

DATE IN 7/17/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 7/17/08	TYPE DHC 4669	APP NO. PKV20819953695
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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

06/02/08  
 Date

kcarrillo@conchoresources.com  
 e-mail Address

2008 JUL 17 PM 1 57  
 RECEIVED



June 02, 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:

Texaco BE #8  
Eddy County, NM  
API # 30-015-35253

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 Texaco BE battery located in the NE/4 NW/4, Section 16, 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 subtraction method 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](mailto: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-C", written over a horizontal line.

Kanicia Carrillo  
Regulatory Analyst

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

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  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.

**30-015-35253**

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

**Texaco BE**

8. Well Number **8**

9. OGRID Number

**229137**

10. Pool name or Wildcat

**LOCO HILLS; Glorieta Yeso**

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 ☒ Gas Well ☐ Other

2. Name of Operator

**COG Operating LLC**

3. Address of Operator

**550 W. Texas Ave., Suite 1300**

**Midland, TX 79701**

4. Well Location

Unit Letter **B** : **330'** feet from the **North** line and **2310'** feet from the **East** line

Section **16** Township **17S** Range **30E** NMPM County **EDDY**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

**3680' GR**

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type **DRILLING** Depth to Groundwater **150'** Distance from nearest fresh water well **1000'** Distance from nearest surface water **1000'**

Pit Liner Thickness: **12 mil** Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

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 ☐

OTHER: **Recompletion**

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

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.

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).

Commingle 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 4367' - 5721'

Percentages to be determined after completion.

Ownership in all zones is the same.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kanicia Carrillo TITLE Regulatory Analyst DATE 6-02-08

Type or print name **Kanicia Carrillo** E-mail address: **kcarrillo@conchoresources.com** Telephone No. **432-685-4332**  
**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

**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 &amp; 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

<sup>1</sup> API Number <b>30-015-35253</b>	<sup>2</sup> Pool Code <b>96718</b>	<sup>3</sup> Pool Name <b>Loco Hills; Glorieta-Yeso</b>
<sup>4</sup> Property Code <b>302572</b>	<sup>5</sup> Property Name <b>Texaco BE</b>	<sup>6</sup> Well Number <b>8</b>
<sup>7</sup> OGRID No. <b>229137</b>	<sup>8</sup> Operator Name <b>COG OPERATING LLC</b>	<sup>9</sup> Elevation <b>3680</b>

<sup>10</sup> Surface Location

UL or lot no. <b>B</b>	Section <b>16</b>	Township <b>17S</b>	Range <b>30E</b>	Lot Idn	Feet from the <b>330</b>	North/South line <b>North</b>	Feet from the <b>2310</b>	East/West line <b>East</b>	County <b>Eddy</b>
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<sup>11</sup> 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
<sup>12</sup> Dedicated Acres <b>40</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<sup>16</sup> 	<sup>17</sup> 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 06/02/08 Date	
	<sup>18</sup> 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>	
	Date of Survey Signature and Seal of Professional Surveyor:	
	Certificate Number	

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## State of New Mexico

Energy, Minerals &amp; 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

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Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-35253</b>	<sup>2</sup> Pool Code <b>28509</b>	<sup>3</sup> Pool Name <b>Grayburg Jackson SR; Queen Grayburg SA</b>
<sup>4</sup> Property Code <b>302572</b>	<sup>5</sup> Property Name <b>Texaco BE</b>	
<sup>7</sup> OGRID No. <b>229137</b>	<sup>8</sup> Operator Name <b>COG OPERATING LLC</b>	
		<sup>6</sup> Well Number <b>8</b>
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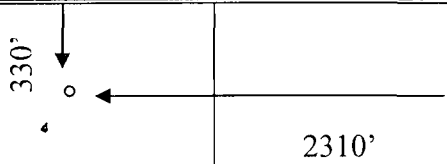
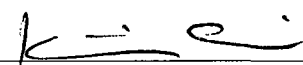
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup> 	<sup>17</sup> 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	
	Printed Name <b>Kanicia Carrillo</b>	
	Title and E-mail Address <b>Regulatory Analyst</b>	
	Date <b>06/02/08</b>	
	<sup>18</sup> 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>	
	Date of Survey	
	Signature and Seal of Professional Surveyor:	
	Certificate Number	

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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

COG OPERATING LLC

550 W. Texas, Suite 550

Midland, TX 79701

Operator

Address

Texaco BE

8

Unit B, Sec 16, T-17S, R-30E

Lease

Well No.

Unit Letter-Section-Township-Range

Eddy

County

OGRID No. 229137 Property Code 302572 API No. 30-015-35253 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	4367 - 5721	
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: 05/06/08 Oil/ Gas /Water Rates: 50/ 109/ 156	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 Kanicia Carrillo TITLE Regulatory Analyst DATE 06/02/08

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

E-MAIL ADDRESS kcarrillo@conchoresources.com