#### OCD - HOBBS

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Design: OH

**EOG PVA** 

15 October, 2015

Deog resources

**EOG Resources - Midland** 

Lea County, NM (NAD 27 NME)

Fruit Loop 29 State

#501H

## • eog resources

#### EOG Resources, Inc. EOG PVA

| Company: Project: Site: Well: Wellbore: Design: | EOG Resources - Midland Lea County, NM (NAD 27 NME) Fruit Loop 29 State #501H OH OH                           | Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: | Well #501H  KB = 25' @ 3751.0usft (H&P 415)  KB = 25' @ 3751.0usft (H&P 415)  Grid  Minimum Curvature |
|---|---|---|---|
| Project Map System: Geo Datum: Map Zone:        | Lea County, NM (NAD 27 NME) US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) New Mexico East 3001 | System Datum:   | Mean Sea Level  |

|                      |       | CENTRE STORE SERVICE OF THE SERVICE CONTRACTOR |                     |                           |               |                   |
|----------------------|-------|--|---------------------|---------------------------|---------------|-------------------|
| Well                 | #501H |  |                     |                           |               |                   |
| Well Position        | S-/N+ |  | ing:                | 530,557.00 usft Latitude: |               | 32° 27' 23.241 N  |
|                      | +E/-W | 0.0 usft                                       | Easting:            | 727,360.00 usft           | Longitude:    | 103° 35' 46.447 W |
| Position Uncertainty | ,     | 0.0 usft                                       | Wellhead Elevation: | 0.0 usft                  | Ground Level: | 3,726.0 usft      |
|                      |       |  |                     |                           |               |                   |

32° 26' 35.478 N 103° 36' 5.623 W 0.39°

Latitude: Longitude: Grid Convergence:

525,719.00 usft 725,750.00 usft 13-3/16 "

Northing: Easting: Slot Radius:

Fruit Loop 29 State

Site

0.0 usft

Map

Site Position: From: Position Uncertainty:

| Sample Date Declination Dip Angle Field Strength (°) (nT) | Wellbore  | НО         |             |                 |       |                     |  |
|---|-----------|------------|-------------|-----------------|-------|---------------------|--|
| C. L.   | Magnetics | Model Name | Sample Date | Declination (°) |       | Field Strength (nT) |  |
| 10/10/2015 /.16 60.29                                     |           | IGRF2015   | 10/10/2015  | 7.16            | 60.29 | 48.246              |  |

| Design | Audit Notes: | Version:      | Vertical Section: |        |        |
|--------|--------------|---------------|-------------------|--------|--------|
| 픙      |              | 1.0           |                   |        |        |
|        |              | Phase:        | Depth From (TVD)  | (nsft) | 0.0    |
|        |              | ACTUAL        |                   | (nsft) | 0.0    |
|        |              | Tie On Depth: | ₩-/3+             | (nstt) | 0.0    |
|        |              | 0.0           | Direction         | (3)    | 175.64 |
|        |              |               |                   |        |        |
|        |              |               |                   |        |        |
|        |              |               |                   |        |        |

| Survey Program | Date 10/15/2015                |           |                |  |
|----------------|--------------------------------|-----------|----------------|--|
| From           | <b>1</b> 2                     |           |                |  |
| (nstt)         | (usft) Survey (Wellbore)       | Tool Name | Description    |  |
| 199.0          | 15,800.0 Drilltech MWD #1 (OH) | MWD       | MWD - Standard |  |

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### EOG Resources, Inc.

**EOG PVA** 

|              | #501H<br>#501H<br>OH<br>OH | Fruit Loop 29 State<br>#501H<br>OH<br>OH | Lea County, NM (NAD 27 NME)<br>Fruit Loop 29 State<br>#501H<br>OH<br>OH | ΙΕ)                     |            |               |       |            |       | Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database: | ate Reference:<br>:<br>e:<br>ion Method: | Well #501H  KB = 25' @ 3751.0usft (H&P  KB = 25' @ 3751.0usft (H&P  Grid  Minimum Curvature  EDM 5000.1 Single User Db | Well #501H KB = 25' @ 3751.0usft (H&P 415) KB = 25' @ 3751.0usft (H&P 415) Grid Minimum Curvature EDM 5000.1 Single User Db |               |
|--------------|----------------------------|--|---|-------------------------|------------|---------------|-------|------------|-------|---|--|--|---|---------------|
| Survey       |                            |  |   |                         |            |               |       |            |       |   |  |  |   |               |
| MD<br>(usft) |                            | lnc<br>(°)                               | (grid_r   | Azi<br>(grid_north_azim | TVD (usft) | N/S<br>(usft) |       | E/W (usft) |       | DLeg<br>(*/100usft)   | Build (*/100usft)                        | Turn (*/100usft)   | High to Plan  | Right to Plan |
|              | 0.0                        |  | 0.00  | 0.00                    | 0.0        |               | 0.0   |            | 0.0   | 0.00  | 0.00                                     | 0.00   | 0.0   | 0.0           |
|              | 199.0                      |  | 06.0  | 265.50                  | 199.0      |               | -0.1  |            | -1.6  | 0.45  | 0.45                                     | 0.00   | -1.6  | 0.0           |
|              | 321.0                      |  | 0.40  | 293.10                  | 321.0      |               | 0.0   |            | -2.9  | 0.47  | -0.41                                    | 22.62  | -2.7  | 1.2           |
|              | 416.0                      |  | 0.40  | 282.20                  | 416.0      |               | 0.2   |            | -3.5  | 0.08  | 0.00                                     | -11.47   | -3.5  | 9.0           |
|              | 601.0                      |  | 1.40  | 285.00                  | 601.0      |               | 6.0   |            | -6.3  | 0.54  | 0.54                                     | 1.51   | -6.4  | 0.8           |
|              | 786.0                      |  | 2.30  | 263.40                  | 785.9      |               | 1.0   | ī          | -12.2 | 0.61  | 0.49                                     | -11.68   | -12.0   | -2.4          |
|              | 880.0                      |  | 2.10  | 251.10                  | 879.8      |               | 0.3   | 7          | -15.7 | 0.54  | -0.21                                    | -13.09   | -14.8   | -5.4          |
|              | 974.0                      |  | 3.90  | 229.70                  | 973.7      |               | -2.4  | ï          | -19.8 | 2.22  | 1.91                                     | -22.77   | -16.6   | -11.0         |
|              | 1,059.0                    |  | 4.00  | 226.80                  | 1,058.5    |               | -6.3  | ',         | -24.2 | 0.26  | 0.12                                     | -3.41  | -21.9   | -12.0         |
|              | 1,153.0                    |  | 2.60  | 205.20                  | 1,152.3    |               | -10.4 | 14         | -27.5 | 1.97  | -1.49                                    | -22.98   | -21.1   | -20.4         |
|              | 1,248.0                    |  | 3.20  | 170.80                  | 1,247.2    |               | -15.0 | '7         | -27.9 | 1.90  | 0.63                                     | -36.21   | -10.3   | -30.0         |
|              | 1,342.0                    |  | 2.30  | 155.80                  | 1,341.1    |               | -19.3 | ,7         | -26.8 | 1.22  | 96.0-                                    | -15.96   | 9.9-  | -32.3         |
|              | 1,437.0                    |  | 1.80  | 145.80                  | 1,436.0    |               | -22.3 | '7'        | -25.1 | 0.65  | -0.53                                    | -10.53   | -4.3  | -33.3         |
|              | 1,531.0                    |  | 2.50  | 138.10                  | 1,530.0    |               | -25.0 | `,         | -22.9 | 0.80  | 0.74                                     | -8.19  | -3.3  | -33.8         |
|              | 1,626.0                    |  | 2.30  | 125.20                  | 1,624.9    |               | -27.7 | 17         | -20.0 | 0.60  | -0.21                                    | -13.58   | 0.4   | -34.1         |
|              | 1,644.0                    |  | 2.50  | 131.40                  | 1,642.9    |               | -28.1 | ٦          | -19.4 | 1.82  | 1.11                                     | 34.44  | 4.0   | -33.9         |
|              | 1,720.0                    |  | 2.10  | 127.70                  | 1,718.8    |               | -30.1 | ī          | -17.1 | 0.56  | -0.53                                    | -4.87  | 4.9   | -34.2         |
|              | 1,815.0                    |  | 1.90  | 26.90                   | 1,813.7    |               | -30.3 | 7          | -14.4 | 2.44  | -0.21                                    | -74.53   | 28.6  | -17.5         |
|              | 1,909.0                    |  | 2.60  | 34.50                   | 1,907.7    |               | -27.7 | T          | -11.8 | 1.18  | 0.74                                     | -23.83   | 29.5  | -5.9          |
|              | 2,003.0                    |  | 2.50  | 38.20                   | 2,001.6    |               | -24.3 | 10.        | -9.4  | 0.20  | -0.11                                    | 3.94   | 24.9  | 7.7-          |
|              | 2,098.0                    |  | 2.10  | 41.60                   | 2,096.5    |               | -21.4 |            | -6.9  | 0.44  | -0.42                                    | 3.58   | 20.6  | 0.6-          |
|              | 2,193.0                    |  | 2.60  | 30.70                   | 2,191.4    |               | -18.2 |            | -4.7  | 0.70  | 0.53                                     | -11.47   | 18.1  | -5.3          |
|              | 2,287.0                    |  | 4.00  | 28.70                   | 2,285.3    |               | -13.5 |            | -2.0  | 1.49  | 1.49                                     | -2.13  | 12.8  | -4.7          |
|              | 2,382.0                    |  | 4.40  | 28.60                   | 2,380.0    |               | -7.4  |            | 1.3   | 0.42  | 0.42                                     | -0.11  | 5.9   | -4.7          |
|              | 2,477.0                    |  | 4.20  | 30.00                   | 2,474.7    |               | -1.2  |            | 4.8   | 0.24  | -0.21                                    | 1.47   | 4.1-  | -4.8          |
|              | 2,571.0                    |  | 3.70  | 31.00                   | 2,568.5    |               | 4.4   |            | 8.1   | 0.54  | -0.53                                    | 1.06   | -7.9  | 7.4-7         |
|              | 2,666.0                    |  | 3.50  | 31.20                   | 2,663.3    |               | 9.5   |            | 11.2  | 0.21  | -0.21                                    | 0.21   | -13.9   | -4.6          |

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**EOG PVA** 

| Math   Math | Company: Project: Site: Well: Wellichericherichericherichericherichericher | EOG Resources - N<br>Lea County, NM (NV<br>Fruit Loop 29 State<br>#501H<br>OH | EOG Resources - Midland<br>Lea County, NM (NAD 27 NME)<br>Fruit Loop 29 State<br>#501H<br>OH | d<br>NME)      |         |      |        | Loca<br>TVD<br>MD F<br>North<br>Surv | Local Co-ordinate Reference:<br>TVD Reference:<br>MD Reference:<br>North Reference:<br>Survey Calculation Method:<br>Database: | teference:<br>Method: | Well #501H  KB = 25' @ 3751.0usft (H&P  KB = 25' @ 3751.0usft (H&P  Grid  Minimum Curvature  EDM 5000.1 Single User Db | Well #501H KB = 25' @ 3751.0usft (H&P 415) KB = 25' @ 3751.0usft (H&P 415) Grid Minimum Curvature EDM 5000.1 Single User Db |               |
|---|--|---|--|----------------|---------|------|--------|--------------------------------------|--|-----------------------|--|---|---------------|
| 11.6         Asia         Asia         May         Learny         Asia         Asia <t< th=""><th>Survey</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>   | Survey   |   |  |                |         |      |        |                                      |  |                       |  |   |               |
| 7.30         Annial (anti)         (a   | MD   | lnc   |  | Azi            | 57      | N/S  | E/W    | Dre                                  |  | Build                 | Turn   | High to Plan  | Right to Plan |
| 3.20         3.20         2.766.2         14.1         14.0         0.33         -0.32         0.75         -16.4           4.50         3.220         2.576.2         14.1         14.0         0.35         0.74         0.74         0.75         -16.4           4.50         3.77.0         2.546.0         18.1         17.1         0.55         0.74         0.74         0.56         -2.52           4.50         3.77.0         2.546.0         3.03.2         2.58         0.64         -0.43         6.77         -3.27           3.50         4.50         3.732.0         2.50         3.64         0.74         0.73         0.74         -0.22         2.50           3.00         4.720         3.727.0         3.69.5         2.50         0.07         0.74         0.73         0.74         0.72         0.22         0.22         0.22         0.22         0.22         0.22         0.24         0  | (nsft)   |   |  | rid_north_azim | (nsft)  |      | (nsft) | (°/100n                              |  | /100usft)             | (°/100usft)  | (nsft)  | (usft)        |
| 380         32.30         286.00         19.1         17.1         0.75         0.74         0.43         -25.2           480         480         48.00         21.2         0.84         0.74         6.88         0.22.6           320         48.00         3.132.2         3.0         3.2         0.04         0.74         0.28         2.68           320         48.00         3.132.2         3.0         3.0         3.0         0.24         0.24         0.28         2.68         4.63         0.24         0.24         0.28         2.68         4.63         0.24         0.2   | 2,   | 759.0   | 3.20   | 31.90          | 2,756.2 | 14.1 | ***    | 4.0                                  | 0.33   | -0.32                 | 0.7  |   | 4.4-          |
| 4 60         37.70         2,844.7         24.8         21.2         0.85         0.74         5.8         -22.6           4 20         4.50         3,038.5         30.3         2.5         0.64         -0.43         6.17         -39.7           3 20         4.60         4.60         3,038.5         30.3         2.5         0.64         -0.43         6.17         -3.97           3 20         4.60         3,032.2         30.0         34.5         2.6         0.64         -0.43         6.17         -3.97           3 20         4.60         3,321.9         36.6         34.5         0.74         -0.74         1.26         -25.0           3 00         4.20         3,321.9         4.65         0.21         0.21         -0.21         -0.25         -0.22           3 00         4.20         3,457.7         4.65         6.2         0.24         0.74         -0.74   | 2,   | 353.0   | 3.90   | 32.30          | 2,850.0 | 19.1 | *-     | 7.1                                  | 0.75   | 0.74                  | 0.4  |   | 4.3           |
| 420         420         420         644         644         647         647         647         647         648         658 <td>2,</td> <td>948.0</td> <td>4.60</td> <td>37.70</td> <td>2,944.7</td> <td>24.8</td> <td>1.4</td> <td>1.2</td> <td>0.85</td> <td>0.74</td> <td>5.68</td> <td></td> <td>-1.6</td>  | 2,   | 948.0   | 4.60   | 37.70          | 2,944.7 | 24.8 | 1.4    | 1.2                                  | 0.85   | 0.74                  | 5.68   |   | -1.6          |
| 390         46.00         31,922         35.0         30.5         0.37         0.32         2.66         46.3           3.20         47.20         38.0         34.6         0.74         0.74         1.26         -62.0           3.20         46.20         38.1         42.5         38.5         0.74         0.73         -62.0           3.70         46.00         34.15.7         46.5         42.4         0.74         0.74         -62.0           4.00         42.00         3.415.7         46.5         6.4         0.74         0.74         -62.0           4.00         42.00         3.606.2         51.1         46.6         0.21         0.74         -63.6         -62.0           2.00         47.00         3.606.2         56.1         6.4         0.55         0.05         0.05         -6.5         -6.6   | 3,0  | 042.0   | 4.20   | 43.50          | 3,038.5 | 30.3 | N      | 5.8                                  | 0.64   | -0.43                 | 6.1  |   | 2.1           |
| 3.20         47.20         3.227.0         3.6         4.5         0.74         0.74         1.26         -62.0           3.00         46.70         42.5         3.6         0.21         -0.21         -0.23         -57.2           3.00         46.70         42.5         36.5         6.2         0.21         -0.21         -0.23         -57.2           4.00         42.60         3.504.5         51.1         46.6         0.24         0.23         0.24         -0.23         -57.2           2.00         47.40         3.586.2         56.1         66.3         54.7         0.53         2.64         -0.03         -0.53         0.64         -0.03         -0.03         -0.04         -0.04         -0.04         -0.03         -0.03         -0.04   | က်   | 136.0   | 3.90   | 46.00          | 3,132.2 | 35.0 | 0,     | 30.5                                 | 0.37   | -0.32                 | 2.6  |   | 4.0           |
| 3.00         467.0         3,321,9         4.25         88.5         0.21         -0.21         -0.53         -57.2           3.70         42.80         3,415.7         48.5         42.4         0.74         -0.21         -0.53         -57.2           4.00         42.80         3,608.5         51.1         46.6         0.32         0.32         0.03         -69.2         -69.2           2.50         44.80         3,608.2         51.1         46.7         0.54         -0.53         0.00         -69.2           2.50         44.80         3,792.1         65.3         64.4         0.54         -0.53         0.00         -69.2           2.50         44.80         3,792.1         65.4         0.54         -0.53         1.26         -99.4           2.50         55.0         4,790.2         65.4         0.53         0.53         1.58         -99.4           2.50         55.0         4,074.7         7.1         69.5         0.53         0.53         1.16         -0.03         -0.03         -0.04         -0.04         -0.04         -0.04         -0.04         -0.04         -0.05         -0.03         -0.00         -0.00         -0.03         -0.00 </td <td>·κ</td> <td>231.0</td> <td>3.20</td> <td>47.20</td> <td>3,227.0</td> <td>39.0</td> <td></td> <td>14.8</td> <td>0.74</td> <td>-0.74</td> <td>1.26</td> <td></td> <td>5.0</td>   | ·κ   | 231.0   | 3.20   | 47.20          | 3,227.0 | 39.0 |        | 14.8                                 | 0.74   | -0.74                 | 1.26   |   | 5.0           |
| 400         42.60         34.16.7         46.5         42.4         0.79         0.74         4.36         62.9           400         42.60         35.09.5         51.1         46.6         0.32         0.32         0.00         -69.2           300         47.40         35.09.5         51.1         46.6         0.55         -0.53         2.54         -80.4           280         47.40         35.09.2         65.3         64.7         0.55         0.53         1.28         -80.4           280         51.10         35.86.0         65.3         65.4         0.53         1.28         -80.4         1.48           280         55.80         4074.7         71.1         69.5         0.53         1.58         1.58         -80.4           280         58.00         4,796.6         73.4         73.2         0.53         0.53         1.58         -90.4         -90.6           280         58.00         4,786.5         73.4         73.2         0.53         0.54         -0.74         -10.6         -10.4         -10.6         -10.6         -10.6         -10.6         -10.6         -10.6         -10.6         -10.6         -10.6         -10.6 <t< td=""><td>· κ</td><td>326.0</td><td>3.00</td><td>46.70</td><td>3,321.9</td><td>42.5</td><td>e,</td><td>38.5</td><td>0.21</td><td>-0.21</td><td>-0.5</td><td></td><td>4.6</td></t<>  | · κ  | 326.0   | 3.00   | 46.70          | 3,321.9 | 42.5 | e,     | 38.5                                 | 0.21   | -0.21                 | -0.5   |   | 4.6           |
| 4.00         4.2 60         3.508.5         51.1         46.6         0.32         0.32         0.00         -69.2           3.00         47.40         3.688.2         58.3         54.7         0.55         0.05         2.54         -90.4           2.50         48.60         3.988.2         58.3         58.1         0.54         -0.53         1.28         -84.8           2.50         48.60         3.986.2         65.1         61.4         0.54         -0.53         1.28         -84.8           2.50         55.00         4.986.0         65.1         71.1         65.4         0.53         1.58         -98.7         1.68.7           2.60         55.00         4.169.6         7.44         73.2         0.53         0.53         1.58         -98.7           1.50         56.30         4.169.6         7.53         76.3         0.54         0.53         1.68         -0.64         -0.64         0.74         1.00.6         -0.65         1.68         0.74         1.00.6         0.74         1.00.6         0.74         0.74         1.00.6         0.74         0.74         1.00.6         0.74         0.74         1.00.7         0.74         1.00.7         0.74<   | é,   | 420.0   | 3.70   | 42.60          | 3,415.7 | 46.5 | 4      | 12.4                                 | 0.79   | 0.74                  | -4.3   |   | 0.3           |
| 3,00         47,40         3,686.2         59.3         54.7         0,55         -0,53         2,54         -80,4           2,50         48,60         3,782.1         62.3         58.1         0,54         0,53         1,28         -64.8           2,80         48,60         3,782.1         62.3         68.1         61.4         0,54         0,53         1,28         -64.8           2,80         51,10         3,866.0         65.1         61.4         0,54         0,53         1,58         -68.7         -68.7           2,80         52,60         4,074.7         71.1         69.5         0,51         0,53         1,58         -68.8         -68.8           1,80         56,30         4,074.7         71.1         69.5         0,51         0,52         0,52         0,52         0,64         0,65         0,64         0,64         0,63         0,64  | 3,   | 514.0   | 4.00   | 42.60          | 3,509.5 | 51.1 | 4      | 9.9                                  | 0.32   | 0.32                  | 0.0  |   | 0.3           |
| 2.50         48.60         3,792.1         62.3         58.1         0.54         -0.53         1,28         -84.8           2.80         51.0         3,866.0         65.1         61.4         0.34         0.53         1,26         -84.8           3.30         52.60         3,960.8         65.1         65.4         0.53         0.53         1,26         -89.7           2.80         55.60         4,074.7         7.1         68.5         0.61         -0.53         6.64         -96.6         -98.7           2.80         58.30         4,166.6         7.3         7.3         0.63         -0.32         1.16         -100.6           1.90         58.30         4,166.6         7.3         7.2         0.32         0.34         -0.74         -100.6           1.10         68.30         76.3         76.3         7.2         0.34         1.16         -100.6         -100.6           1.20         70.40         4,525.5         78.0         80.7         0.59         -0.43         1.18         -108.7         -0.18           1.10         89.60         4,547.4         78.7         82.5         0.44         -0.43         81.8         -0.44   | <sub>(</sub> ຕ   | 703.0   | 3.00   | 47.40          | 3,698.2 | 59.3 | 4)     | 14.7                                 | 0.55   | -0.53                 | 2.5  |   | 6.6           |
| 2.80         57.10         3.886.0         65.1         61.4         0.34         0.32         2.66         -89.7           3.30         52.60         3.980.8         68.3         65.4         0.53         0.53         1.58         -93.4           2.80         52.60         4,074.7         71.1         68.5         0.61         -0.53         5.64         -96.5           2.50         58.00         4,169.6         73.4         73.2         0.22         -0.32         1.16         -100.6           1.90         58.30         4,683.5         75.3         76.3         0.64         -0.74         -0.74         -100.6           1.40         58.30         76.3         76.3         76.3         76.3         1.06         1.07         1.04.5         1.06.5         1.06.4         -0.74         1.06.6         1.06.5         1.06.4         1.07.6         1.06.5         1.06.6  | <sub>(</sub>   | 0.797.0   | 2.50   | 48.60          | 3,792.1 | 62.3 | 4)     | 18.1                                 | 0.54   | -0.53                 | 1.28   |   | 8.3           |
| 3.30         5.260         3,980.8         68.3         65.4         0.63         0.63         1,58         -93.4           2.80         5.790         4,074.7         71.1         69.5         0.61         -0.53         5.64         -96.6           2.50         58.30         4,169.6         73.4         75.3         76.3         0.64         -0.74         -104.5           1.60         58.30         4,263.5         76.3         76.3         0.64         -0.64         -0.74         -104.5           1.160         58.30         4,263.5         76.9         76.3         76.3         1.06         -0.74         -0.74         -104.5           1.20         70.40         4,452.5         76.9         80.7         0.59         -0.32         -3.89         -108.7           1.20         83.10         76.7         86.3         0.42         0.43         4.79         -91.8           1.20         87.6         4,641.4         78.7         86.3         0.44         -0.43         4.79         -91.8           1.10         89.6         4,794.4         78.7         86.3         0.44         -0.43         4.79         -88.5           0.70  | e,   | 391.0   | 2.80   | 51.10          | 3,886.0 | 65.1 | Ð      | 4.1.4                                | 0.34   | 0.32                  | 2.66   |   | 12.1          |
| 2.80         57.90         4,074.7         71.1         69.5         0.61         -0.53         5.64         -96.6           2.50         59.00         4,169.6         73.4         73.2         0.32         -0.32         1.16         -100.6           1.90         58.30         4,169.6         75.3         76.3         76.3         0.64         -0.74         -104.5         -100.6           1.60         54.60         4,263.5         76.9         76.9         78.7         0.34         -0.74         -0.74         -104.5           1.20         70.40         4,452.5         78.0         80.7         0.34         -0.32         -1.38         -108.7           1.20         70.40         4,452.5         78.0         80.7         0.53         0.43         11.02.2         -108.7           1.20         87.50         4,452.5         78.7         85.3         0.44         -0.43         11.02.2         -11.2         11.2         11.2         11.2         11.2         11.2         -11.2         -11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.   | ຕໍ   | 986.0   | 3.30   | 52.60          | 3,980.8 | 68.3 | 9      | 5.4                                  | 0.53   | 0.53                  | 1.58   |   | 14.5          |
| 2.50         59.00         4,169.6         73.4         73.2         0.32         -0.32         1.16         -100.6           1.90         58.30         4,263.5         75.3         76.3         0.64         -0.64         -0.74         -104.5           1.60         54.60         4,268.5         76.9         76.3         0.64         -0.74         -104.5           1.10         54.60         4,568.5         76.9         78.7         80.7         0.34         -0.43         -108.7           1.10         83.10         4,452.5         78.0         80.7         0.53         0.42         103.7         -91.8           1.20         87.60         4,641.4         78.7         85.3         0.44         -0.43         47.9         -98.8           1.10         89.60         4,764.4         78.7         86.5         0.44         -0.43         47.9         -98.8           0.70         10.6.40         4,890.4         78.6         88.6         0.44         -0.43         81.9         -77.9           0.50         10.6.40         4,890.4         78.5         89.6         0.43         81.9         -77.9           0.50         10.6.40         4,890   | 4,   | 0.080   | 2.80   | 27.90          | 4,074.7 | 71.1 | 9      | 9.5                                  | 0.61   | -0.53                 | 5.6  |   | 23.3          |
| 190         58.30         4,263.5         75.3         76.3         0.64         -0.64         -0.64         -104.5         -104.5           1.60         54.60         4,263.5         76.9         78.7         0.34         -0.32         -3.89         -108.7           1.20         70.40         4,558.5         78.0         78.7         80.7         0.59         -0.43         16.81         -108.7           1.20         83.10         4,547.4         78.5         83.0         0.42         13.37         -102.2           1.10         87.50         4,641.4         78.7         85.3         0.44         -0.43         4.79         -88.5           0.70         97.30         4,641.4         78.7         85.6         0.41         -0.43         4.79         -88.5           0.70         97.30         4,830.4         78.5         88.6         0.44         -0.43         8.19         -77.9           0.50         95.0         106.40         4,925.4         78.4         78.4         0.44         0.43         0.43         -13.8         -53.8           0.50         10.00         87.5         10.20         0.21         0.01         -19.8         -53.8 </td <td>4</td> <td>175.0</td> <td>2.50</td> <td>59.00</td> <td>4,169.6</td> <td>73.4</td> <td>7</td> <td>3.2</td> <td>0.32</td> <td>-0.32</td> <td>1.16</td> <td></td> <td>25.2</td>   | 4  | 175.0   | 2.50   | 59.00          | 4,169.6 | 73.4 | 7      | 3.2                                  | 0.32   | -0.32                 | 1.16   |   | 25.2          |
| 1.60         54.60         4,358.5         76.9         78.7         0.34         -0.32         -3.89         -108.7           1.20         70.40         4,452.5         78.0         80.7         0.59         -0.43         16.81         -102.2           1.60         83.10         4,547.4         78.5         83.0         0.53         0.42         13.37         -91.8           1.20         87.60         4,641.4         78.7         85.3         0.44         -0.43         4.79         -88.5           1.10         89.60         4,736.4         78.7         88.6         0.44         -0.43         8.19         -77.9           0.70         97.30         4,830.4         78.5         88.6         0.44         -0.43         8.19         -77.9           0.50         10.64         4,925.4         78.5         89.6         0.23         -0.21         9.58         -63.8           0.50         110.00         5,114.4         78.4         90.4         0.17         0.00         -19.89         -53.8           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         -19.89         -103.2           0.40 <td>4</td> <td>269.0</td> <td>1.90</td> <td>58.30</td> <td>4,263.5</td> <td>75.3</td> <td>1</td> <td>6.3</td> <td>0.64</td> <td>-0.64</td> <td>-0.7</td> <td></td> <td>24.0</td>   | 4  | 269.0   | 1.90   | 58.30          | 4,263.5 | 75.3 | 1      | 6.3                                  | 0.64   | -0.64                 | -0.7   |   | 24.0          |
| 1.20         70.40         4,452.5         78.0         80.7         0.59         -0.43         16.81         -102.2           1.60         83.10         4,547.4         78.5         83.0         0.53         0.42         13.37         -91.8           1.20         87.60         4,647.4         78.7         85.3         0.44         -0.43         4,79         -88.5           1.10         89.60         4,736.4         78.6         88.6         0.44         -0.43         8.19         -77.9           0.70         97.30         4,925.4         78.5         89.6         0.44         -0.43         8.19         -77.9           0.50         106.40         4,925.4         78.5         89.6         0.23         -0.21         9.58         -63.8           0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -53.8         -53.8           0.50         113.10         5,182.4         78.0         91.2         0.04         0.00         4.56         -53.0           0.40         81.50         6.00         -19.2         0.21         0.00         -19.89         -53.8           0.50   | 4  | 364.0   | 1.60   | 54.60          | 4,358.5 | 76.9 | 1      | 7.8.7                                | 0.34   | -0.32                 | -3.86  |   | 17.1          |
| 1.60         83.10         4,547.4         78.5         83.0         0.53         0.43         13.37         -91.8           1.20         87.60         4,547.4         78.7         85.3         0.44         -0.43         4.79         -88.5           1.10         89.60         4,736.4         78.6         88.6         0.44         -0.43         8.19         -77.9           0.70         97.30         4,830.4         78.5         89.6         0.23         -0.21         8.19         -77.9           0.50         106.40         4,925.4         78.5         89.6         0.23         -0.21         8.58         -63.8           0.50         87.50         5,020.4         78.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         77.9         92.7         0.22         -0.08         -26.55         -103.2   | 4,   | 458.0   | 1.20   | 70.40          | 4,452.5 | 78.0 | w      | 7.08                                 | 0.59   | -0.43                 | 16.8   |   | 46.4          |
| 1.20         87.60         4,641.4         78.7         85.3         0.44         -0.43         4.79         -88.5           1.10         89.60         4,736.4         78.7         87.2         0.11         -0.11         2.11         -67.7           0.70         97.30         4,830.4         78.5         88.6         0.44         -0.43         8.19         -77.9           0.50         10.64         4,925.4         78.5         89.6         0.23         -0.21         9.58         -53.8           0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8           0.40         81.50         5,301.3         77.9         92.7         0.22         -0.08         -26.55         -103.2  | 4  | 553.0   | 1.60   | 83.10          | 4,547.4 | 78.5 | w      | 13.0                                 | 0.53   | 0.42                  | 13.37  |   | 67.9          |
| 1.10         89.60         4,736.4         78.7         87.2         0.11         -0.11         2.11         -87.7           0.70         97.30         4,830.4         78.6         88.6         0.44         -0.43         8.19         -77.9           0.50         106.40         4,925.4         78.5         89.6         0.23         -0.21         9.58         -63.8           0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8           0.40         81.50         5,301.3         77.9         92.7         0.22         -0.08         -26.55         -103.2  | 4  | 347.0   | 1.20   | 87.60          | 4,641.4 | 78.7 | ω      | 5.3                                  | 0.44   | -0.43                 | 4.7  |   | 75.0          |
| 0.70         97.30         4,830.4         78.6         88.6         0.44         -0.43         8.19         -77.9           0.50         106.40         4,925.4         78.5         89.6         0.23         -0.21         9.58         -63.8           0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8           0.40         81.50         5,301.3         77.9         92.7         -0.08         -26.55         -103.2  | 4  | 742.0   | 1.10   | 89.60          | 4,736.4 | 78.7 | 3      | 17.2                                 | 0.11   | -0.11                 | 2.1  |   | 78.1          |
| 0.50         106.40         4,925.4         78.5         89.6         0.23         -0.21         9.58         -63.8           0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8           0.40         81.50         5,301.3         77.9         92.7         0.22         -0.08         -26.55         -103.2  | 4  | 336.0   | 0.70   | 97.30          | 4,830.4 | 78.6 | w      | 9.8                                  | 0.44   | -0.43                 | 8.19   |   | 89.3          |
| 0.50         87.50         5,020.4         78.4         90.4         0.17         0.00         -19.89         -93.8           0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0         1           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8         1           0.40         81.50         5,301.3         77.9         92.7         0.22         -0.08         -26.55         -103.2  | 4  | 931.0   | 0.50   | 106.40         | 4,925.4 | 78.5 | ω      | 9.6                                  | 0.23   | -0.21                 | 9.5  |   | 100.6         |
| 0.50         110.00         5,114.4         78.2         91.2         0.21         0.00         23.94         -59.0           0.50         113.10         5,182.4         78.0         91.8         0.04         0.00         4.56         -53.8         1           0.40         81.50         5,301.3         77.9         92.7         0.22         -0.08         -26.55         -103.2  | 5,   | 0.926.0   | 0.50   | 87.50          | 5,020.4 | 78.4 | 33     | 10.4                                 | 0.17   | 0.00                  | -19.8  |   | 74.3          |
| 0.50     113.10     5,182.4     78.0     91.8     0.04     0.00     4.56     -53.8       0.40     81.50     5,301.3     77.9     92.7     0.22     -0.08     -26.55     -103.2  | ς,   | 120.0   | 0.50   | 110.00         | 5,114.4 | 78.2 | 53     | 1.2                                  | 0.21   | 0.00                  | 23.9   |   | 104.7         |
| 0.40 81.50 5,301.3 77.9 92.7 0.22 -0.08 -26.55 -103.2   | 5,   | 188.0   | 0.50   | 113.10         | 5,182.4 | 78.0 | 03     | 1.8                                  | 0.04   | 0.00                  | 4.56   |   | 107.8         |
|   | 2,   | 307.0   | 0.40   | 81.50          | 5,301.3 | 6.77 | 3      | 12.7                                 | 0.22   | -0.08                 | -26.5  |   | 63.3          |

#### EOG Resources, Inc. **EOG PVA**

| <b>eo</b> ç                                     | eog resources   | urc   | es   |                   |               | EOG PVA        |   |                       |  |   |                |
|---|---|---|--|-------------------|---------------|----------------|---|-----------------------|--|---|----------------|
| Company: Project: Site: Well: Wellbore: Design: | EOG Resources - M<br>Lea County, NM (N.<br>Fruit Loop 29 State<br>#501H<br>OH | EOG Resources - Midland<br>Lea County, NM (NAD 27 1<br>Fruit Loop 29 State<br>#501H<br>OH | EOG Resources - Midland<br>Lea County, NM (NAD 27 NME)<br>Fruit Loop 29 State<br>#501H<br>OH |                   |               |                | Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database: | Reference:<br>Method: | Well #501H  KB = 25' @ 3751.0usft (H&P 415)  KB = 25' @ 3751.0usft (H&P 415)  Grid  Minimum Curvature  EDM 5000.1 Single User Db | .ousft (H&P 415)<br>.ousft (H&P 415)<br>rre<br>le User Db |                |
| Survey  |   | lnc<br>•  | Azi  | QVT.              | S/N           | EW             |   | Build                 | Turn   | High to Plan  | Right to Plan  |
| 2   | 5,401.0   |   | 1.60 69.50   | (usit)<br>5,395.3 | (usn)<br>78.4 | (usrt)<br>94.2 | (*/100usft)<br>1.29   | (*/100usft)<br>1.28   | (*/100usft)<br>-12.77  | (usft)<br>-115.5  | (usft)<br>40.4 |
| ις)   | 5,495.0   | 8   | 3.30 72.90   | 5,489.2           | 79.6          | 98.0           | 1.81  | 1.81                  | 3.62   | -115.4  | 47.0           |
| 2   | 5,590.0   | 4.0   | 4.00 70.80   | 5,584.0           | 81.5          | 103.8          | 0.75  | 0.74                  | -2.21  | -120.0  | 42.2           |
| ω.  | 5,684.0   | 4.(   | 4.00 67.90   | 5,677.8           | 83.8          | 109.9          | 0.22  | 00.00                 | -3.09  | -123.8  | 35.4           |
| ισ  | 5,778.0   | 3.6   | 3.90 68.30   | 5,771.6           | 86.3          | 115.9          | 0.11  | -0.11                 | 0.43   | -124.0  | 35.7           |
| (t)   | 5,873.0   | 8   | 3.90 65.80   | 5,866.4           | 88.8          | 121.9          | 0.18  | 0.00                  | -2.63  | -125.4  | 29.8           |
| υ,  | 5,967.0   | 4.20  | 20 64.80   | 5,960.1           | 91.6          | 127.9          | 0.33  | 0.32                  | -1.06  | -126.2  | 27.3           |
| Ø   | 6,061.0   | 4.20  | 20 64.40   | 6,053.9           | 94.5          | 134.1          | 0.03  | 0.00                  | -0.43  | -127.0  | 26.2           |
| 9   | 6,155.0   | 4.40  | 40 64.40   | 6,147.6           | 97.6          | 140.5          | 0.21  | 0.21                  | 0.00   | -127.7  | 26.0           |
| 9   | 6,249.0   | 4   | 4.40 61.80   | 6,241.3           | 100.8         | 146.9          | 0.21  | 00.00                 | -2.77  | -129.6  | 20.2           |
| ω   | 6,344.0   | 4.60  | 06.09  | 6,336.1           | 104.4         | 153.4          | 0.22  | 0.21                  | -0.95  | -130.9  | 18.3           |
| 9   | 6,438.0   | 4.6   | 4.60 62.80   | 6,429.8           | 107.9         | 160.1          | 0.16  | 0.00                  | 2.02   | -131.4  | 22.7           |
| 9   | 6,533.0   | 4.4   | 4.40 61.40   | 6,524.5           | 111.4         | 166.7          | 0.24  | -0.21                 | -1.47  | -133.0  | 19.5           |
| Θ   | 6,627.0   | e,  |  | 6,618.2           | 114.1         | 172.6          | 1.16  | 96.0-                 | 9.57   | -128.4  | 39.8           |
| ω   | 6,722.0   | 8   |  | 6,713.0           | 116.2         | 178.2          | 0.22  | 0.21                  | -0.74  | -128.5  | 37.4           |
| ω   | 6,816.0   | က်  | 3.50 70.60   | 6,806,9           | 118.2         | 183.7          | 0.22  | -0.21                 | 96.0   | -127.5  | 38.6           |
| 9   | 6,910.0   | 3.5   | 3.50 68.10   | 6,900.7           | 120.2         | 189.1          | 0.16  | 0.00                  | -2.66  | -128.4  | 32.2           |
| 2   | 7,004.0   | e,  | 3.50 70.80   | 6,994.5           | 122.2         | 194.4          | 0.18  | 0.00                  | 2.87   | -126.2  | 37.5           |
| 2   | 7,098.0   | 3.20  |  | 7,088.4           | 123.8         | 199.7          | 0.44  | -0.32                 | 5.21   | -121.9  | 46.9           |
| _   | 7,192.0   | 3.0   |  | 7,182.2           | 125.1         | 204.6          | 0.23  | -0.21                 | -1.38  | -121.8  | 42.8           |
| 2   | 7,287.0   | 2.0   | 2.80 78.30   | 7,277.1           | 126.2         | 209.3          | 0.30  | -0.21                 | 4.11   | -117.2  | 49.4           |
| 7   | 7,381.0   | 2.8   | 2.80 77.30   | 7,371.0           | 127.2         | 213.8          | 0.05  | 0.00                  | -1.06  | -116.5  | 45.7           |
| 2   | 7,476.0   | 2.60  | 80.80  | 7,465.9           | 128.1         | 218.2          | 0.27  | -0.21                 | 3.68   | -111.8  | 50.9           |
| 7   | 7,570.0   | 2.60  |  | 7,559.8           | 128.5         | 222.4          | 0.31  | 0.00                  | 6.91   | -103.8  | 60.8           |
| 2   | 7,664.0   | 2.3   | 2.50 95.40   | 7,653.7           | 128.4         | 226.6          | 0.40  | -0.11                 | 8.62   | -93.1   | 71.6           |
| 2   | 7,759.0   | 2.60  | 60 95.70   | 7,748.6           | 128.0         | 230.8          | 0.11  | 0.11                  | 0.32   | -91.5   | 68.6           |
| 7   | 7,853.0   | 2.60  | 60 70.20   | 7,842.5           | 128.5         | 234.9          | 1.22  | 00.00                 | -27.13   | -109.9  | 20.9           |

2.9

-19.8

2.63

0.45

270.5

0.27

273.3

3.0

.3.3 6.5 7.7 8.5 8.5 7.0 8.5 8.5

17.0

-33.40

-0.21

0.50 0.15 0.37

275.6 274.7 274.0

139.5 137.9 137.0 136.1 136.1 135.1

9,823.7 9,917.7 10,012.7 10,106.7

223.90 235.50 206.60

0.70

9,835.0

9,929.0

0.70

0.70

10,118.0

0,024.0

0.70

227.20 236.50 239.00 240.00

0.00

4.3

1.2

-30.42

21.91

12.34

### **eog resources**

### **EOG Resources, Inc.**EOG PVA

27.5 22.9 -23.7 -43.6 -40.2 -22.4 18.4 36.3 40.9 17.2 1.7 14.7 13.2 35.6 25.6 38.4 39.9 2.0 -8.5 Right to Plan (nsft) -108.0 -104.6 -100.5 -94.2 -88.5 -92.6 -91.3 -87.1 -73.3 -73.6 -63.5 -57.0 -64.5 -58.6 -47.8 -17.8 -7.3 25.8 26.4 -84.1 KB = 25' @ 3751.0usft (H&P 415) KB = 25' @ 3751.0usft (H&P 415) High to Plan (nstt) EDM 5000.1 Single User Db Minimum Curvature -0.95 3.47 6.60 10.95 18.53 -6.17 13.83 -10.32-18.83 0.00 0.00 -63.40 -35.37 4.57 -11.81 -34.21 5.21 Well #501H (°/100usft) -0.11 -0.21 -0.21 0.00 0.00 -0.32-0.32-0.74 -0.53-0.21 -0.21 0.43 0.00 0.21 0.00 0.11 0.00 0.32 0.21 Local Co-ordinate Reference: (°/100usft) Survey Calculation Method: Build North Reference: TVD Reference: MD Reference: 0.75 0.25 0.31 0.55 0.43 0.40 0.32 0.58 0.23 0.53 0.53 0.54 0.23 0.43 0.530.21 0.64 Database: (°/100usft) 255.6 258.8 261.9 265.0 267.9 270.9 275.8 277.2 278.2 278.5 278.6 278.0 246.1 249.3 252.4 273.7 278.7 276.7 E/W (usft) 132.3 133.0 131.3 133.3 133.9 135.3 136.7 137.7 138.2 138.4 138.5 138.2 138.4 138.8 139.1 139.2 139.6 140.1 140.1 N/S (usft) 8,503.0 8,880.8 8,031.3 8,126.3 8,220.2 8,314.1 8,598.0 8,691.9 8,786.9 8,974.8 9,068.7 9,163.7 9,257.7 9,351.7 9,446.7 9,540.7 9,634.7 9,729.7 7,937.4 8,409.1 (nsft) 2 68.30 40.90 288.90 72.20 61.10 71.50 71.10 88.70 82.90 95.90 100.80 58.60 7.60 348.50 255.30 69.30 75.50 (grid\_north\_azim Azi Lea County, NM (NAD 27 NME) EOG Resources - Midland 0.20 0.00 2.10 0.70 2.30 1.90 1.90 2.10 2.10 2.10 1.60 0.90 0.90 0.40 2.50 1.80 1.80 1.90 0.40 0.90 Fruit Loop 29 State O C #501H HO HO 8,325.0 9,175.0 9,363.0 9,458.0 9,552.0 9,646.0 9,741.0 8,609.0 8,798.0 8,892.0 7,948.0 8,042.0 8,137.0 8,231.0 8,420.0 8,986.0 9,080,0 9,269.0 8,514.0 8,703.0 MD (usft) Company: Wellbore: Project: Design: Survey Well: Site:

10,401.0

10,389.6

10,295.7

1.20

1.06

2.45

2.67

308.5

11,034.6 11,038.6

11,854.0

303.7

0.00

0.95

297.4

0.96

-2.21

-44.6 -42.3 -37.7 -32.1 -28.2 -25.3

5.7 7.4 12.4 18.5 22.7

-1.23

-0.74

-2.45 -1.68

8.77

8.85 2.56 2.78

289.0

-455.1 -549.0 -643.7 -737.2 -830.9 -925.8

11,016.6

177.80

87.30 85.70 85.70 88.00

11,476.0 11,571.0 11,665.0 11,759.0

178.50

11,022.4 11,029.4

175.70

176.60

292.1

### **eogresources**

#### EOG Resources, Inc. **EOG PVA**

12.5 17.5 -37.1 -39.9 -42.3 -44.8 -44.9 -45.3 7.74 48.7 -48.7 -47.9 -46.8 -45.7 -45.3 -32.4 -43.8 44.5 46.3 48.1 Right to Plan (nsft) -6.1 -2.7 -1.0 3.2 5.9 7.3 8.0 8.1 7.4 5.7 5.2 4.1 3.3 2.7 1.8 1.5 2.7 KB = 25' @ 3751.0usft (H&P 415) KB = 25' @ 3751.0usft (H&P 415) High to Plan (nsft) EDM 5000.1 Single User Db Minimum Curvature 33.10 3.19 2.55 2.13 32.92 -15.32-3.40 0.00 -6.38 0.00 1.06 -2.57 -2.47 -2.13 -0.850.00 2.98 -186.171.91 Well #501H (°/100usft) 8.75 11.70 15.11 14.26 10.21 14.68 7.45 12.77 12.34 13.83 5.53 9.36 8.51 8.51 6.81 5.11 Local Co-ordinate Reference: (°/100usft) Survey Calculation Method: Build North Reference: TVD Reference: MD Reference: 8.75 11.73 5.90 14.68 7.06 14.28 8.92 7.48 12.96 12.50 13.94 5.87 9.36 10.21 9.84 9.84 Database: (°/100usft) DLeg 266.8 266.9 267.3 268.3 272.2 274.5 276.4 277.6 278.2 278.8 280.3 286.6 287.7 270.1 278.1 282.4 284.7 E/W (usft) 134.0 134.0 132.0 112.7 95.7 75.9 52.5 25.4 -5.0 -38.3 -74.8 -114.3 -128.2-157.0-200.0 -244.2 -289.6 -335.8 -382.3N/S (usft) HL Crossing, MD:11041.9', TVD:10933.4',N/S:-128.2', E/W:278.2', INC:62.02 10,925.8 10,802.0 10,837.8 10,870.9 11,002.9 11,014.0 10,542.6 10,589.0 10,763.6 10,900.4 10,933.4 10,982.2 10,447.6 10,721.8 10,966.5 10,994.1 11,009.4 10,495.6 10,634.3 10,679.2 10,947.7 (usft) 2 179.29 178.70 178.70 175.50 175.50 176.00 177.50 178.70 179.70 177.50 177.10 177.10 178.00 179.40 259.20 275.00 187.50 180.30 175.70 178.50 (grid\_north\_azim Azi Lea County, NM (NAD 27 NME) EOG Resources - Midland 12.00 4.90 18.70 48.20 54.00 60.50 62.02 67.70 77.60 0.90 22.90 26.90 31.80 38.70 42.20 73.20 80.80 83.20 89.60 0.90 Fruit Loop 29 State O) #501H HO HO 11,121.0 10,648.0 10,696.0 10,743.0 10,791.0 10,885.0 11,026.0 11,215.0 11,309.0 10,932.0 11,041.9 11,074.0 10,459.0 10,507.0 10,554.0 10,601.0 10,838.0 10,979.0 11,168.0 11,262.0 11,382.0 (usft) Company: Wellbore: Project: Design: Survey Site: Well:

### ® eogresources

#### EOG Resources, Inc. **EOG PVA**

| ė.       | Fruit Loop 29 State #501H | M (NAD 2<br>itate | Lea County, NM (NAD 27 NME) Fruit Loop 29 State #501H OH |          |               |        | Local Co-ordinate Referency TVD Reference: MD Reference: North Reference: Survey Calculation Method: | Local Co-ordinate Reference:<br>TVD Reference:<br>MD Reference:<br>North Reference:<br>Survey Calculation Method: | Well #501H  KB = 25' @ 3751.0u  KB = 25' @ 3751.0u  Grid  Minimum Curvature | Well #501H<br>KB = 25' @ 3751.0usft (H&P 415)<br>KB = 25' @ 3751.0usft (H&P 415)<br>Grid<br>Minimum Curvature |                      |
|----------|---------------------------|-------------------|--|----------|---------------|--------|--|---|---|---|----------------------|
| Survey   | 5                         |                   |  |          |               |        | Database:  |   | EDM 5000.1 Single User Db   | gle User Db   |                      |
| C S      | <u>:</u>                  |                   |  |          |               | ;      |  |   |   |   |                      |
| (nsft)   | E C                       | 6)                | Azı<br>(grid_north_azim                                  | (nsft)   | N/S<br>(usft) | (usft) | DLeg<br>(*/100usft)  | Build<br>(°/100usft)  | Turn<br>(*/100usft)   | High to Plan<br>(usft)  | Right to Plan (usft) |
| 11,948.0 |                           | 87.30             | 178.20   | 11,043.2 | -1,019.6      | 315.2  | 0.30   | 0.21  | 0.21  | 29.6  | -22.9                |
| 12,042.0 |                           | 88.20             | 177.80   | 11,046.9 | -1,113.5      | 318.5  | 1.05   | 0.96  | -0.43   | 32.4  | -20.4                |
| 12,136.0 |                           | 88.50             | 177.50   | 11,049.6 | -1,207.4      | 322.4  | 0.45   | 0.32  | -0.32   | 34.2  | -17.3                |
| 12,231.0 |                           | 88.20             | 178.70   | 11,052.4 | -1,302.3      | 325.5  | 1.30   | -0.32   | 1.26  | 36.0  | -14.9                |
| 12,325.0 |                           | 87.10             | 179.00   | 11,056.2 | -1,396.2      | 327.4  | 1.21   | -1.17   | 0.32  | 39.0  | -13.8                |
| 12,420.0 |                           | 88.70             | 178.70   | 11,059.7 | -1,491.1      | 329.3  | 1.71   | 1.68  | -0.32   | 41.6  | -12.7                |
| 12,514.0 |                           | 89.90             | 177.30   | 11,060.8 | -1,585.0      | 332.6  | 1.96   | 1.28  | -1.49   | 41.6  | -10.1                |
| 12,608.0 |                           | 91.10             | 177.60   | 11,060.0 | -1,678.9      | 336.8  | 1.32   | 1.28  | 0.32  | 39.8  | -6.7                 |
| 12,702.0 |                           | 91.50             | 178.30   | 11,057.9 | -1,772.8      | 340.1  | 0.86   | 0.43  | 0.74  | 36.6  | -4.1                 |
| 12,796.0 |                           | 91.70             | 178.90   | 11,055.3 | -1,866.8      | 342.4  | 0.67   | 0.21  | 0.64  | 32.9  | -2.6                 |
| 12,891.0 |                           | 91.70             | 179.20   | 11,052.4 | -1,961.7      | 344.0  | 0.32   | 0.00  | 0.32  | 29.0  | -1.8                 |
| 12,984.0 |                           | 89.00             | 179.00   | 11,051.9 | -2,054.7      | 345.5  | 2.91   | -2.90   | -0.22   | 27.4  | 7.                   |
| 13,079.0 |                           | 89.70             | 179.20   | 11,053.0 | -2,149.7      | 347.0  | 0.77   | 0.74  | 0.21  | 27.4  | -0.3                 |
| 13,173.0 |                           | 89.90             | 179.60   | 11,053.3 | -2,243.7      | 347.9  | 0.48   | 0.21  | 0.43  | 26.6  | -0.1                 |
| 13,267.0 |                           | 90.30             | 179.70   | 11,053.1 | -2,337.7      | 348.5  | 0.44   | 0.43  | 0.11  | 25.4  | -0.3                 |
| 13,362.0 |                           | 90.40             | 179.70   | 11,052.5 | -2,432.6      | 349.0  | 0.11   | 0.11  | 0.00  | 23.8  | 9.0-                 |
| 13,456.0 |                           | 90.60             | 178.50   | 11,051.7 | -2,526.6      | 350.5  | 1.29   | 0.21  | -1.28   | 21.9  | 0.2                  |
| 13,551.0 |                           | 92.90             | 177.80   | 11,048.8 | -2,621.5      | 353.6  | 2.53   | 2.42  | -0.74   | 17.9  | 2.5                  |
| 13,645.0 |                           | 91.10             | 178.00   | 11,045.5 | -2,715.4      | 357.0  | 1.93   | -1.91   | 0.21  | 13.5  | 5.2                  |
| 13,739.0 |                           | 92.20             | 177.80   | 11,042.8 | -2,809.3      | 360.4  | 1.19   | 1.17  | -0.21   | 9.6   | 7.8                  |
| 13,834.0 |                           | 91.70             | 178.70   | 11,039.6 | -2,904.2      | 363.3  | 1.08   | -0.53   | 0.95  | 5.5   | 10.0                 |
| 13,928.0 |                           | 90.60             | 178.90   | 11,037.7 | -2,998.2      | 365.3  | 1.19   | -1.17   | 0.21  | 2.5   | 11.2                 |
| 14,022.0 |                           | 89.40             | 180.10   | 11,037.7 | -3,092.2      | 366.1  | 1.81   | -1.28   | 1.28  | 1.5   | 11.2                 |
| 14,117.0 |                           | 89.90             | 179.60   | 11,038.3 | -3,187.2      | 366.4  | 0.74   | 0.53  | -0.53   | 1.0   | 10.7                 |
| 14,211.0 |                           | 91.30             | 179.40   | 11,037.3 | -3,281.1      | 367.2  | 1.50   | 1.49  | -0.21   | -1.1  | 10.8                 |
| 14,305.0 |                           | 89.00             | 179.90   | 11,037.1 | -3,375.1      | 367.8  | 2.50   | -2.45   | 0.53  | -2.4  | 10.6                 |
| 14,399.0 |                           | 88.00             | 180.80   | 11,039.5 | -3,469.1      | 367.2  | 1.43   | -1.06   | 0.96  | -1.0  | හ.<br>ග              |

# @eog resources

#### **EOG Resources, Inc.** EOG PVA

| Company: Project: Site: Well: Wellbore: Design: | EOG Resources - M<br>Lea County, NM (N.<br>Fruit Loop 29 State<br>#501H<br>OH | EOG Resources - Midland<br>Lea County, NM (NAD 27 NME)<br>Fruit Loop 29 State<br>#501H<br>OH | ME)                     |  |               |            | Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database: | ate Reference:<br>:<br>e:<br>iion Method: | Well #501H KB = 25' @ 3751.0usft (H&P KB = 25' @ 3751.0usft (H&P Grid Minimum Curvature EDM 5000.1 Single User Db | Well #501H<br>KB = 25' @ 3751.0usft (H&P 415)<br>KB = 25' @ 3751.0usft (H&P 415)<br>Grid<br>Minimum Curvature<br>EDM 5000.1 Single User Db |                      |
|---|---|--|-------------------------|--|---------------|------------|---|---|---|--|----------------------|
| Survey  |   |  |                         |  |               |            |   |   |   |  |                      |
| MD (usft)                                       | Inc<br>(°)  |  | Azi<br>(grid_north_azim | TVD<br>(usft)  | N/S<br>(usft) | E/W (usft) | DLeg<br>(*/100usft)   | Build<br>(*/100usft)                      | Turn<br>(°/100usft)   | High to Plan<br>(usft)   | Right to Plan (usft) |
| 14,494.0  | 0.  | 87.40  | 180.60                  | 11,043.3   | -3,564.0      | 366.0      | 0.67  | -0.63                                     | -0.21   | 6.1.   | 7.4                  |
| 14,588.0  | 0.  | 86.90  | 180.10                  | 11,048.0   | -3,657.9      | 365.5      | 0.75  | -0.53                                     | -0.53   | 5.4  | 6.0                  |
| 14,682.0  | 0.  | 87.60  | 179.60                  | 11,052.5   | -3,751.8      | 365.7      | 0.91  | 0.74                                      | -0.53   | 8.8  | 5.5                  |
| 14,777.0  | 0.  | 89.70  | 178.70                  | 11,054.8   | -3,846.7      | 367.1      | 2.40  | 2.21                                      | -0.95   | 10.0   | 6.2                  |
| 14,871.0  | 0.  | 90.60  | 178.20                  | 11,054.5   | -3,940.7      | 369.7      | 1.10  | 0.96                                      | -0.53   | 8.7  | 7.9                  |
| 14,965.0  | 0.  | 91.10  | 177.80                  | 11,053.1   | -4,034.6      | 372.9      | 0.68  | 0.53                                      | -0.43   | 6.3  | 10.5                 |
| 15,060.0  | 0.  | 89.20  | 178.20                  | 11,052.9   | -4,129.6      | 376.3      | 2.04  | -2.00                                     | 0.42  | 4.9  | 13.0                 |
| 15,154.0  | 0.  | 86.60  | 179.20                  | 11,056.3   | -4,223.5      | 378.4      | 2.96  | -2.77                                     | 1.06  | 7.3  | 14.4                 |
| 15,249.0  | 0.  | 87.10  | 180.30                  | 11,061.5   | -4,318.3      | 378.8      | 1.27  | 0.53                                      | 1.16  | 11.5   | 14.0                 |
| 15,343.0  | 0.  | 87.80  | 180.80                  | 11,065.7   | -4,412.2      | 377.9      | 0.91  | 0.74                                      | 0.53  | 14.6   | 12.4                 |
| 15,438.0  | 0.  | 91.30  | 180.30                  | 11,066.5   | -4,507.2      | 377.0      | 3.72  | 3.68                                      | -0.53   | 14.3   | 10.7                 |
| 15,532.0  | 0.  | 91.00  | 180.40                  | 11,064.6   | -4,601.2      | 376.4      | 0.34  | -0.32                                     | 0.11  | 11.3   | 9.4                  |
| 15,627.0  | 0.  | 89.90  | 181.30                  | 11,063.8   | -4,696.2      | 375.0      | 1.50  | -1.16                                     | 0.95  | 9.5  | 7.2                  |
| 15,675.5  | .5  | 89.44  | 182.02                  | 11,064.1   | -4,744.7      | 373.6      | 1.77  | 96.0-                                     | 1.49  | 9.2  | 5.4                  |
| HL Crossi                                       | ing, MD:15675   | .5', TVD:11064.  | .1',N/S:-4744.7', EA    | HL Crossing, MD:15675.5', TVD:11064.1',N/S:-4744.7', E/W:373.6', INC:89.44 |               |            |   |   |   |  |                      |
| 15,721.0  | 0.  | 89.00  | 182.70                  | 11,064.7   | -4,790.1      | 371.7      | 1.77  | 96.0-                                     | 1.49  | 9.4  | 3.2                  |
| Last MWD Survey<br>15,800.0                     | Survey<br>.0  | 89.00  | 182.70                  | 11,066.1   | -4,869.0      | 368.0      | 0.00  | 0.00                                      | 0.00  | 26.1   | 0.4                  |
| Projection To Bit                               | To Bit  |  |                         |  |               |            | ,   |   |   |  |                      |

| Design Annotations |                 |                   |                 |  |
|--------------------|-----------------|-------------------|-----------------|--|
| Measured           | Vertical        | Local Coordinates | Se              |  |
| Depth<br>(usft)    | Depth<br>(usft) | +N/-S<br>(usft)   | +E/-W<br>(usft) | Comment  |
| 11,041.9           | 10,933.4        | -128.2            | 278.2           | 278.2 HL Crossing, MD:11041.9', TVD:10933.4',N/S:-128.2', E/W:278.2', INC:62.02  |
| 15,675.5           | 11,064.1        | -4,744.7          | 373.6           | ;73.6 HL Crossing, MD:15675,5', TVD:11064.1',N/S:-4744.7', E/W:373.6', INC:89.44 |
| 15,721.0           | 11,064.7        | -4,790.1          | 371.7           | 71.7 Last MWD Survey   |
| 15,800.0           | 11,066.1        | -4,869.0          | 368.0           | 68.0 Projection To Bit   |