

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
811 S. First St., 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

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

NMOCD-REC'D 11/02/2020

Form C-104  
Revised August 1, 2011

Submit one copy to appropriate District Office

☒ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

|                                                                                                         |                                                       |                                                           |                                  |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------|----------------------------------|
| <sup>1</sup> Operator name and Address<br>COG Operating LLC<br>2208 W. Main Street<br>Artesia, NM 88210 |                                                       | <sup>2</sup> O GRID Number<br>229137                      |                                  |
|                                                                                                         |                                                       | <sup>3</sup> Reason for Filing Code/ Effective Date<br>NW |                                  |
| <sup>4</sup> API Number<br>30 – 015-46499                                                               | <sup>5</sup> Pool Name<br>Delaware River; Bone Spring |                                                           | <sup>6</sup> Pool Code<br>16800  |
| <sup>7</sup> Property Code<br>308744                                                                    | <sup>8</sup> Property Name<br>Myox 31 State Com       |                                                           | <sup>9</sup> Well Number<br>503H |

II. <sup>10</sup> Surface Location

|                    |               |                 |              |         |                      |                           |                       |                        |                |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|
| Ul or lot no.<br>N | Section<br>31 | Township<br>25S | Range<br>28E | Lot Idn | Feet from the<br>270 | North/South Line<br>South | Feet from the<br>1420 | East/West line<br>West | County<br>Eddy |
|--------------------|---------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------|

<sup>11</sup> Bottom Hole Location

|                             |                                          |                 |                                      |         |                                   |                           |                                    |                        |                                     |
|-----------------------------|------------------------------------------|-----------------|--------------------------------------|---------|-----------------------------------|---------------------------|------------------------------------|------------------------|-------------------------------------|
| Ul or lot no.<br>C          | Section<br>30                            | Township<br>25S | Range<br>28E                         | Lot Idn | Feet from the<br>50               | North/South Line<br>North | Feet from the<br>2238              | East/West line<br>West | County<br>Eddy                      |
| <sup>12</sup> Lse Code<br>S | <sup>13</sup> Producing Method<br>Code F |                 | <sup>14</sup> Gas Connection<br>Date |         | <sup>15</sup> C-129 Permit Number |                           | <sup>16</sup> C-129 Effective Date |                        | <sup>17</sup> C-129 Expiration Date |

III. Oil and Gas Transporters

|                                     |                                                                           |                     |
|-------------------------------------|---------------------------------------------------------------------------|---------------------|
| <sup>18</sup> Transporter<br>O GRID | <sup>19</sup> Transporter Name<br>and Address                             | <sup>20</sup> O/G/W |
|                                     | ACC<br>(Alpha Crude Connector Pipeline)                                   | O                   |
| 282301                              | Energy Transfer Company<br>2001 Bryan Street Ste 3700<br>Dallas, TX 75201 | G                   |
| 278421                              | Holly Refining and Marketing                                              | O                   |
|                                     |                                                                           |                     |
|                                     |                                                                           |                     |

IV. Well Completion Data

|                                     |                                     |                                    |                               |                                             |                            |
|-------------------------------------|-------------------------------------|------------------------------------|-------------------------------|---------------------------------------------|----------------------------|
| <sup>21</sup> Spud Date<br>12/30/19 | <sup>22</sup> Ready Date<br>9/14/20 | <sup>23</sup> TD<br>18,324'        | <sup>24</sup> PBTD<br>18,240' | <sup>25</sup> Perforations<br>8,070-18,215' | <sup>26</sup> DHC, MC      |
| <sup>27</sup> Hole Size             |                                     | <sup>28</sup> Casing & Tubing Size |                               | <sup>29</sup> Depth Set                     | <sup>30</sup> Sacks Cement |
| 14 3/4"                             |                                     | 13 3/8"                            |                               | 515'                                        | 675                        |
| 12 1/4"                             |                                     | 9 5/8"                             |                               | 2350'                                       | 600                        |
| 8 3/4"                              |                                     | 5 1/2"                             |                               | 18311'                                      | 3500                       |
|                                     |                                     | 2 7/8"                             |                               | 7349'                                       |                            |

V. Well Test Data

|                                       |                                            |                                    |                                     |                                     |                                      |
|---------------------------------------|--------------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| <sup>31</sup> Date New Oil<br>10/7/20 | <sup>32</sup> Gas Delivery Date<br>10/7/20 | <sup>33</sup> Test Date<br>10/7/20 | <sup>34</sup> Test Length<br>24 Hrs | <sup>35</sup> Tbg. Pressure<br>544# | <sup>36</sup> Csg. Pressure<br>345#  |
| <sup>37</sup> Choke Size<br>60/128    | <sup>38</sup> Oil<br>390                   | <sup>39</sup> Water<br>3858        | <sup>40</sup> Gas<br>517            |                                     | <sup>41</sup> Test Method<br>Flowing |

|                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                   |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--|
| <sup>42</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.<br>Signature:<br>Amanda Avery<br>Printed name:<br>Amanda Avery<br>Title:<br>Regulatory Analyst<br>E-mail Address:<br>aavery@concho.com<br>Date:<br>11/2/20 | OIL CONSERVATION DIVISION                                                                         |  |
|                                                                                                                                                                                                                                                                                                                                                                     | Approved by:  |  |
|                                                                                                                                                                                                                                                                                                                                                                     | Title:<br>BUSINESS OP. SPEC.                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                     | Approval Date:<br>12/18/2020                                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                   |  |

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
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1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

NMOCD - Rec'd 10/06/2020

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

As Drilled

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                                |                                                         |                                                              |
|------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|
| <sup>1</sup> API Number<br><b>30-015-46499</b> | <sup>2</sup> Pool Code<br><b>16800</b>                  | <sup>3</sup> Pool Name<br><b>Delaware River; Bone Spring</b> |
| <sup>4</sup> Property Code<br><b>308744</b>    | <sup>5</sup> Property Name<br><b>MYOX 31 STATE COM</b>  | <sup>6</sup> Well Number<br><b>503H</b>                      |
| <sup>7</sup> GRID NO.<br><b>229137</b>         | <sup>8</sup> Operator Name<br><b>COG OPERATING, LLC</b> | <sup>9</sup> Elevation<br><b>3071'</b>                       |

<sup>10</sup> Surface Location

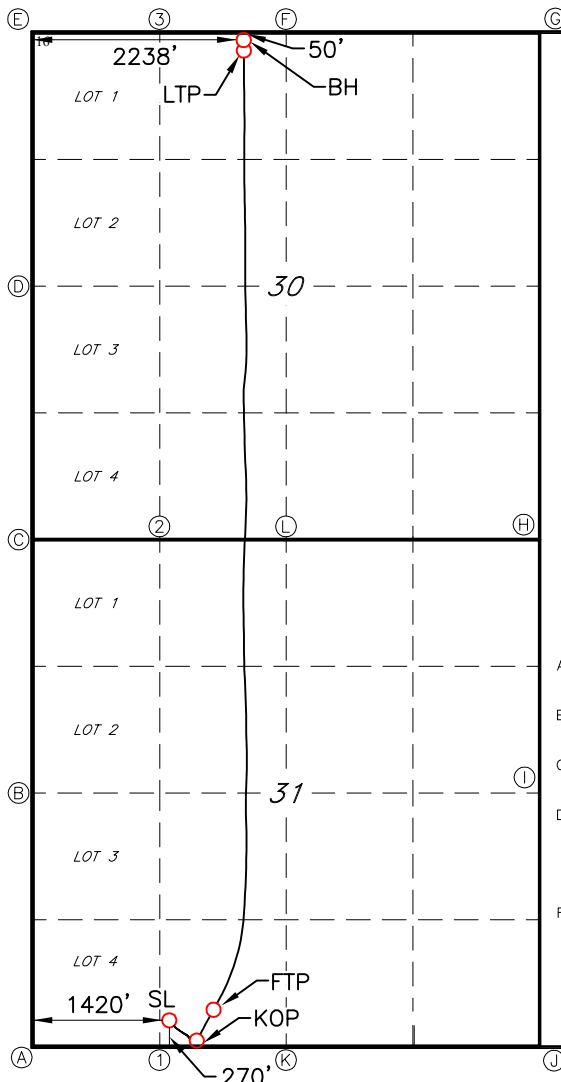
| UL or lot no. | Section   | Township   | Range      | Lot Idn | Feet from the | North/South line | Feet From the | East/West line | County      |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>N</b>      | <b>31</b> | <b>25S</b> | <b>28E</b> |         | <b>270</b>    | <b>SOUTH</b>     | <b>1420</b>   | <b>WEST</b>    | <b>EDDY</b> |

<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      |
|---------------|-----------|------------|------------|---------|---------------|------------------|---------------|----------------|-------------|
| <b>C</b>      | <b>30</b> | <b>25S</b> | <b>28E</b> |         | <b>50</b>     | <b>NORTH</b>     | <b>2238</b>   | <b>WEST</b>    | <b>EDDY</b> |

|                                             |                               |                                  |                         |
|---------------------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres<br><b>320</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 interest have been consolidated or a non-standard unit has been approved by the division.



**GEODEIC DATA**  
NAD 83 GRID - NM EAST  
**SURFACE LOCATION (SL)**  
N: 392781.3 - E: 604109.3  
LAT: 32.0796734° N-LONG: 104.1306606° W  
LAT: 32°02'46.8241" N-LONG: 104°07'50.3781" W

**KICK OFF POINT (KOP)**  
**34' FSL & 1711' FWL (Sec.31)**  
N: 392546.7 - E: 604400.8  
LAT: 32.0790270° N-LONG: 104.1297208° W  
LAT: 32°04'44.4973" N-LONG: 104°07'46.9950" W  
MD=7401.00 - TVD=7385.54

**FIRST TAKE POINT (FTP)**  
**379' FNL & 1882' FWL (Sec.31)**  
N: 392891.7 - E: 604570.4  
LAT: 32.0799745° N-LONG: 104.1291713° W  
LAT: 32°04'47.9080" N-LONG: 104°07'45.0165" W  
MD=8070.00 - TVD=7884.27

**LAST TAKE POINT (LTP)**  
**159' FNL & 2240' FWL (Sec.30)**  
N: 402967.4 - E: 604886.0  
LAT: 32.1076704° N-LONG: 104.1280902° W  
LAT: 32°06'27.6133" N-LONG: 104°07'41.1248" W  
MD=18215.00 - TVD=7930.70

**BOTTOM HOLE (BH)**  
N: 403076.4 - E: 604884.0  
LAT: 32.1079699° N-LONG: 104.1280960° W  
LAT: 32°06'28.6920" N-LONG: 104°07'41.1458" W

**CORNER DATA**  
NAD 83 GRID - NM EAST

|                                                      |                                                      |
|------------------------------------------------------|------------------------------------------------------|
| A: FOUND BRASS CAP "1940"<br>N 392505.8 - E 602690.5 | G: FOUND BRASS CAP "1940"<br>N 403046.2 - E 608036.0 |
| B: FOUND BRASS CAP "1940"<br>N 395164.6 - E 602682.1 | H: FOUND BRASS CAP "1940"<br>N 397715.1 - E 608074.9 |
| C: FOUND BRASS CAP "1940"<br>N 397822.7 - E 602672.6 | I: FOUND BRASS CAP "1940"<br>N 395116.5 - E 608050.9 |
| D: FOUND BRASS CAP "1940"<br>N 400468.2 - E 602664.3 | J: FOUND BRASS CAP "1940"<br>N 392514.2 - E 608024.8 |
| E: CALCULATED CORNER<br>N 403132.3 - E 602645.7      | K: FOUND BRASS CAP "1940"<br>N 392516.4 - E 605361.5 |
| F: FOUND BRASS CAP "1940"<br>N 403125.4 - E 605277.9 | L: FOUND BRASS CAP "1940"<br>N 397768.3 - E 605379.3 |

**CALCULATED POINTS**

1: N 392511.1 - E 604026.3  
2: N 397795.4 - E 604031.2  
3: N 403128.9 - E 603968.4

**<sup>17</sup> OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

**Amanda Avery** 10/6/20  
Signature Date

**Amanda Avery**  
Printed Name

**aaavery@concho.com**  
E-mail Address

**<sup>18</sup> SURVEYOR CERTIFICATION**

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.

**11-13-19**

Date of Survey

Signature and Seal of Professional Surveyor

**19680**

Certificate Number

REV: 9-9-20 As Drill

Job No.:

**LS19111070D**



## **COG Operating LLC**

Eddy County, NM (NAD27 NME)

Myox 31 State Com

503H

ST01 / 66066

Design: Surveys (Ensign 155)

## **Standard Survey Report**

06 February, 2020





## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

|                    |                                      |                      |                |
|--------------------|--------------------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy County, NM (NAD27 NME)          |                      |                |
| <b>Map System:</b> | US State Plane 1927 (Exact solution) | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)              |                      |                |
| <b>Map Zone:</b>   | New Mexico East 3001                 |                      |                |

|                              |                   |                          |                     |
|------------------------------|-------------------|--------------------------|---------------------|
| <b>Site</b>                  | Myox 31 State Com |                          |                     |
| <b>Site Position:</b>        |                   | <b>Northing:</b>         | 392,723.90 usft     |
| <b>From:</b>                 | Map               | <b>Easting:</b>          | 562,925.20 usft     |
| <b>Position Uncertainty:</b> | 0.00 usft         | <b>Slot Radius:</b>      | 13-3/16 "           |
|                              |                   | <b>Latitude:</b>         | 32° 4' 46.382817 N  |
|                              |                   | <b>Longitude:</b>        | 104° 7' 48.611719 W |
|                              |                   | <b>Grid Convergence:</b> | 0.11 °              |

|                      |       |           |                     |                 |               |                     |
|----------------------|-------|-----------|---------------------|-----------------|---------------|---------------------|
| Well                 | 503H  |           |                     |                 |               |                     |
| Well Position        | +N/-S | 0.00 usft | Northing:           | 392,723.90 usft | Latitude:     | 32° 4' 46.382817 N  |
|                      | +E/-W | 0.00 usft | Easting:            | 562,925.20 usft | Longitude:    | 104° 7' 48.611719 W |
| Position Uncertainty |       | 1.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,071.00 usft       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | ST01 / 66066      |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | MVHD              | 2/26/2020          | 6.95                   | 59.70                | 47,767.06612616            |

|                          |                                |                     |                     |                      |           |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----------|
| <b>Design</b>            | Surveys (Ensign 155)           |                     |                     |                      |           |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |           |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> | 14,404.00 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |           |
|                          | 0.00                           | 0.00                | 0.00                | 4.25                 |           |

|                       |                  |                                        |                   |                                                    |  |
|-----------------------|------------------|----------------------------------------|-------------------|----------------------------------------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 2/6/2020                               |                   |                                                    |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>               | <b>Tool Name</b>  | <b>Description</b>                                 |  |
| 100.00                | 7,195.00         | Scientific Gyro Surveys (OH / 66066)   | Scientific Keeper | Scientific Drilling Intl. Standard Wireline Keeper |  |
| 7,195.00              | 14,404.00        | Phoenix MWD Surveys - SQC (OH / 66066) | MWD+IFR1+FDIR     | OWSG MWD + IFR1 + FDIR Correction                  |  |
| 14,404.00             | 18,324.00        | Phoenix MWD Surveys (ST01 / 66066)     | MWD+IFR1+FDIR     | OWSG MWD + IFR1 + FDIR Correction                  |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <b>Survey</b>                |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |  |
| 0.00                         | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |  |
| 100.00                       | 0.32                   | 169.13             | 100.00                       | -0.27               | 0.05                | -0.27                          | 0.32                           | 0.32                          | 0.00                         |  |
| 125.00                       | 0.26                   | 168.41             | 125.00                       | -0.40               | 0.08                | -0.39                          | 0.24                           | -0.24                         | -2.88                        |  |
| 150.00                       | 0.26                   | 179.63             | 150.00                       | -0.51               | 0.09                | -0.50                          | 0.20                           | 0.00                          | 44.88                        |  |
| 175.00                       | 0.39                   | 181.94             | 175.00                       | -0.65               | 0.09                | -0.64                          | 0.52                           | 0.52                          | 9.24                         |  |
| 200.00                       | 0.21                   | 164.61             | 200.00                       | -0.78               | 0.10                | -0.77                          | 0.80                           | -0.72                         | -69.32                       |  |
| 225.00                       | 0.48                   | 185.84             | 225.00                       | -0.93               | 0.10                | -0.92                          | 1.18                           | 1.08                          | 84.92                        |  |
| 250.00                       | 0.71                   | 203.82             | 250.00                       | -1.18               | 0.02                | -1.17                          | 1.17                           | 0.92                          | 71.92                        |  |
| 275.00                       | 0.90                   | 206.94             | 274.99                       | -1.49               | -0.13               | -1.50                          | 0.78                           | 0.76                          | 12.48                        |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 300.00                | 0.80            | 215.32      | 299.99                | -1.81        | -0.32        | -1.83                   | 0.64                    | -0.40                  | 33.52                 |  |
| 325.00                | 0.95            | 211.67      | 324.99                | -2.13        | -0.53        | -2.16                   | 0.64                    | 0.60                   | -14.60                |  |
| 350.00                | 1.10            | 212.25      | 349.98                | -2.51        | -0.76        | -2.56                   | 0.60                    | 0.60                   | 2.32                  |  |
| 375.00                | 1.00            | 216.34      | 374.98                | -2.89        | -1.02        | -2.95                   | 0.50                    | -0.40                  | 16.36                 |  |
| 400.00                | 1.23            | 214.01      | 399.98                | -3.28        | -1.30        | -3.37                   | 0.94                    | 0.92                   | -9.32                 |  |
| 425.00                | 1.32            | 214.22      | 424.97                | -3.75        | -1.61        | -3.85                   | 0.36                    | 0.36                   | 0.84                  |  |
| 450.00                | 1.32            | 217.00      | 449.96                | -4.21        | -1.95        | -4.35                   | 0.26                    | 0.00                   | 11.12                 |  |
| 475.00                | 1.58            | 215.52      | 474.95                | -4.72        | -2.32        | -4.88                   | 1.05                    | 1.04                   | -5.92                 |  |
| 500.00                | 1.62            | 215.06      | 499.94                | -5.29        | -2.72        | -5.48                   | 0.17                    | 0.16                   | -1.84                 |  |
| 525.00                | 1.71            | 215.55      | 524.93                | -5.89        | -3.14        | -6.10                   | 0.36                    | 0.36                   | 1.96                  |  |
| 550.00                | 1.84            | 213.85      | 549.92                | -6.52        | -3.58        | -6.77                   | 0.56                    | 0.52                   | -6.80                 |  |
| 575.00                | 1.84            | 214.47      | 574.91                | -7.19        | -4.04        | -7.47                   | 0.08                    | 0.00                   | 2.48                  |  |
| 600.00                | 1.96            | 215.15      | 599.90                | -7.87        | -4.51        | -8.18                   | 0.49                    | 0.48                   | 2.72                  |  |
| 625.00                | 2.20            | 213.69      | 624.88                | -8.62        | -5.02        | -8.97                   | 0.98                    | 0.96                   | -5.84                 |  |
| 650.00                | 2.37            | 213.82      | 649.86                | -9.45        | -5.58        | -9.83                   | 0.68                    | 0.68                   | 0.52                  |  |
| 675.00                | 2.48            | 215.96      | 674.84                | -10.31       | -6.18        | -10.74                  | 0.57                    | 0.44                   | 8.56                  |  |
| 700.00                | 2.67            | 214.11      | 699.81                | -11.23       | -6.82        | -11.71                  | 0.83                    | 0.76                   | -7.40                 |  |
| 725.00                | 2.71            | 214.00      | 724.78                | -12.20       | -7.48        | -12.73                  | 0.16                    | 0.16                   | -0.44                 |  |
| 750.00                | 2.64            | 214.80      | 749.76                | -13.17       | -8.14        | -13.73                  | 0.32                    | -0.28                  | 3.20                  |  |
| 775.00                | 2.65            | 215.05      | 774.73                | -14.11       | -8.80        | -14.73                  | 0.06                    | 0.04                   | 1.00                  |  |
| 800.00                | 2.41            | 212.92      | 799.71                | -15.03       | -9.42        | -15.68                  | 1.03                    | -0.96                  | -8.52                 |  |
| 825.00                | 1.34            | 208.50      | 824.69                | -15.73       | -9.84        | -16.41                  | 4.32                    | -4.28                  | -17.68                |  |
| 850.00                | 0.63            | 198.01      | 849.69                | -16.11       | -10.03       | -16.81                  | 2.92                    | -2.84                  | -41.96                |  |
| 875.00                | 0.48            | 188.52      | 874.69                | -16.35       | -10.08       | -17.05                  | 0.70                    | -0.60                  | -37.96                |  |
| 900.00                | 0.41            | 182.98      | 899.69                | -16.54       | -10.10       | -17.24                  | 0.33                    | -0.28                  | -22.16                |  |
| 925.00                | 0.42            | 191.92      | 924.69                | -16.72       | -10.13       | -17.42                  | 0.26                    | 0.04                   | 35.76                 |  |
| 950.00                | 0.40            | 204.37      | 949.68                | -16.89       | -10.18       | -17.60                  | 0.36                    | -0.08                  | 49.80                 |  |
| 975.00                | 0.38            | 199.20      | 974.68                | -17.05       | -10.25       | -17.76                  | 0.16                    | -0.08                  | -20.68                |  |
| 1,000.00              | 0.51            | 210.96      | 999.68                | -17.22       | -10.33       | -17.94                  | 0.63                    | 0.52                   | 47.04                 |  |
| 1,025.00              | 0.51            | 219.70      | 1,024.68              | -17.40       | -10.46       | -18.13                  | 0.31                    | 0.00                   | 34.96                 |  |
| 1,050.00              | 0.83            | 225.58      | 1,049.68              | -17.61       | -10.66       | -18.36                  | 1.31                    | 1.28                   | 23.52                 |  |
| 1,075.00              | 0.93            | 237.61      | 1,074.68              | -17.85       | -10.96       | -18.61                  | 0.84                    | 0.40                   | 48.12                 |  |
| 1,100.00              | 1.10            | 248.89      | 1,099.67              | -18.04       | -11.35       | -18.84                  | 1.05                    | 0.68                   | 45.12                 |  |
| 1,125.00              | 1.29            | 245.98      | 1,124.67              | -18.25       | -11.84       | -19.07                  | 0.80                    | 0.76                   | -11.64                |  |
| 1,150.00              | 1.36            | 250.87      | 1,149.66              | -18.46       | -12.37       | -19.32                  | 0.53                    | 0.28                   | 19.56                 |  |
| 1,175.00              | 1.54            | 247.81      | 1,174.65              | -18.68       | -12.96       | -19.59                  | 0.78                    | 0.72                   | -12.24                |  |
| 1,200.00              | 1.40            | 248.44      | 1,199.65              | -18.92       | -13.56       | -19.87                  | 0.56                    | -0.56                  | 2.52                  |  |
| 1,225.00              | 0.70            | 267.66      | 1,224.64              | -19.04       | -14.00       | -20.02                  | 3.10                    | -2.80                  | 76.88                 |  |
| 1,250.00              | 0.55            | 335.40      | 1,249.64              | -18.94       | -14.20       | -19.94                  | 2.83                    | -0.60                  | 270.96                |  |
| 1,275.00              | 0.96            | 7.63        | 1,274.64              | -18.62       | -14.22       | -19.62                  | 2.30                    | 1.64                   | 128.92                |  |
| 1,300.00              | 1.19            | 9.13        | 1,299.63              | -18.16       | -14.15       | -19.15                  | 0.93                    | 0.92                   | 6.00                  |  |
| 1,325.00              | 1.33            | 8.06        | 1,324.63              | -17.61       | -14.07       | -18.61                  | 0.57                    | 0.56                   | -4.28                 |  |
| 1,350.00              | 1.43            | 6.97        | 1,349.62              | -17.01       | -13.99       | -18.00                  | 0.41                    | 0.40                   | -4.36                 |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 1,375.00              | 1.34            | 5.25        | 1,374.61              | -16.41       | -13.93       | -17.40                  | 0.40                    | -0.36                  | -6.88                 |  |
| 1,400.00              | 1.37            | 3.97        | 1,399.61              | -15.82       | -13.88       | -16.81                  | 0.17                    | 0.12                   | -5.12                 |  |
| 1,425.00              | 1.22            | 2.09        | 1,424.60              | -15.26       | -13.85       | -16.25                  | 0.62                    | -0.60                  | -7.52                 |  |
| 1,450.00              | 1.27            | 358.90      | 1,449.59              | -14.72       | -13.84       | -15.70                  | 0.34                    | 0.20                   | -12.76                |  |
| 1,475.00              | 1.09            | 358.03      | 1,474.59              | -14.20       | -13.86       | -15.19                  | 0.72                    | -0.72                  | -3.48                 |  |
| 1,500.00              | 1.02            | 353.19      | 1,499.58              | -13.74       | -13.89       | -14.74                  | 0.45                    | -0.28                  | -19.36                |  |
| 1,525.00              | 1.05            | 355.82      | 1,524.58              | -13.30       | -13.94       | -14.29                  | 0.22                    | 0.12                   | 10.52                 |  |
| 1,550.00              | 0.92            | 350.25      | 1,549.58              | -12.87       | -13.99       | -13.87                  | 0.65                    | -0.52                  | -22.28                |  |
| 1,575.00              | 1.05            | 352.33      | 1,574.57              | -12.44       | -14.05       | -13.45                  | 0.54                    | 0.52                   | 8.32                  |  |
| 1,600.00              | 0.94            | 349.90      | 1,599.57              | -12.02       | -14.12       | -13.03                  | 0.47                    | -0.44                  | -9.72                 |  |
| 1,625.00              | 0.98            | 357.97      | 1,624.57              | -11.60       | -14.16       | -12.62                  | 0.56                    | 0.16                   | 32.28                 |  |
| 1,650.00              | 0.92            | 8.63        | 1,649.56              | -11.19       | -14.14       | -12.20                  | 0.75                    | -0.24                  | 42.64                 |  |
| 1,675.00              | 0.88            | 55.45       | 1,674.56              | -10.88       | -13.95       | -11.88                  | 2.86                    | -0.16                  | 187.28                |  |
| 1,700.00              | 1.52            | 90.57       | 1,699.55              | -10.77       | -13.46       | -11.74                  | 3.79                    | 2.56                   | 140.48                |  |
| 1,725.00              | 2.13            | 98.26       | 1,724.54              | -10.84       | -12.67       | -11.75                  | 2.62                    | 2.44                   | 30.76                 |  |
| 1,750.00              | 2.38            | 99.63       | 1,749.52              | -11.00       | -11.70       | -11.83                  | 1.02                    | 1.00                   | 5.48                  |  |
| 1,775.00              | 2.55            | 101.80      | 1,774.50              | -11.20       | -10.64       | -11.96                  | 0.78                    | 0.68                   | 8.68                  |  |
| 1,800.00              | 2.54            | 104.17      | 1,799.47              | -11.45       | -9.56        | -12.13                  | 0.42                    | -0.04                  | 9.48                  |  |
| 1,825.00              | 2.59            | 103.11      | 1,824.45              | -11.71       | -8.47        | -12.31                  | 0.28                    | 0.20                   | -4.24                 |  |
| 1,850.00              | 2.65            | 104.24      | 1,849.42              | -11.98       | -7.36        | -12.49                  | 0.32                    | 0.24                   | 4.52                  |  |
| 1,875.00              | 2.75            | 105.92      | 1,874.40              | -12.29       | -6.23        | -12.72                  | 0.51                    | 0.40                   | 6.72                  |  |
| 1,900.00              | 2.99            | 105.17      | 1,899.36              | -12.62       | -5.02        | -12.96                  | 0.97                    | 0.96                   | -3.00                 |  |
| 1,925.00              | 3.11            | 104.02      | 1,924.33              | -12.96       | -3.73        | -13.20                  | 0.54                    | 0.48                   | -4.60                 |  |
| 1,950.00              | 3.43            | 105.85      | 1,949.29              | -13.33       | -2.35        | -13.47                  | 1.35                    | 1.28                   | 7.32                  |  |
| 1,975.00              | 3.57            | 106.86      | 1,974.24              | -13.76       | -0.89        | -13.79                  | 0.61                    | 0.56                   | 4.04                  |  |
| 2,000.00              | 3.69            | 104.95      | 1,999.19              | -14.19       | 0.63         | -14.10                  | 0.68                    | 0.48                   | -7.64                 |  |
| 2,025.00              | 3.69            | 104.82      | 2,024.14              | -14.60       | 2.19         | -14.40                  | 0.03                    | 0.00                   | -0.52                 |  |
| 2,050.00              | 3.55            | 105.49      | 2,049.09              | -15.02       | 3.71         | -14.70                  | 0.58                    | -0.56                  | 2.68                  |  |
| 2,075.00              | 3.37            | 102.54      | 2,074.04              | -15.38       | 5.17         | -14.96                  | 1.01                    | -0.72                  | -11.80                |  |
| 2,100.00              | 3.21            | 101.43      | 2,099.00              | -15.68       | 6.58         | -15.15                  | 0.69                    | -0.64                  | -4.44                 |  |
| 2,125.00              | 2.98            | 99.73       | 2,123.97              | -15.93       | 7.90         | -15.30                  | 0.99                    | -0.92                  | -6.80                 |  |
| 2,150.00              | 2.00            | 90.28       | 2,148.94              | -16.04       | 8.98         | -15.33                  | 4.24                    | -3.92                  | -37.80                |  |
| 2,175.00              | 1.50            | 78.51       | 2,173.93              | -15.98       | 9.74         | -15.21                  | 2.45                    | -2.00                  | -47.08                |  |
| 2,200.00              | 1.20            | 66.83       | 2,198.92              | -15.81       | 10.30        | -15.00                  | 1.62                    | -1.20                  | -46.72                |  |
| 2,225.00              | 1.14            | 56.53       | 2,223.92              | -15.57       | 10.75        | -14.73                  | 0.87                    | -0.24                  | -41.20                |  |
| 2,250.00              | 1.16            | 51.45       | 2,248.91              | -15.28       | 11.15        | -14.41                  | 0.42                    | 0.08                   | -20.32                |  |
| 2,275.00              | 1.15            | 48.70       | 2,273.91              | -14.95       | 11.54        | -14.06                  | 0.23                    | -0.04                  | -11.00                |  |
| 2,300.00              | 1.00            | 47.79       | 2,298.90              | -14.64       | 11.89        | -13.72                  | 0.60                    | -0.60                  | -3.64                 |  |
| 2,325.00              | 1.04            | 42.98       | 2,323.90              | -14.33       | 12.20        | -13.38                  | 0.38                    | 0.16                   | -19.24                |  |
| 2,350.00              | 1.16            | 40.32       | 2,348.90              | -13.97       | 12.52        | -13.00                  | 0.52                    | 0.48                   | -10.64                |  |
| 2,375.00              | 1.11            | 42.26       | 2,373.89              | -13.60       | 12.85        | -12.61                  | 0.25                    | -0.20                  | 7.76                  |  |
| 2,400.00              | 1.01            | 39.95       | 2,398.89              | -13.25       | 13.15        | -12.24                  | 0.43                    | -0.40                  | -9.24                 |  |
| 2,425.00              | 1.13            | 40.58       | 2,423.88              | -12.89       | 13.46        | -11.86                  | 0.48                    | 0.48                   | 2.52                  |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 2,450.00              | 1.05            | 41.71       | 2,448.88              | -12.53       | 13.77        | -11.48                  | 0.33                    | -0.32                  | 4.52                  |  |
| 2,475.00              | 1.05            | 40.48       | 2,473.87              | -12.19       | 14.07        | -11.11                  | 0.09                    | 0.00                   | -4.92                 |  |
| 2,500.00              | 1.13            | 41.86       | 2,498.87              | -11.83       | 14.38        | -10.73                  | 0.34                    | 0.32                   | 5.52                  |  |
| 2,525.00              | 1.11            | 37.84       | 2,523.86              | -11.46       | 14.70        | -10.34                  | 0.32                    | -0.08                  | -16.08                |  |
| 2,550.00              | 0.80            | 56.45       | 2,548.86              | -11.17       | 14.99        | -10.03                  | 1.74                    | -1.24                  | 74.44                 |  |
| 2,575.00              | 0.76            | 84.44       | 2,573.86              | -11.06       | 15.30        | -9.89                   | 1.52                    | -0.16                  | 111.96                |  |
| 2,600.00              | 0.94            | 104.15      | 2,598.86              | -11.09       | 15.66        | -9.90                   | 1.36                    | 0.72                   | 78.84                 |  |
| 2,625.00              | 0.96            | 116.06      | 2,623.85              | -11.23       | 16.05        | -10.01                  | 0.79                    | 0.08                   | 47.64                 |  |
| 2,650.00              | 1.75            | 142.48      | 2,648.84              | -11.63       | 16.47        | -10.37                  | 3.95                    | 3.16                   | 105.68                |  |
| 2,675.00              | 2.55            | 152.30      | 2,673.83              | -12.42       | 16.96        | -11.13                  | 3.51                    | 3.20                   | 39.28                 |  |
| 2,700.00              | 2.53            | 146.85      | 2,698.80              | -13.38       | 17.52        | -12.04                  | 0.97                    | -0.08                  | -21.80                |  |
| 2,725.00              | 2.87            | 148.85      | 2,723.77              | -14.37       | 18.15        | -12.99                  | 1.41                    | 1.36                   | 8.00                  |  |
| 2,750.00              | 3.24            | 147.18      | 2,748.74              | -15.50       | 18.85        | -14.06                  | 1.52                    | 1.48                   | -6.68                 |  |
| 2,775.00              | 3.68            | 146.74      | 2,773.69              | -16.77       | 19.68        | -15.26                  | 1.76                    | 1.76                   | -1.76                 |  |
| 2,800.00              | 3.86            | 147.21      | 2,798.64              | -18.15       | 20.57        | -16.57                  | 0.73                    | 0.72                   | 1.88                  |  |
| 2,825.00              | 4.07            | 146.28      | 2,823.58              | -19.59       | 21.52        | -17.94                  | 0.88                    | 0.84                   | -3.72                 |  |
| 2,850.00              | 4.87            | 143.16      | 2,848.50              | -21.18       | 22.65        | -19.44                  | 3.34                    | 3.20                   | -12.48                |  |
| 2,875.00              | 5.34            | 142.43      | 2,873.40              | -22.95       | 24.00        | -21.11                  | 1.90                    | 1.88                   | -2.92                 |  |
| 2,900.00              | 5.58            | 142.95      | 2,898.29              | -24.84       | 25.44        | -22.89                  | 0.98                    | 0.96                   | 2.08                  |  |
| 2,925.00              | 5.60            | 141.56      | 2,923.17              | -26.77       | 26.93        | -24.70                  | 0.55                    | 0.08                   | -5.56                 |  |
| 2,950.00              | 5.67            | 142.55      | 2,948.05              | -28.70       | 28.44        | -26.52                  | 0.48                    | 0.28                   | 3.96                  |  |
| 2,975.00              | 5.63            | 142.92      | 2,972.93              | -30.66       | 29.93        | -28.36                  | 0.22                    | -0.16                  | 1.48                  |  |
| 3,000.00              | 5.66            | 143.05      | 2,997.81              | -32.63       | 31.41        | -30.21                  | 0.13                    | 0.12                   | 0.52                  |  |
| 3,025.00              | 5.59            | 142.68      | 3,022.69              | -34.58       | 32.89        | -32.05                  | 0.32                    | -0.28                  | -1.48                 |  |
| 3,050.00              | 5.61            | 142.06      | 3,047.57              | -36.51       | 34.38        | -33.86                  | 0.25                    | 0.08                   | -2.48                 |  |
| 3,075.00              | 5.77            | 140.95      | 3,072.45              | -38.45       | 35.92        | -35.68                  | 0.78                    | 0.64                   | -4.44                 |  |
| 3,100.00              | 5.57            | 142.17      | 3,097.32              | -40.39       | 37.46        | -37.50                  | 0.93                    | -0.80                  | 4.88                  |  |
| 3,125.00              | 5.50            | 142.14      | 3,122.21              | -42.29       | 38.94        | -39.29                  | 0.28                    | -0.28                  | -0.12                 |  |
| 3,150.00              | 5.51            | 141.68      | 3,147.09              | -44.18       | 40.42        | -41.06                  | 0.18                    | 0.04                   | -1.84                 |  |
| 3,175.00              | 5.29            | 142.69      | 3,171.98              | -46.04       | 41.86        | -42.81                  | 0.96                    | -0.88                  | 4.04                  |  |
| 3,200.00              | 5.07            | 142.71      | 3,196.88              | -47.83       | 43.23        | -44.50                  | 0.88                    | -0.88                  | 0.08                  |  |
| 3,225.00              | 5.05            | 143.12      | 3,221.78              | -49.59       | 44.56        | -46.15                  | 0.17                    | -0.08                  | 1.64                  |  |
| 3,250.00              | 5.04            | 142.65      | 3,246.68              | -51.34       | 45.88        | -47.80                  | 0.17                    | -0.04                  | -1.88                 |  |
| 3,275.00              | 4.83            | 142.36      | 3,271.59              | -53.05       | 47.19        | -49.41                  | 0.85                    | -0.84                  | -1.16                 |  |
| 3,300.00              | 4.89            | 143.56      | 3,296.50              | -54.74       | 48.47        | -51.00                  | 0.47                    | 0.24                   | 4.80                  |  |
| 3,325.00              | 5.02            | 144.00      | 3,321.41              | -56.48       | 49.74        | -52.64                  | 0.54                    | 0.52                   | 1.76                  |  |
| 3,350.00              | 4.98            | 143.34      | 3,346.31              | -58.24       | 51.03        | -54.30                  | 0.28                    | -0.16                  | -2.64                 |  |
| 3,375.00              | 4.94            | 142.55      | 3,371.22              | -59.96       | 52.34        | -55.92                  | 0.32                    | -0.16                  | -3.16                 |  |
| 3,400.00              | 5.00            | 142.17      | 3,396.13              | -61.68       | 53.66        | -57.53                  | 0.27                    | 0.24                   | -1.52                 |  |
| 3,425.00              | 5.05            | 142.86      | 3,421.03              | -63.41       | 54.99        | -59.17                  | 0.31                    | 0.20                   | 2.76                  |  |
| 3,450.00              | 5.03            | 143.47      | 3,445.93              | -65.17       | 56.31        | -60.82                  | 0.23                    | -0.08                  | 2.44                  |  |
| 3,475.00              | 5.04            | 143.57      | 3,470.84              | -66.94       | 57.61        | -62.48                  | 0.05                    | 0.04                   | 0.40                  |  |
| 3,500.00              | 5.06            | 143.06      | 3,495.74              | -68.70       | 58.93        | -64.15                  | 0.20                    | 0.08                   | -2.04                 |  |
| 3,525.00              | 5.10            | 139.98      | 3,520.64              | -70.43       | 60.30        | -65.77                  | 1.10                    | 0.16                   | -12.32                |  |





## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 3,550.00              | 5.29            | 135.74      | 3,545.54              | -72.11       | 61.82        | -67.33                  | 1.71                    | 0.76                   | -16.96                |  |
| 3,575.00              | 5.51            | 130.87      | 3,570.43              | -73.72       | 63.53        | -68.81                  | 2.03                    | 0.88                   | -19.48                |  |
| 3,600.00              | 5.54            | 128.80      | 3,595.31              | -75.26       | 65.38        | -70.21                  | 0.81                    | 0.12                   | -8.28                 |  |
| 3,625.00              | 5.41            | 128.08      | 3,620.20              | -76.75       | 67.25        | -71.55                  | 0.59                    | -0.52                  | -2.88                 |  |
| 3,650.00              | 5.63            | 127.91      | 3,645.08              | -78.23       | 69.15        | -72.89                  | 0.88                    | 0.88                   | -0.68                 |  |
| 3,675.00              | 5.57            | 127.51      | 3,669.96              | -79.72       | 71.08        | -74.23                  | 0.29                    | -0.24                  | -1.60                 |  |
| 3,700.00              | 5.61            | 127.84      | 3,694.84              | -81.21       | 73.00        | -75.57                  | 0.21                    | 0.16                   | 1.32                  |  |
| 3,725.00              | 5.41            | 126.47      | 3,719.73              | -82.66       | 74.92        | -76.88                  | 0.96                    | -0.80                  | -5.48                 |  |
| 3,750.00              | 5.40            | 127.74      | 3,744.62              | -84.08       | 76.79        | -78.15                  | 0.48                    | -0.04                  | 5.08                  |  |
| 3,775.00              | 5.33            | 126.93      | 3,769.51              | -85.49       | 78.65        | -79.43                  | 0.41                    | -0.28                  | -3.24                 |  |
| 3,800.00              | 5.33            | 127.33      | 3,794.40              | -86.90       | 80.50        | -80.69                  | 0.15                    | 0.00                   | 1.60                  |  |
| 3,825.00              | 5.35            | 128.08      | 3,819.29              | -88.32       | 82.34        | -81.97                  | 0.29                    | 0.08                   | 3.00                  |  |
| 3,850.00              | 5.20            | 126.87      | 3,844.18              | -89.72       | 84.17        | -83.23                  | 0.75                    | -0.60                  | -4.84                 |  |
| 3,875.00              | 5.19            | 127.10      | 3,869.08              | -91.08       | 85.98        | -84.46                  | 0.09                    | -0.04                  | 0.92                  |  |
| 3,900.00              | 5.25            | 127.45      | 3,893.98              | -92.46       | 87.79        | -85.70                  | 0.27                    | 0.24                   | 1.40                  |  |
| 3,925.00              | 5.00            | 127.14      | 3,918.88              | -93.81       | 89.56        | -86.92                  | 1.01                    | -1.00                  | -1.24                 |  |
| 3,950.00              | 5.01            | 127.38      | 3,943.78              | -95.13       | 91.30        | -88.10                  | 0.09                    | 0.04                   | 0.96                  |  |
| 3,975.00              | 4.81            | 126.59      | 3,968.69              | -96.42       | 93.01        | -89.26                  | 0.84                    | -0.80                  | -3.16                 |  |
| 4,000.00              | 4.84            | 125.46      | 3,993.60              | -97.66       | 94.71        | -90.37                  | 0.40                    | 0.12                   | -4.52                 |  |
| 4,025.00              | 4.76            | 126.47      | 4,018.51              | -98.88       | 96.40        | -91.47                  | 0.47                    | -0.32                  | 4.04                  |  |
| 4,050.00              | 4.89            | 125.80      | 4,043.43              | -100.12      | 98.10        | -92.58                  | 0.57                    | 0.52                   | -2.68                 |  |
| 4,075.00              | 4.85            | 125.88      | 4,068.34              | -101.37      | 99.82        | -93.69                  | 0.16                    | -0.16                  | 0.32                  |  |
| 4,100.00              | 4.93            | 126.15      | 4,093.24              | -102.62      | 101.54       | -94.81                  | 0.33                    | 0.32                   | 1.08                  |  |
| 4,125.00              | 4.97            | 126.47      | 4,118.15              | -103.90      | 103.28       | -95.96                  | 0.19                    | 0.16                   | 1.28                  |  |
| 4,150.00              | 4.97            | 126.24      | 4,143.06              | -105.18      | 105.03       | -97.11                  | 0.08                    | 0.00                   | -0.92                 |  |
| 4,175.00              | 5.06            | 127.01      | 4,167.96              | -106.48      | 106.78       | -98.28                  | 0.45                    | 0.36                   | 3.08                  |  |
| 4,200.00              | 5.07            | 126.10      | 4,192.86              | -107.80      | 108.55       | -99.46                  | 0.32                    | 0.04                   | -3.64                 |  |
| 4,225.00              | 5.08            | 125.02      | 4,217.77              | -109.08      | 110.35       | -100.61                 | 0.38                    | 0.04                   | -4.32                 |  |
| 4,250.00              | 4.99            | 124.78      | 4,242.67              | -110.34      | 112.15       | -101.73                 | 0.37                    | -0.36                  | -0.96                 |  |
| 4,275.00              | 5.04            | 124.82      | 4,267.57              | -111.59      | 113.95       | -102.84                 | 0.20                    | 0.20                   | 0.16                  |  |
| 4,300.00              | 5.17            | 125.45      | 4,292.48              | -112.87      | 115.77       | -103.98                 | 0.57                    | 0.52                   | 2.52                  |  |
| 4,325.00              | 5.21            | 124.14      | 4,317.37              | -114.16      | 117.62       | -105.13                 | 0.50                    | 0.16                   | -5.24                 |  |
| 4,350.00              | 5.12            | 125.50      | 4,342.27              | -115.44      | 119.47       | -106.27                 | 0.61                    | -0.36                  | 5.44                  |  |
| 4,375.00              | 5.19            | 124.70      | 4,367.17              | -116.73      | 121.31       | -107.42                 | 0.40                    | 0.28                   | -3.20                 |  |
| 4,400.00              | 5.21            | 124.25      | 4,392.07              | -118.02      | 123.18       | -108.56                 | 0.18                    | 0.08                   | -1.80                 |  |
| 4,425.00              | 5.22            | 123.45      | 4,416.96              | -119.28      | 125.06       | -109.69                 | 0.29                    | 0.04                   | -3.20                 |  |
| 4,450.00              | 5.15            | 124.55      | 4,441.86              | -120.55      | 126.94       | -110.81                 | 0.49                    | -0.28                  | 4.40                  |  |
| 4,475.00              | 4.94            | 123.71      | 4,466.76              | -121.78      | 128.76       | -111.90                 | 0.89                    | -0.84                  | -3.36                 |  |
| 4,500.00              | 5.27            | 122.97      | 4,491.67              | -123.00      | 130.61       | -112.98                 | 1.35                    | 1.32                   | -2.96                 |  |
| 4,525.00              | 5.01            | 123.42      | 4,516.56              | -124.23      | 132.49       | -114.07                 | 1.05                    | -1.04                  | 1.80                  |  |
| 4,550.00              | 5.16            | 123.31      | 4,541.47              | -125.45      | 134.34       | -115.15                 | 0.60                    | 0.60                   | -0.44                 |  |
| 4,575.00              | 5.13            | 123.27      | 4,566.37              | -126.68      | 136.21       | -116.23                 | 0.12                    | -0.12                  | -0.16                 |  |
| 4,600.00              | 4.97            | 121.96      | 4,591.27              | -127.86      | 138.07       | -117.28                 | 0.79                    | -0.64                  | -5.24                 |  |





## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 4,625.00              | 4.89            | 122.81      | 4,616.18              | -129.01      | 139.88       | -118.29                 | 0.43                    | -0.32                  | 3.40                  |  |
| 4,650.00              | 4.60            | 122.24      | 4,641.09              | -130.13      | 141.62       | -119.27                 | 1.18                    | -1.16                  | -2.28                 |  |
| 4,675.00              | 4.61            | 122.24      | 4,666.01              | -131.20      | 143.32       | -120.21                 | 0.04                    | 0.04                   | 0.00                  |  |
| 4,700.00              | 4.57            | 122.34      | 4,690.93              | -132.27      | 145.01       | -121.16                 | 0.16                    | -0.16                  | 0.40                  |  |
| 4,725.00              | 4.69            | 122.46      | 4,715.85              | -133.35      | 146.72       | -122.11                 | 0.48                    | 0.48                   | 0.48                  |  |
| 4,750.00              | 4.64            | 121.45      | 4,740.77              | -134.42      | 148.44       | -123.05                 | 0.38                    | -0.20                  | -4.04                 |  |
| 4,775.00              | 4.75            | 122.33      | 4,765.68              | -135.50      | 150.18       | -124.00                 | 0.53                    | 0.44                   | 3.52                  |  |
| 4,800.00              | 4.67            | 121.42      | 4,790.60              | -136.59      | 151.92       | -124.95                 | 0.44                    | -0.32                  | -3.64                 |  |
| 4,825.00              | 4.55            | 121.83      | 4,815.52              | -137.64      | 153.63       | -125.88                 | 0.50                    | -0.48                  | 1.64                  |  |
| 4,850.00              | 4.57            | 122.43      | 4,840.44              | -138.70      | 155.32       | -126.81                 | 0.21                    | 0.08                   | 2.40                  |  |
| 4,875.00              | 4.34            | 121.09      | 4,865.36              | -139.72      | 156.97       | -127.70                 | 1.01                    | -0.92                  | -5.36                 |  |
| 4,900.00              | 4.05            | 120.78      | 4,890.29              | -140.66      | 158.54       | -128.53                 | 1.16                    | -1.16                  | -1.24                 |  |
| 4,925.00              | 3.84            | 122.01      | 4,915.23              | -141.56      | 160.00       | -129.31                 | 0.91                    | -0.84                  | 4.92                  |  |
| 4,950.00              | 3.66            | 122.23      | 4,940.18              | -142.43      | 161.39       | -130.07                 | 0.72                    | -0.72                  | 0.88                  |  |
| 4,975.00              | 3.57            | 118.71      | 4,965.13              | -143.23      | 162.75       | -130.77                 | 0.96                    | -0.36                  | -14.08                |  |
| 5,000.00              | 3.55            | 118.27      | 4,990.08              | -143.97      | 164.11       | -131.41                 | 0.14                    | -0.08                  | -1.76                 |  |
| 5,025.00              | 3.35            | 119.66      | 5,015.04              | -144.69      | 165.43       | -132.04                 | 0.87                    | -0.80                  | 5.56                  |  |
| 5,050.00              | 3.31            | 117.07      | 5,040.00              | -145.38      | 166.71       | -132.63                 | 0.62                    | -0.16                  | -10.36                |  |
| 5,075.00              | 3.33            | 115.66      | 5,064.95              | -146.03      | 168.00       | -133.18                 | 0.34                    | 0.08                   | -5.64                 |  |
| 5,100.00              | 3.41            | 116.51      | 5,089.91              | -146.67      | 169.32       | -133.72                 | 0.38                    | 0.32                   | 3.40                  |  |
| 5,125.00              | 3.37            | 117.08      | 5,114.87              | -147.34      | 170.64       | -134.29                 | 0.21                    | -0.16                  | 2.28                  |  |
| 5,150.00              | 3.44            | 115.99      | 5,139.82              | -148.00      | 171.97       | -134.85                 | 0.38                    | 0.28                   | -4.36                 |  |
| 5,175.00              | 3.47            | 116.60      | 5,164.78              | -148.67      | 173.32       | -135.42                 | 0.19                    | 0.12                   | 2.44                  |  |
| 5,200.00              | 3.38            | 116.35      | 5,189.73              | -149.34      | 174.66       | -135.98                 | 0.36                    | -0.36                  | -1.00                 |  |
| 5,225.00              | 3.69            | 122.96      | 5,214.69              | -150.10      | 175.99       | -136.65                 | 2.05                    | 1.24                   | 26.44                 |  |
| 5,250.00              | 3.89            | 126.80      | 5,239.63              | -151.05      | 177.35       | -137.49                 | 1.29                    | 0.80                   | 15.36                 |  |
| 5,275.00              | 3.94            | 127.70      | 5,264.57              | -152.08      | 178.71       | -138.42                 | 0.32                    | 0.20                   | 3.60                  |  |
| 5,300.00              | 3.89            | 126.30      | 5,289.51              | -153.11      | 180.07       | -139.34                 | 0.43                    | -0.20                  | -5.60                 |  |
| 5,325.00              | 4.07            | 127.35      | 5,314.45              | -154.15      | 181.46       | -140.28                 | 0.78                    | 0.72                   | 4.20                  |  |
| 5,350.00              | 3.94            | 127.46      | 5,339.39              | -155.21      | 182.84       | -141.23                 | 0.52                    | -0.52                  | 0.44                  |  |
| 5,375.00              | 3.87            | 128.01      | 5,364.33              | -156.25      | 184.19       | -142.17                 | 0.32                    | -0.28                  | 2.20                  |  |
| 5,400.00              | 3.85            | 128.59      | 5,389.28              | -157.29      | 185.51       | -143.11                 | 0.18                    | -0.08                  | 2.32                  |  |
| 5,425.00              | 3.85            | 128.64      | 5,414.22              | -158.34      | 186.82       | -144.06                 | 0.01                    | 0.00                   | 0.20                  |  |
| 5,450.00              | 3.80            | 128.14      | 5,439.17              | -159.38      | 188.13       | -145.00                 | 0.24                    | -0.20                  | -2.00                 |  |
| 5,475.00              | 3.86            | 128.50      | 5,464.11              | -160.41      | 189.44       | -145.93                 | 0.26                    | 0.24                   | 1.44                  |  |
| 5,500.00              | 3.85            | 130.28      | 5,489.05              | -161.48      | 190.74       | -146.90                 | 0.48                    | -0.04                  | 7.12                  |  |
| 5,525.00              | 3.69            | 130.64      | 5,514.00              | -162.55      | 191.99       | -147.87                 | 0.65                    | -0.64                  | 1.44                  |  |
| 5,550.00              | 3.59            | 129.98      | 5,538.95              | -163.57      | 193.20       | -148.80                 | 0.43                    | -0.40                  | -2.64                 |  |
| 5,575.00              | 4.20            | 137.25      | 5,563.89              | -164.75      | 194.42       | -149.89                 | 3.13                    | 2.44                   | 29.08                 |  |
| 5,600.00              | 4.55            | 140.89      | 5,588.82              | -166.19      | 195.67       | -151.23                 | 1.79                    | 1.40                   | 14.56                 |  |
| 5,625.00              | 4.62            | 143.94      | 5,613.74              | -167.77      | 196.89       | -152.72                 | 1.01                    | 0.28                   | 12.20                 |  |
| 5,650.00              | 4.51            | 142.84      | 5,638.66              | -169.37      | 198.07       | -154.22                 | 0.56                    | -0.44                  | -4.40                 |  |
| 5,675.00              | 4.54            | 144.82      | 5,663.58              | -170.96      | 199.24       | -155.73                 | 0.64                    | 0.12                   | 7.92                  |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |  |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 5,700.00              | 4.68            | 144.19      | 5,688.50              | -172.60      | 200.40       | -157.27                 | 0.60                    | 0.56                   | -2.52                 |  |
| 5,725.00              | 4.53            | 144.19      | 5,713.42              | -174.23      | 201.58       | -158.81                 | 0.60                    | -0.60                  | 0.00                  |  |
| 5,750.00              | 4.68            | 143.64      | 5,738.34              | -175.85      | 202.76       | -160.34                 | 0.63                    | 0.60                   | -2.20                 |  |
| 5,775.00              | 4.54            | 144.63      | 5,763.26              | -177.48      | 203.94       | -161.87                 | 0.64                    | -0.56                  | 3.96                  |  |
| 5,800.00              | 4.50            | 143.63      | 5,788.18              | -179.07      | 205.09       | -163.38                 | 0.35                    | -0.16                  | -4.00                 |  |
| 5,825.00              | 4.36            | 144.89      | 5,813.11              | -180.64      | 206.22       | -164.86                 | 0.68                    | -0.56                  | 5.04                  |  |
| 5,850.00              | 4.47            | 143.24      | 5,838.03              | -182.20      | 207.35       | -166.33                 | 0.67                    | 0.44                   | -6.60                 |  |
| 5,875.00              | 4.34            | 144.30      | 5,862.96              | -183.75      | 208.48       | -167.79                 | 0.61                    | -0.52                  | 4.24                  |  |
| 5,900.00              | 4.26            | 145.06      | 5,887.89              | -185.27      | 209.57       | -169.23                 | 0.39                    | -0.32                  | 3.04                  |  |
| 5,925.00              | 4.28            | 143.89      | 5,912.82              | -186.79      | 210.65       | -170.66                 | 0.36                    | 0.08                   | -4.68                 |  |
| 5,950.00              | 4.22            | 144.13      | 5,937.75              | -188.29      | 211.74       | -172.08                 | 0.25                    | -0.24                  | 0.96                  |  |
| 5,975.00              | 4.14            | 145.10      | 5,962.68              | -189.77      | 212.79       | -173.48                 | 0.43                    | -0.32                  | 3.88                  |  |
| 6,000.00              | 4.14            | 143.91      | 5,987.62              | -191.24      | 213.84       | -174.87                 | 0.34                    | 0.00                   | -4.76                 |  |
| 6,025.00              | 4.11            | 145.50      | 6,012.55              | -192.71      | 214.88       | -176.26                 | 0.47                    | -0.12                  | 6.36                  |  |
| 6,050.00              | 4.15            | 144.89      | 6,037.49              | -194.19      | 215.91       | -177.65                 | 0.24                    | 0.16                   | -2.44                 |  |
| 6,075.00              | 4.14            | 141.16      | 6,062.42              | -195.63      | 217.00       | -179.01                 | 1.08                    | -0.04                  | -14.92                |  |
| 6,100.00              | 3.95            | 142.26      | 6,087.36              | -197.02      | 218.09       | -180.31                 | 0.82                    | -0.76                  | 4.40                  |  |
| 6,125.00              | 3.96            | 136.74      | 6,112.30              | -198.33      | 219.21       | -181.54                 | 1.52                    | 0.04                   | -22.08                |  |
| 6,150.00              | 4.35            | 123.87      | 6,137.24              | -199.48      | 220.59       | -182.59                 | 4.03                    | 1.56                   | -51.48                |  |
| 6,175.00              | 4.79            | 118.00      | 6,162.16              | -200.50      | 222.29       | -183.48                 | 2.57                    | 1.76                   | -23.48                |  |
| 6,200.00              | 5.04            | 114.54      | 6,187.06              | -201.45      | 224.22       | -184.28                 | 1.55                    | 1.00                   | -13.84                |  |
| 6,225.00              | 4.90            | 112.29      | 6,211.97              | -202.31      | 226.20       | -184.99                 | 0.96                    | -0.56                  | -9.00                 |  |
| 6,250.00              | 4.82            | 108.84      | 6,236.88              | -203.05      | 228.18       | -185.58                 | 1.21                    | -0.32                  | -13.80                |  |
| 6,275.00              | 4.62            | 106.01      | 6,261.80              | -203.67      | 230.15       | -186.05                 | 1.23                    | -0.80                  | -11.32                |  |
| 6,300.00              | 4.35            | 105.01      | 6,286.72              | -204.19      | 232.03       | -186.44                 | 1.12                    | -1.08                  | -4.00                 |  |
| 6,325.00              | 4.22            | 102.96      | 6,311.65              | -204.64      | 233.84       | -186.75                 | 0.80                    | -0.52                  | -8.20                 |  |
| 6,350.00              | 3.98            | 102.74      | 6,336.58              | -205.04      | 235.58       | -187.02                 | 0.96                    | -0.96                  | -0.88                 |  |
| 6,375.00              | 3.78            | 100.71      | 6,361.53              | -205.39      | 237.24       | -187.24                 | 0.97                    | -0.80                  | -8.12                 |  |
| 6,400.00              | 3.50            | 99.40       | 6,386.48              | -205.66      | 238.80       | -187.40                 | 1.17                    | -1.12                  | -5.24                 |  |
| 6,425.00              | 3.27            | 101.09      | 6,411.43              | -205.93      | 240.26       | -187.55                 | 1.00                    | -0.92                  | 6.76                  |  |
| 6,450.00              | 3.32            | 103.80      | 6,436.39              | -206.24      | 241.66       | -187.76                 | 0.65                    | 0.20                   | 10.84                 |  |
| 6,475.00              | 3.25            | 103.98      | 6,461.35              | -206.58      | 243.05       | -188.00                 | 0.28                    | -0.28                  | 0.72                  |  |
| 6,500.00              | 2.90            | 104.50      | 6,486.32              | -206.91      | 244.35       | -188.23                 | 1.40                    | -1.40                  | 2.08                  |  |
| 6,525.00              | 2.96            | 111.50      | 6,511.28              | -207.30      | 245.56       | -188.54                 | 1.45                    | 0.24                   | 28.00                 |  |
| 6,550.00              | 3.09            | 113.41      | 6,536.25              | -207.81      | 246.78       | -188.95                 | 0.66                    | 0.52                   | 7.64                  |  |
| 6,575.00              | 3.17            | 112.10      | 6,561.21              | -208.34      | 248.04       | -189.38                 | 0.43                    | 0.32                   | -5.24                 |  |
| 6,600.00              | 3.11            | 108.73      | 6,586.17              | -208.81      | 249.32       | -189.76                 | 0.78                    | -0.24                  | -13.48                |  |
| 6,625.00              | 3.20            | 111.39      | 6,611.13              | -209.29      | 250.61       | -190.14                 | 0.69                    | 0.36                   | 10.64                 |  |
| 6,650.00              | 3.74            | 116.40      | 6,636.09              | -209.90      | 251.99       | -190.65                 | 2.48                    | 2.16                   | 20.04                 |  |
| 6,675.00              | 3.89            | 118.41      | 6,661.03              | -210.67      | 253.47       | -191.31                 | 0.80                    | 0.60                   | 8.04                  |  |
| 6,700.00              | 3.99            | 116.72      | 6,685.97              | -211.46      | 254.99       | -191.99                 | 0.61                    | 0.40                   | -6.76                 |  |
| 6,725.00              | 3.65            | 116.84      | 6,710.92              | -212.21      | 256.48       | -192.62                 | 1.36                    | -1.36                  | 0.48                  |  |
| 6,750.00              | 3.18            | 116.19      | 6,735.87              | -212.88      | 257.81       | -193.19                 | 1.89                    | -1.88                  | -2.60                 |  |
| 6,775.00              | 3.33            | 116.83      | 6,760.83              | -213.51      | 259.08       | -193.73                 | 0.62                    | 0.60                   | 2.56                  |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 6,800.00              | 3.63            | 114.61      | 6,785.79              | -214.17      | 260.45       | -194.28                 | 1.32                    | 1.20                   | -8.88                 |
| 6,825.00              | 4.14            | 118.05      | 6,810.73              | -214.92      | 261.97       | -194.92                 | 2.24                    | 2.04                   | 13.76                 |
| 6,850.00              | 4.63            | 118.67      | 6,835.66              | -215.83      | 263.65       | -195.70                 | 1.97                    | 1.96                   | 2.48                  |
| 6,875.00              | 4.66            | 120.11      | 6,860.58              | -216.83      | 265.41       | -196.56                 | 0.48                    | 0.12                   | 5.76                  |
| 6,900.00              | 4.90            | 122.36      | 6,885.49              | -217.91      | 267.19       | -197.51                 | 1.22                    | 0.96                   | 9.00                  |
| 6,925.00              | 4.70            | 124.87      | 6,910.40              | -219.06      | 268.93       | -198.53                 | 1.16                    | -0.80                  | 10.04                 |
| 6,950.00              | 4.67            | 126.55      | 6,935.32              | -220.26      | 270.59       | -199.60                 | 0.56                    | -0.12                  | 6.72                  |
| 6,975.00              | 4.68            | 126.70      | 6,960.23              | -221.47      | 272.23       | -200.69                 | 0.06                    | 0.04                   | 0.60                  |
| 7,000.00              | 4.40            | 127.07      | 6,985.16              | -222.66      | 273.81       | -201.76                 | 1.13                    | -1.12                  | 1.48                  |
| 7,025.00              | 4.17            | 128.66      | 7,010.09              | -223.81      | 275.28       | -202.79                 | 1.04                    | -0.92                  | 6.36                  |
| 7,050.00              | 3.60            | 134.95      | 7,035.03              | -224.93      | 276.55       | -203.81                 | 2.84                    | -2.28                  | 25.16                 |
| 7,075.00              | 3.89            | 125.25      | 7,059.98              | -225.97      | 277.80       | -204.76                 | 2.78                    | 1.16                   | -38.80                |
| 7,100.00              | 3.57            | 126.66      | 7,084.92              | -226.93      | 279.11       | -205.62                 | 1.33                    | -1.28                  | 5.64                  |
| 7,125.00              | 3.32            | 125.01      | 7,109.88              | -227.81      | 280.33       | -206.40                 | 1.08                    | -1.00                  | -6.60                 |
| 7,150.00              | 3.05            | 129.69      | 7,134.84              | -228.65      | 281.44       | -207.16                 | 1.50                    | -1.08                  | 18.72                 |
| 7,175.00              | 3.23            | 123.45      | 7,159.80              | -229.46      | 282.54       | -207.89                 | 1.54                    | 0.72                   | -24.96                |
| 7,195.00              | 2.93            | 123.62      | 7,179.77              | -230.05      | 283.43       | -208.42                 | 1.50                    | -1.50                  | 0.85                  |
| 7,256.00              | 3.61            | 115.85      | 7,240.67              | -231.75      | 286.46       | -209.89                 | 1.33                    | 1.11                   | -12.74                |
| 7,349.00              | 2.01            | 122.45      | 7,333.56              | -233.90      | 290.47       | -211.74                 | 1.75                    | -1.72                  | 7.10                  |
| 7,381.00              | 1.38            | 146.20      | 7,365.54              | -234.53      | 291.16       | -212.30                 | 2.91                    | -1.97                  | 74.22                 |
| 7,412.00              | 1.36            | 47.84       | 7,396.54              | -234.59      | 291.64       | -212.33                 | 6.69                    | -0.06                  | -317.29               |
| 7,444.00              | 4.96            | 24.16       | 7,428.49              | -233.07      | 292.49       | -210.76                 | 11.73                   | 11.25                  | -74.00                |
| 7,475.00              | 10.07           | 21.13       | 7,459.21              | -229.32      | 294.01       | -206.90                 | 16.53                   | 16.48                  | -9.77                 |
| 7,507.00              | 15.11           | 19.78       | 7,490.43              | -222.78      | 296.43       | -200.20                 | 15.78                   | 15.75                  | -4.22                 |
| 7,539.00              | 20.09           | 20.62       | 7,520.92              | -213.71      | 299.78       | -190.90                 | 15.58                   | 15.56                  | 2.63                  |
| 7,570.00              | 24.22           | 21.87       | 7,549.63              | -202.82      | 304.03       | -179.73                 | 13.41                   | 13.32                  | 4.03                  |
| 7,602.00              | 26.52           | 21.48       | 7,578.54              | -190.08      | 309.09       | -166.65                 | 7.21                    | 7.19                   | -1.22                 |
| 7,634.00              | 27.98           | 20.74       | 7,606.99              | -176.41      | 314.37       | -152.62                 | 4.68                    | 4.56                   | -2.31                 |
| 7,665.00              | 30.82           | 20.63       | 7,633.99              | -162.17      | 319.74       | -138.03                 | 9.16                    | 9.16                   | -0.35                 |
| 7,696.00              | 34.41           | 21.02       | 7,660.10              | -146.56      | 325.68       | -122.02                 | 11.60                   | 11.58                  | 1.26                  |
| 7,727.00              | 38.56           | 22.03       | 7,685.02              | -129.42      | 332.45       | -104.42                 | 13.53                   | 13.39                  | 3.26                  |
| 7,759.00              | 42.17           | 24.67       | 7,709.40              | -110.40      | 340.68       | -84.85                  | 12.48                   | 11.28                  | 8.25                  |
| 7,790.00              | 43.70           | 26.54       | 7,732.09              | -91.37       | 349.81       | -65.19                  | 6.42                    | 4.94                   | 6.03                  |
| 7,821.00              | 44.86           | 27.79       | 7,754.29              | -72.11       | 359.69       | -45.26                  | 4.68                    | 3.74                   | 4.03                  |
| 7,853.00              | 47.32           | 28.32       | 7,776.48              | -51.77       | 370.53       | -24.17                  | 7.78                    | 7.69                   | 1.66                  |
| 7,884.00              | 51.22           | 28.64       | 7,796.70              | -31.13       | 381.74       | -2.75                   | 12.60                   | 12.58                  | 1.03                  |
| 7,916.00              | 54.50           | 29.15       | 7,816.02              | -8.80        | 394.06       | 20.43                   | 10.33                   | 10.25                  | 1.59                  |
| 7,947.00              | 57.95           | 29.56       | 7,833.25              | 13.66        | 406.69       | 43.76                   | 11.18                   | 11.13                  | 1.32                  |
| 7,978.00              | 61.90           | 29.47       | 7,848.78              | 37.00        | 419.91       | 68.02                   | 12.74                   | 12.74                  | -0.29                 |
| 8,010.00              | 64.84           | 29.49       | 7,863.13              | 61.90        | 433.98       | 93.89                   | 9.19                    | 9.19                   | 0.06                  |
| 8,041.00              | 68.08           | 29.08       | 7,875.51              | 86.68        | 447.88       | 119.64                  | 10.52                   | 10.45                  | -1.32                 |
| 8,072.00              | 71.76           | 28.95       | 7,886.15              | 112.14       | 462.00       | 146.07                  | 11.88                   | 11.87                  | -0.42                 |
| 8,104.00              | 75.23           | 28.87       | 7,895.24              | 138.99       | 476.83       | 173.95                  | 10.85                   | 10.84                  | -0.25                 |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,135.00              | 78.37           | 28.63       | 7,902.32              | 165.45       | 491.35       | 201.41                  | 10.16                   | 10.13                  | -0.77                 |
| 8,166.00              | 80.55           | 28.30       | 7,907.99              | 192.24       | 505.87       | 229.20                  | 7.11                    | 7.03                   | -1.06                 |
| 8,198.00              | 82.00           | 27.93       | 7,912.84              | 220.14       | 520.77       | 258.13                  | 4.67                    | 4.53                   | -1.16                 |
| 8,229.00              | 84.13           | 27.75       | 7,916.58              | 247.35       | 535.15       | 286.33                  | 6.90                    | 6.87                   | -0.58                 |
| 8,260.00              | 85.86           | 27.51       | 7,919.29              | 274.71       | 549.47       | 314.67                  | 5.63                    | 5.58                   | -0.77                 |
| 8,292.00              | 87.67           | 27.08       | 7,921.09              | 303.10       | 564.12       | 344.07                  | 5.81                    | 5.66                   | -1.34                 |
| 8,323.00              | 89.89           | 25.52       | 7,921.75              | 330.88       | 577.85       | 372.79                  | 8.75                    | 7.16                   | -5.03                 |
| 8,386.00              | 91.34           | 23.57       | 7,921.08              | 388.18       | 604.01       | 431.88                  | 3.86                    | 2.30                   | -3.10                 |
| 8,480.00              | 90.76           | 20.62       | 7,919.35              | 475.25       | 639.36       | 521.33                  | 3.20                    | -0.62                  | -3.14                 |
| 8,571.00              | 89.86           | 18.79       | 7,918.86              | 560.92       | 670.04       | 609.03                  | 2.24                    | -0.99                  | -2.01                 |
| 8,666.00              | 89.62           | 16.36       | 7,919.29              | 651.48       | 698.73       | 701.47                  | 2.57                    | -0.25                  | -2.56                 |
| 8,759.00              | 89.02           | 13.77       | 7,920.40              | 741.27       | 722.89       | 792.80                  | 2.86                    | -0.65                  | -2.78                 |
| 8,854.00              | 88.58           | 11.11       | 7,922.39              | 834.01       | 743.35       | 886.80                  | 2.84                    | -0.46                  | -2.80                 |
| 8,947.00              | 87.29           | 8.22        | 7,925.74              | 925.61       | 758.95       | 979.31                  | 3.40                    | -1.39                  | -3.11                 |
| 9,042.00              | 87.04           | 4.99        | 7,930.44              | 1,019.86     | 769.87       | 1,074.11                | 3.41                    | -0.26                  | -3.40                 |
| 9,136.00              | 88.12           | 4.05        | 7,934.41              | 1,113.48     | 777.27       | 1,168.02                | 1.52                    | 1.15                   | -1.00                 |
| 9,230.00              | 88.82           | 3.55        | 7,936.92              | 1,207.24     | 783.50       | 1,261.98                | 0.92                    | 0.74                   | -0.53                 |
| 9,324.00              | 90.06           | 3.17        | 7,937.84              | 1,301.07     | 789.00       | 1,355.96                | 1.38                    | 1.32                   | -0.40                 |
| 9,418.00              | 91.39           | 2.89        | 7,936.65              | 1,394.93     | 793.97       | 1,449.93                | 1.45                    | 1.41                   | -0.30                 |
| 9,512.00              | 92.73           | 2.65        | 7,933.27              | 1,488.75     | 798.51       | 1,543.84                | 1.45                    | 1.43                   | -0.26                 |
| 9,606.00              | 92.45           | 0.48        | 7,929.02              | 1,582.62     | 801.08       | 1,637.63                | 2.33                    | -0.30                  | -2.31                 |
| 9,701.00              | 88.88           | 0.78        | 7,927.92              | 1,677.59     | 802.12       | 1,732.42                | 3.77                    | -3.76                  | 0.32                  |
| 9,795.00              | 88.84           | 0.40        | 7,929.79              | 1,771.57     | 803.09       | 1,826.21                | 0.41                    | -0.04                  | -0.40                 |
| 9,889.00              | 89.92           | 0.05        | 7,930.80              | 1,865.56     | 803.46       | 1,919.97                | 1.21                    | 1.15                   | -0.37                 |
| 9,983.00              | 91.05           | 359.46      | 7,930.01              | 1,959.55     | 803.06       | 2,013.68                | 1.36                    | 1.20                   | -0.63                 |
| 10,076.00             | 92.01           | 358.74      | 7,927.52              | 2,052.51     | 801.60       | 2,106.27                | 1.29                    | 1.03                   | -0.77                 |
| 10,171.00             | 93.20           | 358.58      | 7,923.21              | 2,147.38     | 799.38       | 2,200.72                | 1.26                    | 1.25                   | -0.17                 |
| 10,265.00             | 91.30           | 359.99      | 7,919.52              | 2,241.29     | 798.21       | 2,294.28                | 2.52                    | -2.02                  | 1.50                  |
| 10,359.00             | 88.48           | 1.43        | 7,919.70              | 2,335.27     | 799.37       | 2,388.09                | 3.37                    | -3.00                  | 1.53                  |
| 10,453.00             | 88.72           | 1.79        | 7,921.99              | 2,429.21     | 802.01       | 2,481.97                | 0.46                    | 0.26                   | 0.38                  |
| 10,546.00             | 89.99           | 1.82        | 7,923.04              | 2,522.16     | 804.94       | 2,574.87                | 1.37                    | 1.37                   | 0.03                  |
| 10,640.00             | 91.06           | 1.94        | 7,922.18              | 2,616.10     | 808.02       | 2,668.79                | 1.15                    | 1.14                   | 0.13                  |
| 10,735.00             | 90.75           | 359.49      | 7,920.68              | 2,711.07     | 809.21       | 2,763.59                | 2.60                    | -0.33                  | -2.58                 |
| 10,829.00             | 91.49           | 357.60      | 7,918.84              | 2,805.02     | 806.82       | 2,857.10                | 2.16                    | 0.79                   | -2.01                 |
| 10,922.00             | 89.87           | 358.00      | 7,917.74              | 2,897.94     | 803.25       | 2,949.50                | 1.79                    | -1.74                  | 0.43                  |
| 11,015.00             | 90.35           | 359.17      | 7,917.56              | 2,990.91     | 800.96       | 3,042.04                | 1.36                    | 0.52                   | 1.26                  |
| 11,109.00             | 91.97           | 359.83      | 7,915.66              | 3,084.88     | 800.14       | 3,135.70                | 1.86                    | 1.72                   | 0.70                  |
| 11,203.00             | 91.26           | 0.03        | 7,913.01              | 3,178.85     | 800.02       | 3,229.39                | 0.78                    | -0.76                  | 0.21                  |
| 11,297.00             | 89.50           | 357.78      | 7,912.38              | 3,272.82     | 798.22       | 3,322.97                | 3.04                    | -1.87                  | -2.39                 |
| 11,391.00             | 87.85           | 358.06      | 7,914.56              | 3,366.73     | 794.81       | 3,416.37                | 1.78                    | -1.76                  | 0.30                  |
| 11,485.00             | 87.73           | 357.36      | 7,918.18              | 3,460.58     | 791.06       | 3,509.69                | 0.75                    | -0.13                  | -0.74                 |
| 11,579.00             | 89.12           | 357.17      | 7,920.77              | 3,554.44     | 786.58       | 3,602.95                | 1.49                    | 1.48                   | -0.20                 |
| 11,673.00             | 90.89           | 357.78      | 7,920.76              | 3,648.34     | 782.44       | 3,696.29                | 1.99                    | 1.88                   | 0.65                  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                                 |                 |             |                       |              |              |                         |                         |                        |                       |  |
|----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)                  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 11,767.00                              | 89.27           | 359.13      | 7,920.63              | 3,742.30     | 779.90       | 3,789.81                | 2.24                    | -1.72                  | 1.44                  |  |
| 11,861.00                              | 89.97           | 359.42      | 7,921.25              | 3,836.29     | 778.71       | 3,883.45                | 0.81                    | 0.74                   | 0.31                  |  |
| 11,955.00                              | 91.38           | 359.38      | 7,920.14              | 3,930.28     | 777.73       | 3,977.11                | 1.50                    | 1.50                   | -0.04                 |  |
| 12,049.00                              | 87.83           | 359.65      | 7,920.79              | 4,024.26     | 776.93       | 4,070.77                | 3.79                    | -3.78                  | 0.29                  |  |
| 12,143.00                              | 87.31           | 359.10      | 7,924.78              | 4,118.17     | 775.91       | 4,164.34                | 0.80                    | -0.55                  | -0.59                 |  |
| 12,238.00                              | 88.43           | 358.32      | 7,928.31              | 4,213.07     | 773.77       | 4,258.83                | 1.44                    | 1.18                   | -0.82                 |  |
| 12,333.00                              | 90.11           | 359.94      | 7,929.52              | 4,308.05     | 772.33       | 4,353.44                | 2.46                    | 1.77                   | 1.71                  |  |
| 12,427.00                              | 90.80           | 359.40      | 7,928.77              | 4,402.04     | 771.79       | 4,447.13                | 0.93                    | 0.73                   | -0.57                 |  |
| 12,521.00                              | 90.90           | 1.47        | 7,927.38              | 4,496.02     | 772.50       | 4,540.91                | 2.20                    | 0.11                   | 2.20                  |  |
| 12,615.00                              | 91.35           | 0.81        | 7,925.53              | 4,589.99     | 774.37       | 4,634.75                | 0.85                    | 0.48                   | -0.70                 |  |
| 12,710.00                              | 92.92           | 0.63        | 7,921.99              | 4,684.91     | 775.56       | 4,729.50                | 1.66                    | 1.65                   | -0.19                 |  |
| 12,803.00                              | 89.69           | 2.57        | 7,919.87              | 4,777.83     | 778.16       | 4,822.36                | 4.05                    | -3.47                  | 2.09                  |  |
| 12,897.00                              | 91.10           | 2.15        | 7,919.22              | 4,871.75     | 782.03       | 4,916.31                | 1.57                    | 1.50                   | -0.45                 |  |
| 12,992.00                              | 88.15           | 2.57        | 7,919.85              | 4,966.66     | 785.94       | 5,011.24                | 3.14                    | -3.11                  | 0.44                  |  |
| 13,086.00                              | 88.24           | 2.48        | 7,922.81              | 5,060.52     | 790.08       | 5,105.15                | 0.14                    | 0.10                   | -0.10                 |  |
| 13,180.00                              | 89.69           | 2.45        | 7,924.51              | 5,154.41     | 794.12       | 5,199.09                | 1.54                    | 1.54                   | -0.03                 |  |
| 13,274.00                              | 91.01           | 2.30        | 7,923.93              | 5,248.33     | 798.02       | 5,293.04                | 1.41                    | 1.40                   | -0.16                 |  |
| 13,368.00                              | 89.55           | 2.47        | 7,923.47              | 5,342.24     | 801.93       | 5,386.98                | 1.56                    | -1.55                  | 0.18                  |  |
| 13,462.00                              | 88.24           | 359.81      | 7,925.28              | 5,436.20     | 803.80       | 5,480.82                | 3.15                    | -1.39                  | -2.83                 |  |
| 13,556.00                              | 88.70           | 358.83      | 7,927.79              | 5,530.16     | 802.69       | 5,574.43                | 1.15                    | 0.49                   | -1.04                 |  |
| 13,650.00                              | 89.88           | 358.29      | 7,928.96              | 5,624.12     | 800.32       | 5,667.96                | 1.38                    | 1.26                   | -0.57                 |  |
| 13,744.00                              | 91.05           | 357.27      | 7,928.20              | 5,718.04     | 796.68       | 5,761.36                | 1.65                    | 1.24                   | -1.09                 |  |
| 13,839.00                              | 92.44           | 356.94      | 7,925.30              | 5,812.87     | 791.89       | 5,855.57                | 1.50                    | 1.46                   | -0.35                 |  |
| 13,933.00                              | 90.55           | 358.14      | 7,922.85              | 5,906.75     | 787.85       | 5,948.89                | 2.38                    | -2.01                  | 1.28                  |  |
| 14,026.00                              | 90.50           | 358.90      | 7,922.00              | 5,999.71     | 785.45       | 6,041.42                | 0.82                    | -0.05                  | 0.82                  |  |
| 14,121.00                              | 91.30           | 358.69      | 7,920.51              | 6,094.68     | 783.45       | 6,135.98                | 0.87                    | 0.84                   | -0.22                 |  |
| 14,215.00                              | 89.57           | 358.59      | 7,919.79              | 6,188.65     | 781.22       | 6,229.52                | 1.84                    | -1.84                  | -0.11                 |  |
| 14,309.00                              | 90.19           | 359.20      | 7,919.99              | 6,282.63     | 779.41       | 6,323.11                | 0.93                    | 0.66                   | 0.65                  |  |
| 14,404.00                              | 90.33           | 358.05      | 7,919.56              | 6,377.60     | 777.13       | 6,417.65                | 1.22                    | 0.15                   | -1.21                 |  |
| <b>Tie In - ST01</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 14,468.00                              | 90.57           | 357.98      | 7,919.06              | 6,441.56     | 774.91       | 6,481.27                | 0.39                    | 0.38                   | -0.11                 |  |
| <b>First Phoenix MWD Survey - ST01</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 14,499.00                              | 88.73           | 359.40      | 7,919.25              | 6,472.55     | 774.21       | 6,512.12                | 7.50                    | -5.94                  | 4.58                  |  |
| 14,510.00                              | 88.58           | 359.30      | 7,919.50              | 6,483.54     | 774.08       | 6,523.08                | 1.64                    | -1.36                  | -0.91                 |  |
| 14,531.00                              | 87.90           | 359.75      | 7,920.15              | 6,504.53     | 773.91       | 6,544.00                | 3.88                    | -3.24                  | 2.14                  |  |
| 14,563.00                              | 89.05           | 1.09        | 7,921.00              | 6,536.52     | 774.14       | 6,575.91                | 5.52                    | 3.59                   | 4.19                  |  |
| 14,594.00                              | 90.00           | 2.06        | 7,921.26              | 6,567.50     | 774.99       | 6,606.88                | 4.38                    | 3.06                   | 3.13                  |  |
| 14,625.00                              | 90.35           | 4.58        | 7,921.16              | 6,598.45     | 776.79       | 6,637.87                | 8.21                    | 1.13                   | 8.13                  |  |
| 14,657.00                              | 90.60           | 5.97        | 7,920.90              | 6,630.31     | 779.73       | 6,669.86                | 4.41                    | 0.78                   | 4.34                  |  |
| 14,688.00                              | 91.08           | 6.36        | 7,920.44              | 6,661.13     | 783.06       | 6,700.84                | 1.99                    | 1.55                   | 1.26                  |  |
| 14,720.00                              | 90.20           | 6.40        | 7,920.09              | 6,692.93     | 786.62       | 6,732.82                | 2.75                    | -2.75                  | 0.13                  |  |
| 14,751.00                              | 89.77           | 6.56        | 7,920.09              | 6,723.73     | 790.11       | 6,763.80                | 1.48                    | -1.39                  | 0.52                  |  |
| 14,783.00                              | 89.84           | 6.24        | 7,920.20              | 6,755.53     | 793.68       | 6,795.77                | 1.02                    | 0.22                   | -1.00                 |  |
| 14,877.00                              | 88.54           | 3.90        | 7,921.53              | 6,849.15     | 801.99       | 6,889.75                | 2.85                    | -1.38                  | -2.49                 |  |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Survey                                 |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                  | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 14,970.00                              | 87.17           | 1.05        | 7,925.01              | 6,941.98     | 806.00       | 6,982.62                | 3.40                    | -1.47                  | -3.06                 |
| 15,064.00                              | 87.34           | 358.42      | 7,929.52              | 7,035.86     | 805.57       | 7,076.22                | 2.80                    | 0.18                   | -2.80                 |
| 15,158.00                              | 87.91           | 358.62      | 7,933.41              | 7,129.75     | 803.14       | 7,169.67                | 0.64                    | 0.61                   | 0.21                  |
| 15,253.00                              | 88.64           | 358.79      | 7,936.27              | 7,224.68     | 800.99       | 7,264.18                | 0.79                    | 0.77                   | 0.18                  |
| 15,347.00                              | 89.20           | 358.77      | 7,938.04              | 7,318.65     | 798.99       | 7,357.73                | 0.60                    | 0.60                   | -0.02                 |
| 15,441.00                              | 89.90           | 358.25      | 7,938.78              | 7,412.61     | 796.55       | 7,451.26                | 0.93                    | 0.74                   | -0.55                 |
| 15,536.00                              | 90.63           | 358.86      | 7,938.34              | 7,507.58     | 794.15       | 7,545.79                | 1.00                    | 0.77                   | 0.64                  |
| 15,631.00                              | 91.43           | 358.86      | 7,936.63              | 7,602.54     | 792.26       | 7,640.35                | 0.84                    | 0.84                   | 0.00                  |
| 15,725.00                              | 90.98           | 359.78      | 7,934.66              | 7,696.51     | 791.15       | 7,733.98                | 1.09                    | -0.48                  | 0.98                  |
| 15,819.00                              | 91.62           | 359.74      | 7,932.52              | 7,790.49     | 790.75       | 7,827.67                | 0.68                    | 0.68                   | -0.04                 |
| 15,913.00                              | 90.22           | 0.11        | 7,931.02              | 7,884.47     | 790.63       | 7,921.39                | 1.54                    | -1.49                  | 0.39                  |
| 16,006.00                              | 90.89           | 0.43        | 7,930.11              | 7,977.47     | 791.07       | 8,014.16                | 0.80                    | 0.72                   | 0.34                  |
| 16,100.00                              | 90.14           | 359.75      | 7,929.27              | 8,071.46     | 791.22       | 8,107.90                | 1.08                    | -0.80                  | -0.72                 |
| 16,194.00                              | 91.06           | 0.21        | 7,928.29              | 8,165.46     | 791.18       | 8,201.64                | 1.09                    | 0.98                   | 0.49                  |
| 16,288.00                              | 89.60           | 358.65      | 7,927.74              | 8,259.44     | 790.25       | 8,295.30                | 2.27                    | -1.55                  | -1.66                 |
| 16,383.00                              | 90.43           | 358.96      | 7,927.72              | 8,354.42     | 788.27       | 8,389.87                | 0.93                    | 0.87                   | 0.33                  |
| 16,476.00                              | 91.30           | 358.87      | 7,926.31              | 8,447.40     | 786.51       | 8,482.45                | 0.94                    | 0.94                   | -0.10                 |
| 16,570.00                              | 92.28           | 358.78      | 7,923.38              | 8,541.33     | 784.58       | 8,575.99                | 1.05                    | 1.04                   | -0.10                 |
| 16,665.00                              | 92.02           | 359.43      | 7,919.81              | 8,636.25     | 783.10       | 8,670.54                | 0.74                    | -0.27                  | 0.68                  |
| 16,759.00                              | 90.99           | 359.70      | 7,917.35              | 8,730.21     | 782.38       | 8,764.19                | 1.13                    | -1.10                  | 0.29                  |
| 16,853.00                              | 87.94           | 359.65      | 7,918.22              | 8,824.20     | 781.85       | 8,857.87                | 3.25                    | -3.24                  | -0.05                 |
| 16,947.00                              | 88.66           | 359.82      | 7,921.01              | 8,918.15     | 781.42       | 8,951.54                | 0.79                    | 0.77                   | 0.18                  |
| 17,042.00                              | 89.70           | 0.20        | 7,922.37              | 9,013.14     | 781.43       | 9,046.27                | 1.17                    | 1.09                   | 0.40                  |
| 17,136.00                              | 89.19           | 0.32        | 7,923.28              | 9,107.14     | 781.86       | 9,140.04                | 0.56                    | -0.54                  | 0.13                  |
| 17,230.00                              | 88.94           | 0.43        | 7,924.82              | 9,201.12     | 782.48       | 9,233.81                | 0.29                    | -0.27                  | 0.12                  |
| 17,324.00                              | 89.17           | 1.25        | 7,926.37              | 9,295.10     | 783.85       | 9,327.63                | 0.91                    | 0.24                   | 0.87                  |
| 17,418.00                              | 88.11           | 359.38      | 7,928.60              | 9,389.06     | 784.37       | 9,421.37                | 2.29                    | -1.13                  | -1.99                 |
| 17,511.00                              | 88.14           | 358.84      | 7,931.64              | 9,482.00     | 782.93       | 9,513.95                | 0.58                    | 0.03                   | -0.58                 |
| 17,604.00                              | 89.02           | 358.97      | 7,933.95              | 9,574.96     | 781.15       | 9,606.52                | 0.96                    | 0.95                   | 0.14                  |
| 17,699.00                              | 89.84           | 359.43      | 7,934.89              | 9,669.94     | 779.82       | 9,701.14                | 0.99                    | 0.86                   | 0.48                  |
| 17,791.00                              | 90.89           | 0.01        | 7,934.30              | 9,761.94     | 779.37       | 9,792.85                | 1.30                    | 1.14                   | 0.63                  |
| 17,886.00                              | 91.57           | 359.81      | 7,932.26              | 9,856.91     | 779.22       | 9,887.56                | 0.75                    | 0.72                   | -0.21                 |
| 17,980.00                              | 89.84           | 359.65      | 7,931.11              | 9,950.90     | 778.78       | 9,981.25                | 1.85                    | -1.84                  | -0.17                 |
| 18,074.00                              | 89.75           | 359.54      | 7,931.44              | 10,044.90    | 778.12       | 10,074.94               | 0.15                    | -0.10                  | -0.12                 |
| 18,169.00                              | 90.38           | 359.69      | 7,931.34              | 10,139.90    | 777.48       | 10,169.63               | 0.68                    | 0.66                   | 0.16                  |
| 18,259.00                              | 91.19           | 358.77      | 7,930.10              | 10,229.88    | 776.27       | 10,259.28               | 1.36                    | 0.90                   | -1.02                 |
| <b>Final Phoenix MWD Survey - ST01</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 18,274.00                              | 91.19           | 358.77      | 7,929.79              | 10,244.87    | 775.95       | 10,274.20               | 0.00                    | 0.00                   | 0.00                  |
| <b>LTP: 18274' MD</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 18,324.00                              | 91.19           | 358.77      | 7,928.75              | 10,294.85    | 774.87       | 10,323.97               | 0.00                    | 0.00                   | 0.00                  |
| <b>Projection to TD - ST01</b>         |                 |             |                       |              |              |                         |                         |                        |                       |



## Survey Report



|                  |                             |                                     |                                |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COG Operating LLC           | <b>Local Co-ordinate Reference:</b> | Well 503H                      |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | RKB @ 3095.00usft (Ensign 155) |
| <b>Site:</b>     | Myox 31 State Com           | <b>MD Reference:</b>                | RKB @ 3095.00usft (Ensign 155) |
| <b>Well:</b>     | 503H                        | <b>North Reference:</b>             | Grid                           |
| <b>Wellbore:</b> | ST01 / 66066                | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | Surveys (Ensign 155)        | <b>Database:</b>                    | USA Compass                    |

| Design Targets                                                                                                                                  |                  |                 |               |                 |                 |                    |                   |                    |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|--------------------|---------------------|
| Target Name<br>- hit/miss target<br>- Shape                                                                                                     | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude           | Longitude           |
| FTP v1 - Myox 31 State<br>- actual wellpath misses target center by 440.74usft at 8018.34usft MD (7866.61 TVD, 68.49 N, 437.70 E)<br>- Point    | 0.00             | 0.01            | 7,924.00      | -166.70         | 806.00          | 392,557.20         | 563,731.20        | 32° 4' 44.717945 N | 104° 7' 39.247217 W |
| LTP v1 - Myox 31 State<br>- actual wellpath misses target center by 12.74usft at 18274.00usft MD (7929.79 TVD, 10244.87 N, 775.95 E)<br>- Point | 0.00             | 0.01            | 7,924.00      | 10,245.20       | 764.60          | 402,969.10         | 563,689.80        | 32° 6' 27.760367 N | 104° 7' 39.497580 W |
| BHL v1 - Myox 31 State<br>- actual wellpath misses target center by 11.69usft at 18324.00usft MD (7928.75 TVD, 10294.85 N, 774.87 E)<br>- Point | 0.00             | 0.01            | 7,924.00      | 10,295.20       | 764.20          | 403,019.10         | 563,689.40        | 32° 6' 28.255200 N | 104° 7' 39.501121 W |

| Design Annotations          |                             |                   |                 |                                 |  |
|-----------------------------|-----------------------------|-------------------|-----------------|---------------------------------|--|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 |                                 |  |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) | Comment                         |  |
| 14,404.00                   | 7,919.56                    | 6,377.60          | 777.13          | Tie In - ST01                   |  |
| 14,468.00                   | 7,919.06                    | 6,441.56          | 774.91          | First Phoenix MWD Survey - ST01 |  |
| 18,259.00                   | 7,930.10                    | 10,229.88         | 776.27          | Final Phoenix MWD Survey - ST01 |  |
| 18,274.00                   | 7,929.79                    | 10,244.87         | 775.95          | LTP: 18274' MD                  |  |
| 18,324.00                   | 7,928.75                    | 10,294.85         | 774.87          | Projection to TD - ST01         |  |



NMOCD-REC'D 11/02/2020

|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------|----------------------------------------------------------------------|---------------|---------------|
| Submit To Appropriate District Office<br>Two Copies<br><u>District I</u><br>1625 N. French Dr., Hobbs, NM 88240<br><u>District II</u><br>811 S. First St., Artesia, NM 88210<br><u>District III</u><br>1000 Rio Brazos Rd., Aztec, NM 87410<br><u>District IV</u><br>1220 S. St. Francis Dr., Santa Fe, NM 87505                                             |                       | <b>State of New Mexico</b><br><b>Energy, Minerals and Natural Resources</b><br><br><b>Oil Conservation Division</b><br><b>1220 South St. Francis Dr.</b><br><b>Santa Fe, NM 87505</b> |                        |                                       | <b>Form C-105</b><br>Revised April 3, 2017                                                                 |                                                 |                 |                                                                      |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       | 1. WELL API NO.                                                                                                                                                                       |                        |                                       | 30-015-46499                                                                                               |                                                 |                 |                                                                      |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       | 2. Type of Lease                                                                                                                                                                      |                        |                                       | <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN |                                                 |                 |                                                                      |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       | 3. State Oil & Gas Lease No.                                                                                                                                                          |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| <b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>                                                                                                                                                                                                                                                                                                        |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 4. Reason for filing:                                                                                                                                                                                                                                                                                                                                        |                       |                                                                                                                                                                                       |                        | 5. Lease Name or Unit Agreement Name  |                                                                                                            |                                                 |                 |                                                                      |               |               |
| <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)<br><br><input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC) |                       |                                                                                                                                                                                       |                        | Myox31 State Com                      |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 7. Type of Completion:                                                                                                                                                                                                                                                                                                                                       |                       |                                                                                                                                                                                       |                        | 6. Well Number:                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER _____                                                                                                                        |                       |                                                                                                                                                                                       |                        | 503H                                  |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 8. Name of Operator                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                       |                        | 9. OGRID                              |                                                                                                            |                                                 |                 |                                                                      |               |               |
| COG Operating LLC                                                                                                                                                                                                                                                                                                                                            |                       |                                                                                                                                                                                       |                        | 229137                                |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 10. Address of Operator                                                                                                                                                                                                                                                                                                                                      |                       |                                                                                                                                                                                       |                        | 11. Pool name or Wildcat              |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 2208 W. Main Street                                                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                       |                        | Delaware River; Bone Spring           |                                                                                                            |                                                 |                 |                                                                      |               |               |
| Artesia, NM 88210                                                                                                                                                                                                                                                                                                                                            |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 12. Location                                                                                                                                                                                                                                                                                                                                                 | Unit Ltr              | Section                                                                                                                                                                               | Township               | Range                                 | Lot                                                                                                        | Feet from the                                   | N/S Line        | Feet from the                                                        | E/W Line      | County        |
| Surface:                                                                                                                                                                                                                                                                                                                                                     | N                     | 31                                                                                                                                                                                    | 25S                    | 28E                                   |                                                                                                            | 270'                                            | South           | 1420'                                                                | West          | Eddy          |
| BH:                                                                                                                                                                                                                                                                                                                                                          | C                     | 30                                                                                                                                                                                    | 25S                    | 28E                                   |                                                                                                            | 50'                                             | North           | 2238'                                                                | West          | Eddy          |
| 13. Date Spudded                                                                                                                                                                                                                                                                                                                                             | 14. Date T.D. Reached | 15. Date Rig Released                                                                                                                                                                 |                        | 16. Date Completed (Ready to Produce) |                                                                                                            | 17. Elevations (DF and RKB, RT, GR, etc.)       |                 | 3071' GR                                                             |               |               |
| 12/30/19                                                                                                                                                                                                                                                                                                                                                     | 2/4/20                | 2/8/20                                                                                                                                                                                |                        | 9/14/20                               |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 18. Total Measured Depth of Well                                                                                                                                                                                                                                                                                                                             |                       | 19. Plug Back Measured Depth                                                                                                                                                          |                        | 20. Was Directional Survey Made?      |                                                                                                            | 21. Type Electric and Other Logs Run            |                 |                                                                      |               |               |
| 18,324'                                                                                                                                                                                                                                                                                                                                                      |                       | 18,240'                                                                                                                                                                               |                        | Yes                                   |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 22. Producing Interval(s), of this completion - Top, Bottom, Name                                                                                                                                                                                                                                                                                            |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 | 8,070-18,215' Bone Spring                                            |               |               |
| <b>23. CASING RECORD (Report all strings set in well)</b>                                                                                                                                                                                                                                                                                                    |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| CASING SIZE                                                                                                                                                                                                                                                                                                                                                  |                       | WEIGHT LB./FT.                                                                                                                                                                        |                        | DEPTH SET                             |                                                                                                            | HOLE SIZE                                       |                 | CEMENTING RECORD                                                     |               | AMOUNT PULLED |
| 13 3/8"                                                                                                                                                                                                                                                                                                                                                      |                       | 54.5#                                                                                                                                                                                 |                        | 515'                                  |                                                                                                            | 14 3/4"                                         |                 | 675 sx                                                               |               |               |
| 9 5/8                                                                                                                                                                                                                                                                                                                                                        |                       | 40#                                                                                                                                                                                   |                        | 2350'                                 |                                                                                                            | 12 1/4"                                         |                 | 600 sx                                                               |               |               |
| 5 1/2"                                                                                                                                                                                                                                                                                                                                                       |                       | 17#                                                                                                                                                                                   |                        | 18311'                                |                                                                                                            | 8 3/4"                                          |                 | 3500 sx                                                              |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| <b>24. LINER RECORD</b>                                                                                                                                                                                                                                                                                                                                      |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | <b>25. TUBING RECORD</b>                        |                 |                                                                      |               |               |
| SIZE                                                                                                                                                                                                                                                                                                                                                         | TOP                   | BOTTOM                                                                                                                                                                                | SACKS CEMENT           | SCREEN                                | SIZE                                                                                                       | DEPTH SET                                       | PACKER SET      |                                                                      |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       | 2 7/8"                                                                                                     | 7349'                                           | 7339' 7439'     |                                                                      |               |               |
| 26. Perforation record (interval, size, and number)                                                                                                                                                                                                                                                                                                          |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. |                 |                                                                      |               |               |
| 8,070-18,215' (1200)                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | DEPTH INTERVAL                                  |                 | AMOUNT AND KIND MATERIAL USED                                        |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | 8070-18,215'                                    |                 | Acidz w/0 gal 7 1/2%; Frac w/25,573,835# sand & 25,498,078 gal fluid |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| <b>28. PRODUCTION</b>                                                                                                                                                                                                                                                                                                                                        |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| Date First Production                                                                                                                                                                                                                                                                                                                                        |                       | Production Method (Flowing, gas lift, pumping - Size and type pump)                                                                                                                   |                        |                                       |                                                                                                            | Well Status (Prod. or Shut-in)                  |                 |                                                                      |               |               |
| 10/7/20                                                                                                                                                                                                                                                                                                                                                      |                       | Flowing                                                                                                                                                                               |                        |                                       |                                                                                                            | Producing                                       |                 |                                                                      |               |               |
| Date of Test                                                                                                                                                                                                                                                                                                                                                 | Hours Tested          | Choke Size                                                                                                                                                                            | Prod'n For Test Period | Oil - Bbl                             | Gas - MCF                                                                                                  | Water - Bbl.                                    | Gas - Oil Ratio |                                                                      |               |               |
| 10/7/20                                                                                                                                                                                                                                                                                                                                                      | 24                    | 60/128"                                                                                                                                                                               |                        | 390                                   | 517                                                                                                        | 3858                                            |                 |                                                                      |               |               |
| Flow Tubing Press.                                                                                                                                                                                                                                                                                                                                           | Casing Pressure       | Calculated 24-Hour Rate                                                                                                                                                               | Oil - Bbl.             | Gas - MCF                             | Water - Bbl.                                                                                               | Oil Gravity - API - (Corr.)                     |                 |                                                                      |               |               |
| 544#                                                                                                                                                                                                                                                                                                                                                         | 345#                  |                                                                                                                                                                                       | 390                    | 517                                   | 3858                                                                                                       |                                                 |                 |                                                                      |               |               |
| 29. Disposition of Gas (Sold, used for fuel, vented, etc.)                                                                                                                                                                                                                                                                                                   |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | 30. Test Witnessed By                           |                 |                                                                      |               |               |
| Sold                                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | Nicholas Jancha                                 |                 |                                                                      |               |               |
| 31. List Attachments                                                                                                                                                                                                                                                                                                                                         |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| Surveys                                                                                                                                                                                                                                                                                                                                                      |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.                                                                                                                                                                                                                                                           |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | 33. Rig Release Date:                           |                 |                                                                      |               |               |
|                                                                                                                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            | 2/8/20                                          |                 |                                                                      |               |               |
| 34. If an on-site burial was used at the well, report the exact location of the on-site burial:                                                                                                                                                                                                                                                              |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| Latitude                                                                                                                                                                                                                                                                                                                                                     |                       |                                                                                                                                                                                       |                        | Longitude                             |                                                                                                            |                                                 |                 | NAD83                                                                |               |               |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief                                                                                                                                                                                                                           |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |
| Signature <i>Amanda Avery</i>                                                                                                                                                                                                                                                                                                                                |                       |                                                                                                                                                                                       | Name: Amanda Avery     |                                       |                                                                                                            | Title Regulatory Analyst                        |                 |                                                                      | Date: 11/2/20 |               |
| E-mail Address: <a href="mailto:aavery@concho.com">aavery@concho.com</a>                                                                                                                                                                                                                                                                                     |                       |                                                                                                                                                                                       |                        |                                       |                                                                                                            |                                                 |                 |                                                                      |               |               |

12/10/2020 AB

| From | To | Thickness<br>In Feet | Lithology |
|------|----|----------------------|-----------|
|      |    |                      |           |

|              |                   |                    |                  |           |        |                |       |              |        |
|--------------|-------------------|--------------------|------------------|-----------|--------|----------------|-------|--------------|--------|
| Operator:    | COG OPERATING LLC | 600 W Illinois Ave | Midland, TX79701 | OGRID:    | 229137 | Action Number: | 12672 | Action Type: | C-104C |
| OCD Reviewer |                   |                    |                  | Condition |        |                |       |              |        |
| abustamante  |                   |                    |                  | None      |        |                |       |              |        |