

4/28/08 DATE IN	SUSPENSE	W Jones ENGINEER	4/28/08 LOGGED IN	DHC 4032 TYPE	PKVR0811952298 APP NO.
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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

04/17/08
 Date

kcarrillo@conchoresources.com
 e-mail Address

RECEIVED
 2008 APR 28 PM 1 56



RECEIVED

April 24, 2008

2008 APR 28 PM 1 56

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:
White Oak State #5
Eddy County, NM
API # 30-015-31347

Pools:
(96210) Empire; Glorieta-Yeso
(51300) Red Lake; 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 White Oak State #5 battery located in the NE/4 NE/4, Section 23, T17S, R28E. 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

Kanicia Carrillo
Regulatory Analyst

Attachments: C-107A's 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. 30-015-31347
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name WHITE OAK STATE
8. Well Number 5
9. OGRID Number 229137
10. Pool name or Wildcat EMPIRE; GLORIETA-YESO 96210

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 <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	
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 A : 990 feet from the North line and 330 feet from the East line Section 23 Township 17S Range 28E NMPM County EDDY	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3707 GR	
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input checked="" type="checkbox"/>	
Pit type DRILLING Depth to Groundwater 125' 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: Recomplete to SA and DHC SA w/ Yeso ☒

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 SA as follows:

MIRU pulling unit. POOH w/ pump, rods and tubing, stand up. MIRU WLU. RIH and perforate San Andres zone, 2495 – 2852.5, 2SPF, 36 holes. RIH w/ 4-1/2" RBP and RTTS. Set RBP @ 2960' w/ 32jts out. Set RTTS and test RBP to 3500 psi. Unset RTTS and POOH. RIH w/ 4-1/2" PPI to 2852'. Acidize w/2,000 gals 15% HCl acid. Frac w/92,650 gals gel, 8,014# 14/30 Liteprop, 76,480, 91,840# 16/30 sand. RIH w/ 124jts 2-3/8" tbg, SN @ 4008'. RIH w/ new 2"x1-1/2"x20' RHTC trash pump.

COG proposes to down hole commingle the Empire; Glorieta-Yeso, (96210) with Red Lake; Queen-Grayburg-SA, (51300).

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

The proposed intervals are as follows:

Red Lake; Queen-Grayburg-SA 2495' – 2852.5'

Empire; Glorieta-Yeso 3750' – 4023'

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  TITLE Regulatory Analyst DATE 04/16/08

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
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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 30-015-31347	² Pool Code 51300	³ Pool Name Red Lake; Queen-Grayburg-SA
⁴ Property Code 302584	⁵ Property Name White Oak State	⁶ Well Number 5
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	⁹ Elevation 3707

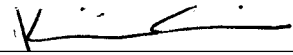
¹⁰ Surface Location

UL or lot no. A	Section 23	Township 17S	Range 28E	Lot Idn	Feet from the 990	North/South line North	Feet from the 330	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
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

¹⁶										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 04/17/08 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 Survey Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

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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 30-015-31347	² Pool Code 96210	³ Pool Name Empire; Glorieta-Yeso
⁴ Property Code 302584	⁵ Property Name White Oak State	⁶ Well Number 5
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	⁹ Elevation 3707

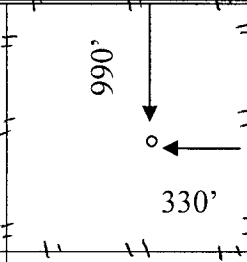
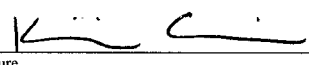
¹⁰ Surface Location

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¹⁶		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 04/17/08 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 Survey Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

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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

White Oak State 5 Unit A, Sec 23, T-17S, R-28E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 229137 Property Code 302584 API No. 30-015-31347 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE UNDES	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Red Lake; Queen-Grayburg-SA (Oil)	Empire; Glorieta-Yeso (Oil)	
Pool Code	51300	96210	
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2495 - 2852.5	3750 - 4023	
Method of Production (Flowing or Artificial Lift)	Pump	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: 2/24/06 Oil/Gas/Water Rates: 7 / 6 / 6	Date: 10/01/05 Oil/ Gas /Water Rates: 2 / 8 /25	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 78% 43%	Oil Gas 22% 57%	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 04/24/08

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

E-MAIL ADDRESS kcarrillo@conchoresources.com