

DATE IN <u>7.21.10</u>	SUSPENSE	ENGINEER <u>WJ</u>	LOGGED IN <u>7.21.10</u>	TYPE <u>DHC</u>	APP NO. <u>1020251894</u>
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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



COG

Western Federal #8
30-015-34815

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

Western Federal #8
30-015-34815

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

6/29/10
Date

kcarrillo@conchoresources.com
e-mail Address

2009 JUL 21 A 11:14
RECEIVED OGD



July 12, 2010

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:

Western Federal #8
Eddy County, NM
API # 30-015-34815

Pools:
(96210) Empire; Glorieta-Yeso
(28509) Grayburg Jackson SR; Queen Grayburg SA

Dear Mr. Jones,

RECEIVED OCD
2010 JUL 21 A 11:14

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 Western Federal battery located in the SE/4 NE/4, Section 30, T17S, R29E. 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: Administrative Application, BLM Notification, 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 30-015-34815	² Pool Code 28509	³ Pool Name Grayburg Jackson SR; Queen Grayburg SA
⁴ Property Code 302495	⁵ Property Name Western Federal	⁶ Well Number 08
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	⁹ Elevation 3621'

¹⁰ Surface Location

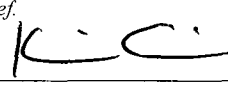
UL or lot no. H	Section 30	Township 17S	Range 29E	Lot Idn	Feet from the 2040	North/South line North	Feet from the 330	East/West line East	County Eddy
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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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 6/28/10 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> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

				2040'	<div>17</div> <div>OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div></div> <div>Signature</div> <div>Kanicia Carrillo</div> <div>Printed Name</div> <div>Regulatory Analyst</div> <div>Title and E-mail Address</div> <div>6/28/10</div> <div>Date</div>
				<div>○ ←</div> <div>330'</div>	<div>18</div> <div>SURVEYOR CERTIFICATION</div> <div>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.</div> <div>Date of Survey</div> <div>Signature and Seal of Professional Surveyor:</div> <div>Certificate Number</div>

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**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.*5. Lease Serial No.
NMLC028480A

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
WESTERN FEDERAL 82. Name of Operator
COG OPERATING LLCContact: KANICIA CARRILLO
E-Mail: kcarrillo@conchoresources.com9. API Well No.
30-015-348153a. Address
550 WEST TEXAS AVE STE 1300
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-685-433210. Field and Pool, or Exploratory
GRAYBURG JACKSON;SR-Q-G-S

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 30 T17S R29E 2040FNL 330FEL

11. County or Parish, and 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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 recompleate 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 recompleation 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 recompleate to the GB/SA as follows:

Western Fed #8 San Andres / GB Add Pay Procedure

1. MI. Hold safety mtg. RU.
2. POOH w/ rods and pump.
3. NU BOP.
4. Release TAC and POOH w/ tbg.
5. RIH w/ CIBP and set at +/- 3900'. Do not cap with cement. COG plans to commingle with Yeso after separately production testing the San Andres and GB.
6. RIH and perforate lower San Andres from 3540' ? 3775' w/ 1 spf, 28 holes.
7. Frac lower San Andres with 128,250 gals of gel carrying 178,400# of 16/30 sand.

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #89164 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad**

Name (Printed/Typed) KANICIA CARRILLO

Title PREPARER

Signature (Electronic Submission)

Date 07/07/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By	Title	Date
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.		
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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #89164 that would not fit on the form

32. Additional remarks, continued

8. RIH w/ perf gun and composite frac plug and set plug at +/- 3000?. Perforate upper San Andres from 2586? ? 2592? w/ 1 spf, 2 holes, 2624? ? 2628? w/ 1 spf, 2 holes, 2710? ? 2880? w/ 1 spf, 22 holes.
9. Frac middle San Andres with 128,250 gals of gel carrying 178,400# of 16/30 sand.
10. RIH w/ bit and drill out CFP at 3000?. Clean out to CIBP at 3800?.
11. POOH w/ bit and scraper.
12. RIH w/ tbg and land EOT at +/- 3700?.
13. ND BOP.
14. RIH w/ rods and pump.
15. HWOB
16. RDMO.
COG intends to test GB/SA separately from Yeso to determine its producing characteristics and evaluation. COG plans to commingle GB/SA/Yeso at a later date.

COG proposes to down hole commingle the Grayburg Jackson SR Queen Grayburg SA, (28509) with the Empire; Glorieta-Yeso, (96210).

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

The proposed intervals are as follows:

Grayburg Jackson SR Queen Grayburg SA 2396' - 3686'

Empire; Glorieta-Yeso 3933' - 4093'

Percentages to be determined after completion.

Ownership in all zones are the same.

District I
1625 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

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

DHC-4303

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

Western Federal #8 H, 30, 17S 29E Eddy
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 229137 Property Code 302495 API No. 30-015-34815 Lease Type: x Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Grayburg Jackson; SR-Q-G-SA		Empire; Yeso,
Pool Code	28509		96210
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2396-3686		3933-4093
Method of Production (Flowing or 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)			76psi
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: Rates:	Date: 6/28/10 Rates: O G W 3 48 2
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 x 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 x No

Will commingling decrease the value of production? Yes No x

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 x 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 7/7/10

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

E-MAIL ADDRESS kcarrillo@conchoresources.com