



## **Caza Operating LLC**

**Lea County, New Mexico (NAD 83)**

**Sioux 25-36 State Fed Com**

**Sioux 25-36 State Fed Com 8H**

**API # 30-025-46533**

**Wellbore #2**

**Survey: MS MWD**

## **Standard Survey Report**

**26 May, 2020**



|                  |                                 |                                     |                                   |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Caza Operating LLC              | <b>Local Co-ordinate Reference:</b> | Well Sioux 25-36 State Fed Com 8H |
| <b>Project:</b>  | Lea County, New Mexico (NAD 83) | <b>TVD Reference:</b>               | WELL @ 3109.00usft (Citadel 2)    |
| <b>Site:</b>     | Sioux 25-36 State Fed Com       | <b>MD Reference:</b>                | WELL @ 3109.00usft (Citadel 2)    |
| <b>Well:</b>     | Sioux 25-36 State Fed Com 8H    | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Wellbore #2                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | Surveys                         | <b>Database:</b>                    | 5000.1 Conroe DB                  |

|                    |                                 |                      |                |
|--------------------|---------------------------------|----------------------|----------------|
| <b>Project</b>     | Lea County, New Mexico (NAD 83) |                      |                |
| <b>Map System:</b> | US State Plane 1983             | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983       |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone         |                      |                |

|                              |                           |                          |                  |
|------------------------------|---------------------------|--------------------------|------------------|
| <b>Site</b>                  | Sioux 25-36 State Fed Com |                          |                  |
| <b>Site Position:</b>        |                           | <b>Northing:</b>         | 404,579.81 usft  |
| <b>From:</b>                 | Map                       | <b>Easting:</b>          | 855,901.65 usft  |
| <b>Position Uncertainty:</b> | 0.00 usft                 | <b>Slot Radius:</b>      | 13-3/16 "        |
|                              |                           | <b>Latitude:</b>         | 32° 6' 29.498 N  |
|                              |                           | <b>Longitude:</b>        | 103° 19' 2.639 W |
|                              |                           | <b>Grid Convergence:</b> | 0.540 °          |

|                             |                              |                            |                                  |
|-----------------------------|------------------------------|----------------------------|----------------------------------|
| <b>Well</b>                 | Sioux 25-36 State Fed Com 8H |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>                 | 0.00 usft                  | <b>Northing:</b> 404,579.81 usft |
|                             | <b>+E/-W</b>                 | 0.00 usft                  | <b>Easting:</b> 855,901.65 usft  |
| <b>Position Uncertainty</b> | 0.00 usft                    | <b>Wellhead Elevation:</b> | usft                             |
|                             |                              | <b>Latitude:</b>           | 32° 6' 29.498 N                  |
|                             |                              | <b>Longitude:</b>          | 103° 19' 2.639 W                 |
|                             |                              | <b>Ground Level:</b>       | 3,085.00 usft                    |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #2       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | HDGM2020          | 4/25/2020          | 6.450                  | 59.700               | 47,677.90                  |

|                          |                                |                     |                     |                      |           |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----------|
| <b>Design</b>            | Surveys                        |                     |                     |                      |           |
| <b>Audit Notes:</b>      |                                |                     |                     |                      |           |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>       | ACTUAL              | <b>Tie On Depth:</b> | 10,460.00 |
| <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                | 184.03               |           |

|                       |                  |                           |                  |                    |  |
|-----------------------|------------------|---------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 5/12/2020                 |                  |                    |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>  | <b>Tool Name</b> | <b>Description</b> |  |
| 222.00                | 10,460.00        | Phoenix MWD (Wellbore #1) | MWD+HRGM         | OWSG MWD + HRGM    |  |
| 10,468.00             | 22,150.00        | MS MWD (Wellbore #2)      | MWD+HRGM         | OWSG MWD + HRGM    |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <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> |  |
| 10,460.00                    | 8.72                   | 299.27             | 10,421.17                    | 84.64               | -691.44             | -35.84                         | 0.00                           | 0.00                          | 0.00                         |  |
| 10,468.00                    | 8.10                   | 299.60             | 10,429.08                    | 85.22               | -692.46             | -36.34                         | 7.77                           | -7.75                         | 4.13                         |  |
| 10,500.00                    | 5.00                   | 282.20             | 10,460.87                    | 86.63               | -695.79             | -37.51                         | 11.40                          | -9.69                         | -54.38                       |  |
| 10,562.00                    | 4.50                   | 247.00             | 10,522.67                    | 86.25               | -700.67             | -36.79                         | 4.69                           | -0.81                         | -56.77                       |  |
| 10,656.00                    | 3.50                   | 284.30             | 10,616.46                    | 85.52               | -706.84             | -35.63                         | 2.90                           | -1.06                         | 39.68                        |  |
| 10,750.00                    | 6.10                   | 289.00             | 10,710.12                    | 87.85               | -714.35             | -37.43                         | 2.80                           | 2.77                          | 5.00                         |  |
| 10,844.00                    | 6.90                   | 277.10             | 10,803.52                    | 90.17               | -724.67             | -39.02                         | 1.66                           | 0.85                          | -12.66                       |  |
| 10,938.00                    | 5.60                   | 254.80             | 10,896.97                    | 89.67               | -734.70             | -37.81                         | 2.90                           | -1.38                         | -23.72                       |  |
| 11,033.00                    | 4.40                   | 253.60             | 10,991.61                    | 87.43               | -742.67             | -35.02                         | 1.27                           | -1.26                         | -1.26                        |  |
| 11,127.00                    | 4.50                   | 248.80             | 11,085.33                    | 85.07               | -749.57             | -32.19                         | 0.41                           | 0.11                          | -5.11                        |  |

|                  |                                 |                                     |                                   |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Caza Operating LLC              | <b>Local Co-ordinate Reference:</b> | Well Sioux 25-36 State Fed Com 8H |
| <b>Project:</b>  | Lea County, New Mexico (NAD 83) | <b>TVD Reference:</b>               | WELL @ 3109.00usft (Citadel 2)    |
| <b>Site:</b>     | Sioux 25-36 State Fed Com       | <b>MD Reference:</b>                | WELL @ 3109.00usft (Citadel 2)    |
| <b>Well:</b>     | Sioux 25-36 State Fed Com 8H    | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Wellbore #2                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | Surveys                         | <b>Database:</b>                    | 5000.1 Conroe DB                  |

| 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) |
| 11,221.00             | 3.70            | 191.90      | 11,179.12             | 80.77        | -753.64      | -27.61                  | 4.22                    | -0.85                  | -60.53                |
| 11,315.00             | 3.80            | 175.10      | 11,272.92             | 74.70        | -753.99      | -21.53                  | 1.17                    | 0.11                   | -17.87                |
| 11,410.00             | 3.70            | 162.40      | 11,367.72             | 68.64        | -752.80      | -15.57                  | 0.88                    | -0.11                  | -13.37                |
| 11,457.00             | 5.30            | 171.70      | 11,414.57             | 65.05        | -752.03      | -12.04                  | 3.73                    | 3.40                   | 19.79                 |
| 11,505.00             | 9.00            | 178.10      | 11,462.19             | 59.10        | -751.58      | -6.13                   | 7.87                    | 7.71                   | 13.33                 |
| 11,552.00             | 14.60           | 175.70      | 11,508.18             | 49.51        | -751.02      | 3.39                    | 11.96                   | 11.91                  | -5.11                 |
| 11,600.00             | 18.50           | 182.60      | 11,554.19             | 35.86        | -750.91      | 17.00                   | 9.09                    | 8.13                   | 14.38                 |
| 11,647.00             | 21.40           | 182.80      | 11,598.36             | 19.85        | -751.67      | 33.03                   | 6.17                    | 6.17                   | 0.43                  |
| 11,694.00             | 25.10           | 183.90      | 11,641.54             | 1.33         | -752.76      | 51.58                   | 7.93                    | 7.87                   | 2.34                  |
| 11,788.00             | 34.40           | 180.70      | 11,723.07             | -45.22       | -754.45      | 98.13                   | 10.03                   | 9.89                   | -3.40                 |
| 11,835.00             | 40.20           | 179.20      | 11,760.44             | -73.68       | -754.40      | 126.52                  | 12.49                   | 12.34                  | -3.19                 |
| 11,882.00             | 45.00           | 177.70      | 11,795.03             | -105.47      | -753.52      | 158.17                  | 10.44                   | 10.21                  | -3.19                 |
| 11,929.00             | 50.50           | 172.90      | 11,826.63             | -140.11      | -750.61      | 192.52                  | 13.93                   | 11.70                  | -10.21                |
| 11,976.00             | 55.20           | 168.50      | 11,855.01             | -177.05      | -744.51      | 228.93                  | 12.47                   | 10.00                  | -9.36                 |
| 12,070.00             | 60.50           | 172.00      | 11,905.02             | -255.45      | -731.11      | 306.20                  | 6.46                    | 5.64                   | 3.72                  |
| 12,165.00             | 66.40           | 179.90      | 11,947.52             | -340.10      | -725.27      | 390.23                  | 9.69                    | 6.21                   | 8.32                  |
| 12,260.00             | 76.80           | 186.00      | 11,977.49             | -429.94      | -730.05      | 480.18                  | 12.52                   | 10.95                  | 6.42                  |
| 12,355.00             | 85.90           | 187.90      | 11,991.77             | -523.06      | -741.42      | 573.87                  | 9.78                    | 9.58                   | 2.00                  |
| 12,362.00             | 86.50           | 188.10      | 11,992.23             | -529.98      | -742.39      | 580.84                  | 9.03                    | 8.57                   | 2.86                  |
| 12,447.00             | 85.30           | 187.10      | 11,998.31             | -614.01      | -753.60      | 665.46                  | 1.84                    | -1.41                  | -1.18                 |
| 12,541.00             | 83.10           | 185.90      | 12,007.81             | -706.92      | -764.19      | 758.88                  | 2.66                    | -2.34                  | -1.28                 |
| 12,635.00             | 82.60           | 185.40      | 12,019.51             | -799.74      | -773.37      | 852.11                  | 0.75                    | -0.53                  | -0.53                 |
| 12,671.00             | 84.30           | 185.90      | 12,023.61             | -835.33      | -776.89      | 887.86                  | 4.92                    | 4.72                   | 1.39                  |
| 12,763.00             | 85.60           | 185.70      | 12,031.71             | -926.50      | -786.15      | 979.46                  | 1.43                    | 1.41                   | -0.22                 |
| 12,855.00             | 86.90           | 183.50      | 12,037.73             | -1,018.00    | -793.51      | 1,071.25                | 2.77                    | 1.41                   | -2.39                 |
| 12,948.00             | 86.60           | 181.10      | 12,043.00             | -1,110.77    | -797.24      | 1,164.05                | 2.60                    | -0.32                  | -2.58                 |
| 13,041.00             | 85.60           | 180.00      | 12,049.33             | -1,203.55    | -798.13      | 1,256.66                | 1.60                    | -1.08                  | -1.18                 |
| 13,133.00             | 86.20           | 179.20      | 12,055.91             | -1,295.31    | -797.49      | 1,348.15                | 1.09                    | 0.65                   | -0.87                 |
| 13,225.00             | 88.30           | 178.50      | 12,060.32             | -1,387.18    | -795.65      | 1,439.66                | 2.41                    | 2.28                   | -0.76                 |
| 13,318.00             | 87.20           | 177.80      | 12,063.97             | -1,480.06    | -792.65      | 1,532.10                | 1.40                    | -1.18                  | -0.75                 |
| 13,410.00             | 90.50           | 178.90      | 12,065.82             | -1,571.98    | -790.00      | 1,623.62                | 3.78                    | 3.59                   | 1.20                  |
| 13,503.00             | 90.60           | 178.40      | 12,064.92             | -1,664.95    | -787.81      | 1,716.20                | 0.55                    | 0.11                   | -0.54                 |
| 13,599.00             | 90.90           | 178.10      | 12,063.67             | -1,760.90    | -784.88      | 1,811.71                | 0.44                    | 0.31                   | -0.31                 |
| 13,691.00             | 89.00           | 178.40      | 12,063.75             | -1,852.85    | -782.07      | 1,903.24                | 2.09                    | -2.07                  | 0.33                  |
| 13,786.00             | 86.30           | 178.60      | 12,067.64             | -1,947.73    | -779.58      | 1,997.70                | 2.85                    | -2.84                  | 0.21                  |
| 13,880.00             | 86.90           | 179.60      | 12,073.22             | -2,041.55    | -778.11      | 2,091.19                | 1.24                    | 0.64                   | 1.06                  |
| 13,976.00             | 84.00           | 179.70      | 12,080.83             | -2,137.24    | -777.52      | 2,186.60                | 3.02                    | -3.02                  | 0.10                  |
| 14,070.00             | 84.70           | 180.20      | 12,090.09             | -2,230.78    | -777.44      | 2,279.90                | 0.91                    | 0.74                   | 0.53                  |
| 14,164.00             | 86.60           | 180.10      | 12,097.22             | -2,324.51    | -777.69      | 2,373.41                | 2.02                    | 2.02                   | -0.11                 |
| 14,258.00             | 86.60           | 180.50      | 12,102.79             | -2,418.34    | -778.18      | 2,467.05                | 0.42                    | 0.00                   | 0.43                  |
| 14,352.00             | 86.00           | 179.60      | 12,108.86             | -2,512.14    | -778.26      | 2,560.63                | 1.15                    | -0.64                  | -0.96                 |
| 14,447.00             | 85.20           | 179.80      | 12,116.15             | -2,606.86    | -777.77      | 2,655.07                | 0.87                    | -0.84                  | 0.21                  |
| 14,541.00             | 86.90           | 179.00      | 12,122.62             | -2,700.63    | -776.78      | 2,748.54                | 2.00                    | 1.81                   | -0.85                 |

|                  |                                 |                                     |                                   |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Caza Operating LLC              | <b>Local Co-ordinate Reference:</b> | Well Sioux 25-36 State Fed Com 8H |
| <b>Project:</b>  | Lea County, New Mexico (NAD 83) | <b>TVD Reference:</b>               | WELL @ 3109.00usft (Citadel 2)    |
| <b>Site:</b>     | Sioux 25-36 State Fed Com       | <b>MD Reference:</b>                | WELL @ 3109.00usft (Citadel 2)    |
| <b>Well:</b>     | Sioux 25-36 State Fed Com 8H    | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Wellbore #2                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | Surveys                         | <b>Database:</b>                    | 5000.1 Conroe DB                  |

| 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) |
| 14,635.00             | 90.30           | 181.30      | 12,124.92             | -2,794.58    | -777.03      | 2,842.28                | 4.37                    | 3.62                   | 2.45                  |
| 14,730.00             | 89.90           | 182.10      | 12,124.75             | -2,889.54    | -779.85      | 2,937.20                | 0.94                    | -0.42                  | 0.84                  |
| 14,823.00             | 89.30           | 182.70      | 12,125.40             | -2,982.45    | -783.74      | 3,030.16                | 0.91                    | -0.65                  | 0.65                  |
| 14,917.00             | 90.50           | 181.30      | 12,125.57             | -3,076.39    | -787.02      | 3,124.09                | 1.96                    | 1.28                   | -1.49                 |
| 15,011.00             | 87.60           | 178.40      | 12,127.12             | -3,170.36    | -786.78      | 3,217.81                | 4.36                    | -3.09                  | -3.09                 |
| 15,105.00             | 90.10           | 181.40      | 12,129.01             | -3,264.32    | -786.62      | 3,311.53                | 4.15                    | 2.66                   | 3.19                  |
| 15,199.00             | 89.00           | 180.30      | 12,129.75             | -3,358.30    | -788.01      | 3,405.38                | 1.65                    | -1.17                  | -1.17                 |
| 15,293.00             | 91.80           | 182.40      | 12,129.09             | -3,452.26    | -790.22      | 3,499.26                | 3.72                    | 2.98                   | 2.23                  |
| 15,387.00             | 90.90           | 180.10      | 12,126.88             | -3,546.20    | -792.27      | 3,593.12                | 2.63                    | -0.96                  | -2.45                 |
| 15,481.00             | 91.60           | 179.80      | 12,124.83             | -3,640.18    | -792.19      | 3,686.86                | 0.81                    | 0.74                   | -0.32                 |
| 15,575.00             | 89.70           | 178.90      | 12,123.76             | -3,734.16    | -791.12      | 3,780.53                | 2.24                    | -2.02                  | -0.96                 |
| 15,670.00             | 85.50           | 177.80      | 12,127.74             | -3,829.02    | -788.39      | 3,874.96                | 4.57                    | -4.42                  | -1.16                 |
| 15,763.00             | 86.50           | 178.20      | 12,134.23             | -3,921.73    | -785.16      | 3,967.22                | 1.16                    | 1.08                   | 0.43                  |
| 15,858.00             | 85.90           | 176.90      | 12,140.52             | -4,016.44    | -781.10      | 4,061.40                | 1.50                    | -0.63                  | -1.37                 |
| 15,951.00             | 88.20           | 177.90      | 12,145.31             | -4,109.21    | -776.89      | 4,153.65                | 2.70                    | 2.47                   | 1.08                  |
| 16,046.00             | 88.00           | 178.10      | 12,148.46             | -4,204.10    | -773.58      | 4,248.07                | 0.30                    | -0.21                  | 0.21                  |
| 16,140.00             | 86.70           | 177.60      | 12,152.80             | -4,297.93    | -770.06      | 4,341.42                | 1.48                    | -1.38                  | -0.53                 |
| 16,234.00             | 88.40           | 178.40      | 12,156.82             | -4,391.78    | -766.78      | 4,434.81                | 2.00                    | 1.81                   | 0.85                  |
| 16,329.00             | 90.00           | 178.40      | 12,158.15             | -4,486.73    | -764.13      | 4,529.34                | 1.68                    | 1.68                   | 0.00                  |
| 16,423.00             | 88.20           | 176.90      | 12,159.62             | -4,580.64    | -760.27      | 4,622.74                | 2.49                    | -1.91                  | -1.60                 |
| 16,519.00             | 90.00           | 179.10      | 12,161.13             | -4,676.56    | -756.93      | 4,718.19                | 2.96                    | 1.88                   | 2.29                  |
| 16,612.00             | 93.30           | 182.40      | 12,158.45             | -4,769.48    | -758.14      | 4,810.97                | 5.02                    | 3.55                   | 3.55                  |
| 16,706.00             | 92.60           | 182.50      | 12,153.62             | -4,863.27    | -762.15      | 4,904.81                | 0.75                    | -0.74                  | 0.11                  |
| 16,800.00             | 91.60           | 183.00      | 12,150.17             | -4,957.10    | -766.66      | 4,998.72                | 1.19                    | -1.06                  | 0.53                  |
| 16,894.00             | 90.40           | 181.40      | 12,148.53             | -5,051.01    | -770.27      | 5,092.66                | 2.13                    | -1.28                  | -1.70                 |
| 16,989.00             | 90.60           | 181.60      | 12,147.70             | -5,145.98    | -772.75      | 5,187.56                | 0.30                    | 0.21                   | 0.21                  |
| 17,081.00             | 88.60           | 180.30      | 12,148.35             | -5,237.95    | -774.28      | 5,279.42                | 2.59                    | -2.17                  | -1.41                 |
| 17,175.00             | 88.10           | 180.10      | 12,151.05             | -5,331.92    | -774.61      | 5,373.17                | 0.57                    | -0.53                  | -0.21                 |
| 17,268.00             | 87.90           | 180.30      | 12,154.30             | -5,424.86    | -774.93      | 5,465.91                | 0.30                    | -0.22                  | 0.22                  |
| 17,363.00             | 88.30           | 178.60      | 12,157.45             | -5,519.80    | -774.02      | 5,560.55                | 1.84                    | 0.42                   | -1.79                 |
| 17,456.00             | 90.70           | 177.60      | 12,158.26             | -5,612.73    | -770.94      | 5,653.04                | 2.80                    | 2.58                   | -1.08                 |
| 17,551.00             | 90.40           | 176.00      | 12,157.35             | -5,707.58    | -765.63      | 5,747.27                | 1.71                    | -0.32                  | -1.68                 |
| 17,644.00             | 90.10           | 174.90      | 12,156.94             | -5,800.28    | -758.26      | 5,839.23                | 1.23                    | -0.32                  | -1.18                 |
| 17,738.00             | 90.70           | 175.70      | 12,156.28             | -5,893.96    | -750.55      | 5,932.14                | 1.06                    | 0.64                   | 0.85                  |
| 17,833.00             | 91.50           | 178.20      | 12,154.46             | -5,988.80    | -745.50      | 6,026.39                | 2.76                    | 0.84                   | 2.63                  |
| 17,928.00             | 89.50           | 176.30      | 12,153.63             | -6,083.68    | -740.94      | 6,120.71                | 2.90                    | -2.11                  | -2.00                 |
| 18,022.00             | 91.40           | 177.80      | 12,152.89             | -6,177.55    | -736.11      | 6,214.01                | 2.58                    | 2.02                   | 1.60                  |
| 18,115.00             | 90.40           | 179.30      | 12,151.43             | -6,270.50    | -733.75      | 6,306.56                | 1.94                    | -1.08                  | 1.61                  |
| 18,210.00             | 92.50           | 182.60      | 12,149.03             | -6,365.44    | -735.33      | 6,401.38                | 4.12                    | 2.21                   | 3.47                  |
| 18,305.00             | 90.40           | 180.80      | 12,146.62             | -6,460.36    | -738.14      | 6,496.26                | 2.91                    | -2.21                  | -1.89                 |
| 18,399.00             | 90.90           | 183.70      | 12,145.56             | -6,554.27    | -741.83      | 6,590.20                | 3.13                    | 0.53                   | 3.09                  |
| 18,495.00             | 90.90           | 184.60      | 12,144.05             | -6,650.01    | -748.78      | 6,686.19                | 0.94                    | 0.00                   | 0.94                  |
| 18,590.00             | 92.40           | 183.40      | 12,141.31             | -6,744.73    | -755.40      | 6,781.14                | 2.02                    | 1.58                   | -1.26                 |

|                  |                                 |                                     |                                   |
|------------------|---------------------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Caza Operating LLC              | <b>Local Co-ordinate Reference:</b> | Well Sioux 25-36 State Fed Com 8H |
| <b>Project:</b>  | Lea County, New Mexico (NAD 83) | <b>TVD Reference:</b>               | WELL @ 3109.00usft (Citadel 2)    |
| <b>Site:</b>     | Sioux 25-36 State Fed Com       | <b>MD Reference:</b>                | WELL @ 3109.00usft (Citadel 2)    |
| <b>Well:</b>     | Sioux 25-36 State Fed Com 8H    | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Wellbore #2                     | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | Surveys                         | <b>Database:</b>                    | 5000.1 Conroe DB                  |

| 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) |
| 18,684.00             | 87.10           | 178.50      | 12,141.72             | -6,838.65    | -756.96      | 6,874.94                | 7.68                    | -5.64                  | -5.21                 |
| 18,779.00             | 88.00           | 178.40      | 12,145.79             | -6,933.53    | -754.39      | 6,969.41                | 0.95                    | 0.95                   | -0.11                 |
| 18,875.00             | 89.90           | 179.20      | 12,147.54             | -7,029.49    | -752.38      | 7,064.98                | 2.15                    | 1.98                   | 0.83                  |
| 18,969.00             | 90.40           | 179.30      | 12,147.30             | -7,123.48    | -751.15      | 7,158.66                | 0.54                    | 0.53                   | 0.11                  |
| 19,064.00             | 91.00           | 179.50      | 12,146.14             | -7,218.47    | -750.16      | 7,253.34                | 0.67                    | 0.63                   | 0.21                  |
| 19,159.00             | 90.70           | 179.80      | 12,144.73             | -7,313.46    | -749.58      | 7,348.05                | 0.45                    | -0.32                  | 0.32                  |
| 19,203.00             | 91.10           | 179.90      | 12,144.04             | -7,357.45    | -749.46      | 7,391.93                | 0.94                    | 0.91                   | 0.23                  |
| 19,298.00             | 91.10           | 180.30      | 12,142.21             | -7,452.43    | -749.63      | 7,486.69                | 0.42                    | 0.00                   | 0.42                  |
| 19,394.00             | 91.20           | 180.90      | 12,140.29             | -7,548.41    | -750.63      | 7,582.50                | 0.63                    | 0.10                   | 0.63                  |
| 19,488.00             | 90.60           | 179.90      | 12,138.81             | -7,642.39    | -751.29      | 7,676.29                | 1.24                    | -0.64                  | -1.06                 |
| 19,582.00             | 90.70           | 180.80      | 12,137.74             | -7,736.38    | -751.86      | 7,770.09                | 0.96                    | 0.11                   | 0.96                  |
| 19,676.00             | 90.50           | 180.60      | 12,136.76             | -7,830.37    | -753.01      | 7,863.93                | 0.30                    | -0.21                  | -0.21                 |
| 19,771.00             | 90.40           | 180.20      | 12,136.01             | -7,925.36    | -753.68      | 7,958.74                | 0.43                    | -0.11                  | -0.42                 |
| 19,866.00             | 89.40           | 176.60      | 12,136.18             | -8,020.31    | -751.02      | 8,053.26                | 3.93                    | -1.05                  | -3.79                 |
| 19,960.00             | 89.00           | 176.30      | 12,137.49             | -8,114.12    | -745.20      | 8,146.43                | 0.53                    | -0.43                  | -0.32                 |
| 20,055.00             | 89.00           | 176.60      | 12,139.15             | -8,208.92    | -739.32      | 8,240.59                | 0.32                    | 0.00                   | 0.32                  |
| 20,150.00             | 89.80           | 177.90      | 12,140.14             | -8,303.81    | -734.77      | 8,334.91                | 1.61                    | 0.84                   | 1.37                  |
| 20,245.00             | 89.70           | 176.90      | 12,140.56             | -8,398.71    | -730.46      | 8,429.28                | 1.06                    | -0.11                  | -1.05                 |
| 20,341.00             | 90.10           | 178.00      | 12,140.73             | -8,494.61    | -726.18      | 8,524.64                | 1.22                    | 0.42                   | 1.15                  |
| 20,435.00             | 89.70           | 177.00      | 12,140.89             | -8,588.52    | -722.08      | 8,618.03                | 1.15                    | -0.43                  | -1.06                 |
| 20,530.00             | 89.80           | 177.40      | 12,141.31             | -8,683.40    | -717.44      | 8,712.35                | 0.43                    | 0.11                   | 0.42                  |
| 20,624.00             | 88.90           | 175.50      | 12,142.37             | -8,777.21    | -711.62      | 8,805.52                | 2.24                    | -0.96                  | -2.02                 |
| 20,719.00             | 88.70           | 175.00      | 12,144.36             | -8,871.87    | -703.76      | 8,899.39                | 0.57                    | -0.21                  | -0.53                 |
| 20,814.00             | 89.10           | 179.60      | 12,146.19             | -8,966.72    | -699.29      | 8,993.69                | 4.86                    | 0.42                   | 4.84                  |
| 20,909.00             | 89.90           | 180.10      | 12,147.02             | -9,061.71    | -699.04      | 9,088.43                | 0.99                    | 0.84                   | 0.53                  |
| 21,004.00             | 90.00           | 180.40      | 12,147.10             | -9,156.71    | -699.45      | 9,183.23                | 0.33                    | 0.11                   | 0.32                  |
| 21,099.00             | 90.60           | 180.50      | 12,146.60             | -9,251.71    | -700.20      | 9,278.04                | 0.64                    | 0.63                   | 0.11                  |
| 21,193.00             | 90.10           | 179.40      | 12,146.03             | -9,345.70    | -700.12      | 9,371.80                | 1.29                    | -0.53                  | -1.17                 |
| 21,288.00             | 90.80           | 180.10      | 12,145.28             | -9,440.70    | -699.70      | 9,466.53                | 1.04                    | 0.74                   | 0.74                  |
| 21,383.00             | 92.10           | 180.90      | 12,142.88             | -9,535.66    | -700.53      | 9,561.32                | 1.61                    | 1.37                   | 0.84                  |
| 21,477.00             | 92.40           | 180.70      | 12,139.19             | -9,629.58    | -701.84      | 9,655.09                | 0.38                    | 0.32                   | -0.21                 |
| 21,572.00             | 90.20           | 179.60      | 12,137.03             | -9,724.55    | -702.09      | 9,749.84                | 2.59                    | -2.32                  | -1.16                 |
| 21,668.00             | 89.80           | 179.70      | 12,137.03             | -9,820.54    | -701.50      | 9,845.56                | 0.43                    | -0.42                  | 0.10                  |
| 21,762.00             | 88.90           | 179.60      | 12,138.10             | -9,914.54    | -700.93      | 9,939.28                | 0.96                    | -0.96                  | -0.11                 |
| 21,858.00             | 88.70           | 179.60      | 12,140.11             | -10,010.51   | -700.26      | 10,034.97               | 0.21                    | -0.21                  | 0.00                  |
| 21,951.00             | 88.30           | 179.20      | 12,142.54             | -10,103.48   | -699.29      | 10,127.64               | 0.61                    | -0.43                  | -0.43                 |
| 22,046.00             | 87.90           | 178.60      | 12,145.69             | -10,198.40   | -697.46      | 10,222.21               | 0.76                    | -0.42                  | -0.63                 |
| 22,089.00             | 88.10           | 178.90      | 12,147.19             | -10,241.37   | -696.53      | 10,265.00               | 0.84                    | 0.47                   | 0.70                  |
| 22,150.00             | 88.10           | 178.90      | 12,149.21             | -10,302.32   | -695.36      | 10,325.72               | 0.00                    | 0.00                   | 0.00 PTB              |