

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

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

NOV 10 2008  
OCD-ARTESIA

Form C-101  
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address COG OPERATING LLC 550 W. Texas, Suite 1300 Midland, TX 79701		<sup>2</sup> OGRID Number 299137
<sup>3</sup> Property Code 302497		<sup>4</sup> API Number 30-015-26581
<sup>5</sup> Property Name GJ West Coop Unit		<sup>6</sup> Well No. 90
<sup>9</sup> Proposed Pool 1 Grayburg Jackson; 7RVS-QN-GB-Glorieta-Yeso, East		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	28	17S	29E		2310	North	2310	East	Eddy

<sup>8</sup> 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

<sup>11</sup> Work Type Code D	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3569
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 5700	<sup>18</sup> Formation Yeso	<sup>19</sup> Contractor	<sup>20</sup> Spud Date As soon as approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
<input type="checkbox"/> Liner. Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume _____ bbls 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"/>				

<sup>21</sup> 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	380	250	
7-7/8	5-1/2	17	4563	1800	
4-3/4	4	11.3	5700	115	

<sup>22</sup> 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

<sup>23</sup> 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. Dunn</i>	
Title: Regulatory Analyst		District II Supervisor	
E-mail Address: kcarrillo@conchoresources.com		Approval Date: 11/13/08	Expiration Date: 11/13/10

Date: 11/07/08	Phone 432-685-4332	Conditions of Approval Attached <input type="checkbox"/>
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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**

<sup>1</sup> API Number <b>30-015-26581</b>	<sup>2</sup> Pool Code <b>97558</b>	<sup>3</sup> Pool Name <b>Grayburg Jackson; 7RVS-QN-GB-Glorieta-Yeso, East</b>
<sup>4</sup> Property Code <b>302497</b>	<sup>5</sup> Property Name <b>GJ West Coop Unit</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>90</b>
		<sup>9</sup> Elevation <b>3569</b>

<sup>10</sup> Surface Location

UL or lot no. <b>G</b>	Section <b>28</b>	Township <b>17S</b>	Range <b>29E</b>	Lot Idn	Feet from the <b>2310</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

	<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature </p> <p>Printed Name <b>Kanicia Carrillo</b></p> <p>Regulatory Analyst</p> <p>Title and E-mail Address</p> <p>Date <b>11/07/08</b></p>
	<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b> <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></p> <p>Referred Original Plat</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p>
	<p>Certificate Number</p>

## Deepening Procedure

1. MIRU rig.
2. PU 4-3/4" bit and drill 4-3/4" from 4585' to 5700'.
3. POOH w/ bit and drillstring.
4. RIH w/ logs and log from TD to 5700'.
5. RIH w/ 4", 11.3# casing.
6. Cement casing from TD to 4486' w/ 115 sxs Class C cmt.
7. RDMO rig.

## Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 5700 – 5500 w/ 2 spf, 30 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 180,000 # of sand. Set plug at 5550'.
4. RIH w/ perforating guns and perforate Yeso from 5400' – 5200'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 180,000 # of sand. Set plug at 5150'.
6. RIH w/ perforating guns and perforate Yeso from 5100' – 500'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 180,000 # of sand.
8. RIH and drill out plug at 5150' and 5550'.
9. RIH and cut 4" casing at 4486'. POOH w/ 4" casing. Leave 4" liner from 4486' to 5700' (TD).
10. RIH w/ tbg and locate end of tbg at 4386'.
11. RIH w/ rods and pump.
12. RDMO rig.