

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
MAR 13 2008
OCD-ARTESIA

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 API Number 30-015-27377
⁴ Property Code 302497	⁵ Property Name GJ West Coop Unit	⁶ Well No. 107
⁹ Proposed Pool 1 Grayburg Jackson; 7RVS-QN-G-SA/Empire ; Yeso, East		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no L	Section 21	Township 17S	Range 29E	Lot Idn	Feet from the 1650	North/South line South	Feet from the 330	East/West line West	County Eddy
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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
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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 3604
¹⁶ Multiple N	¹⁷ Proposed Depth 5525	¹⁸ Formation Blinebry	¹⁹ Contractor	²⁰ Spud Date As soon as approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input checked="" type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2	13-3/8	54.5	138	250	
12-1/4	8-5/8	24	801	500	
7-7/8	5-1/2	15.5	5057	1200	
	2-7/8 tbg		4998		

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 Attachment

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 <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name Kanicia Carrillo		Approved by <i>Jim W. Green</i>	
Title Regulatory Analyst		Title <i>District II Supervisor</i>	
E-mail Address kcarrillo@conchoresources.com		Approval Date <i>3/25/08</i> Expiration Date <i>3/25/10</i>	

Date 03/10/08	Phone 432-685-4332	Conditions of Approval Attached <input type="checkbox"/>
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PROCEDURE

1. MIRU pulling unit. POOH laying down rods and pump. Release TAC and NU BOP. Tag bottom and POOH laying down tubing (need 3-4 joints). Send tubing to Cottons Inspection.
2. PU workstring and TIH w/ bit and scraper. PU cement retainer and TIH.
3. Pump through retainer and set @ 3850'. Pump 300 sx of Class C w/ 2% CaCl₂ + 0.25 celloflake + 3 ppg LCM. Wash up lines and then hesitate down tubing. If no squeeze obtained, over displace 8-10 bbls and repeat.
4. Once squeeze is obtained sting out and reverse out tubing. POOH w/ setting tool.
5. Wait on cement at least 12 hours.
6. PU 4 3/4" workover bit and 6-3 1/2" DC's. Drill out squeeze and test to 500 psi. If squeeze does not hold, notify engineer. Drill out shoe and 10' of new hole to 5074' circulating w/ 2% KCl.
7. POOH w/ workover bit. PU 4 3/4" PDC, 14 3 1/2" DC's and motor.
8. Drill using varying weights and RPM's to optimize drill rate. Drill to at least 5525'. Make hole fit pipe.
9. Log well according to geology and utilize caliper log for cement volume determinations.
10. TIH and circulate clean. POOH laying down drill string.
11. Run 4" 11.3# ULTFJ casing w/ float shoe and float collar. Locate positive stand off centralizers @ shoe, 5100', 4700' and 4350'. Run DV tool and set no deeper than 4300'.
12. Cement casing w/ 150% excess volume. Batch mix cement to ensure good cement throughout job. Make sure field blends are tested prior to pumping.
13. Drop DV plug and open stage tool. Circulate cement from top of DV tool out of hole.
14. Pickup 3 5/16" bit and 2 3/8" workstring w/ turned down collars. Drill out DV tool and chase to PBTD. POOH laying down workstring.
15. Prep well for Blinbry frac.

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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 30-015-27377		² Pool Code		³ Pool Name Grayburg Jackson;7RVS-QN-G-SA/Empier;Yeso, East	
⁴ Property Code 302497		⁵ Property Name GJ West Coop Unit			⁶ Well Number 107
⁷ OGRID No. 229137		⁸ Operator Name COG OPERATING LLC			⁹ Elevation 3604

¹⁰ Surface Location

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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 03/10/08 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 Sursvey Date of Survey Signature and Seal of Professional Surveyor	
					Certificate Number	