

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

FEB 08 2008

☐ AMENDED REPORT

OCD-ARTESIA

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> API Number 30-015-30940
<sup>3</sup> Property Code 23810	<sup>3</sup> Property Name Mesquite State	<sup>6</sup> Well No 8
<sup>9</sup> Proposed Pool 1 Empire; Glorieta-Yeso, East 96610		<sup>10</sup> Proposed Pool 2

<sup>7</sup> Surface Location

UL or lot no E	Section 20	Township 17S	Range 29E	Lot Idn	Feet from the 1650	North/South line North	Feet from the 990	East/West line West	County Eddy
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<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
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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 3642 KB
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 5425	<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
Pit	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
17-1/2	13-3/8	48, 54	346	350	
12-1/4	8-5/8	24	802	425	
7-7/8	5-1/2	15.5	4334	750	
4-3/4	4	11.3	5425	100	

<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 Attachment

<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 NMOC 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: BRYAN G. ARRANT DISTRICT II GEOLOGIST	
Title Regulatory Analyst		Title	
E-mail Address kcarrillo@conchoresources.com		Approval Date FEB 11 2008 Expiration Date FEB 11 2010	
Date 02/01/08	Phone 432-685-4332	Conditions of Approval Attached <input type="checkbox"/>	

## PROCEDURE

1. MIRU pulling unit. POOH laying down rods and pump. Send rods to ICO for inspection. 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 @ 3800'. Pump 300 sx of Class C w/ 2% CaCl<sub>2</sub> + 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, 20-3 1/2" DC's and 2 7/8" L80 workstring. Drill out shoe and 10' of new hole to 4350' circulating w/ 2% KCl.
7. POOH w/ workover bit. PU 4 3/4" PDC and motor.
8. Drill using varying weights and RPM's to optimize drill rate. TD 4 3/4" hole @ 5425'.
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, 5050', 4650' and 4250'. Run DV tool and set @ +/-4200.
12. Cement casing w/ 30% 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 1/8" 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 Blinebry 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**

<sup>1</sup> API Number <b>30-015-30940</b>		<sup>2</sup> Pool Code <b>96610</b>	<sup>3</sup> Pool Name <b>Empire; Glorieta-Yeso, East</b>
<sup>4</sup> Property Code <b>23810</b>	<sup>5</sup> Property Name <b>Mesquite State</b>		<sup>6</sup> Well Number <b>8</b>
<sup>7</sup> OGRID No. <b>229137</b>	<sup>8</sup> Operator Name <b>COG OPERATING LLC</b>		<sup>9</sup> Elevation <b>3632</b>

**<sup>10</sup> Surface Location**

UL or lot no. <b>E</b>	Section <b>20</b>	Township <b>17S</b>	Range <b>29E</b>	Lot Idn	Feet from the <b>1650</b>	North/South line <b>North</b>	Feet from the <b>990</b>	East/West line <b>West</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

					<b><sup>17</sup> 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>  Signature <b>Kanicia Carrillo</b> Printed Name <b>Regulatory Analyst</b> Title and E-mail Address <b>02/07/08</b> Date
					<b><sup>18</sup> 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>
					Date of Survey Signature and Seal of Professional Surveyor
					Referred Original Survey Certificate Number