previously in well. ND BOP. RIH w/ same rod string and pump configuration as previously in well. Hang well on beam. RDMO pulling unit.

COG proposes to down hole commingle the Grayburg Jackson SR Queen Grayburg SA, (28509) with the Loco Hills; Glorieta-Yeso, (96718).

Commingling will not reduce the value of the total remaining production.

The proposed intervals are as follows:

Grayburg Jackson SR Queen Grayburg SA 2725' - 4200'

Loco Hills; Glorieta-Yeso 4607' - 5331'

Percentages to be determined after completion.

Ownership in all zones is the same.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Kanicia Carrillo

Title **Regulatory Analyst**

Signature



Date

04/11/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)