

District I,
1625 N French Dr., 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

Form C-101
May 27, 2004

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

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address COG OPERATING LLC 550 W. Texas, Suite 1300 Midland, TX 79701		² OGRID Number 299137	
³ Property Code 302497		⁴ API Number 30-015-25489	
⁵ Property Name GJ West Coop Unit		⁶ Well No 78	
⁹ Proposed Pool 1 GJ;7RVS-QN-GB-GLORIETA-YESO 97558		¹⁰ Proposed Pool 2	

7 Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	17S	29E		1345	South	660	East	Eddy

8 Proposed 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

Additional Well Information

¹¹ Work Type Code D	¹² Well Type Code O	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3554
¹⁶ Multiple N	¹⁷ Proposed Depth 5600	¹⁸ Formation Yeso	¹⁹ Contractor	²⁰ Spud Date As soon as approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
<input type="checkbox"/> Pit. <input type="checkbox"/> Liner <input type="checkbox"/> Synthetic <input type="checkbox"/> mls thick <input type="checkbox"/> Clay <input type="checkbox"/> Pit Volume _____ bbls <input type="checkbox"/> Drilling Method _____				
Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4	8-5/8	24	294	250	
7-7/8	5-1/2	15.5	4425	2650	
4-3/4	4	11.3	5600	115	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See Attachments

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Kancica Carrillo
Title: Regulatory Analyst
E-mail Address: kcarrillo@conchoresources.com

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Date: 10/19/09

Phone: 432-685-4332

Conditions of Approval Attached ☐

COG Operating, LLC
GJ West Coop Unit 78 Deepening
Unit I, Sec 21, T17S, R29E
1345 FSL & 660 FEL
API# 30-015-25489
Eddy County, NM

Deepening Procedure

1. MIRU rig.
2. PU 4-3/4" bit and drill 4-3/4" from 4450' to 5600'.
3. POOH w/ bit and drillstring.
4. RIH w/ logs and log from TD to 4400'.
5. RIH w/ 4", 11.3# casing.
6. Cement casing from TD to 4375' w/ 115 sxs Class C cmt.
7. RDMO rig.

Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 5500 – 5300 w/ 2 spf, 30 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 5250'.
4. RIH w/ perforating guns and perforate Yeso from 5200' – 5000'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand. Set plug at 4950'.
6. RIH w/ perforating guns and perforate Yeso from 4900' – 4700'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 190,000 # of sand.
8. RIH and drill out plug at 4950' and 5250'.
9. RIH and cut 4" casing at 4375'. POOH w/ 4" casing. Leave 4" liner from 4375' to 5600' (TD).
10. RIH w/ tbg and locate end of tbg at 4300'.
11. RIH w/ rods and pump.
12. RDMO rig.

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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 30-015-25489	² Pool Code 97558	³ Pool Name Grayburg Jackson; 7RVS-QN-GB-Glorieta-Yeso, East
⁴ Property Code 302497	⁵ Property Name GJ West Coop Unit	
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	
		⁶ Well Number 78
		⁹ Elevation 3554

¹⁰ Surface Location

UL or lot no. I	Section 21	Township 17S	Range 29E	Lot Idn	Feet from the 1345	North/South line South	Feet from the 660	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.
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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 10/19/09 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