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## **XTO Energy**

**Eddy County, NM (NAD-27)**

**Remuda South 25 State**

**#105H**

**OH**

**Plan: PERMIT**

## **Standard Planning Report**

**31 May, 2019**



Project: Eddy County, NM (NAD-27)  
Site: Remuda South 25 State  
Well: #105H  
Wellbore: OH  
Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)  
Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level

#### DESIGN TARGET DETAILS

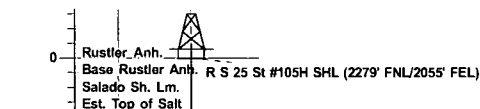
| Name                                      | TVD      | +N/-S    | +E/-W  | Northing  | Easting   | Latitude   | Longitude    | Shape |
|-------------------------------------------|----------|----------|--------|-----------|-----------|------------|--------------|-------|
| R S 25 St #105H SHL (2279' FNL/2055' FEL) | 0.00     | 0.00     | 0.00   | 464640.40 | 622880.40 | 32.2767873 | -103.9357405 | Point |
| R S 25 St #105H FTP                       | 10365.00 | -710.00  | -87.70 | 463930.40 | 622792.70 | 32.2748365 | -103.9360328 | Point |
| R S 25 St #105H LTP                       | 10384.65 | -8021.40 | -55.20 | 456619.00 | 622825.80 | 32.2547378 | -103.9360152 | Point |
| R S 25 St #105H PBHL (200' FSL/2145' FEL) | 10385.00 | -8151.40 | -54.60 | 456489.00 | 622825.80 | 32.2543804 | -103.9360148 | Point |

#### WELL DETAILS: #105H

|                                                               |       |            |              |
|---------------------------------------------------------------|-------|------------|--------------|
| Rig Name:<br>RKB = 22' @ 3083.00usft<br>Ground Level: 3061.00 |       |            |              |
| +N/-S                                                         | +E/-W | Northing   | Eastng       |
| 0.00                                                          | 0.00  | 464640.40  | 622880.40    |
|                                                               |       | Latitude   | Longitude    |
|                                                               |       | 32.2767873 | -103.9357405 |

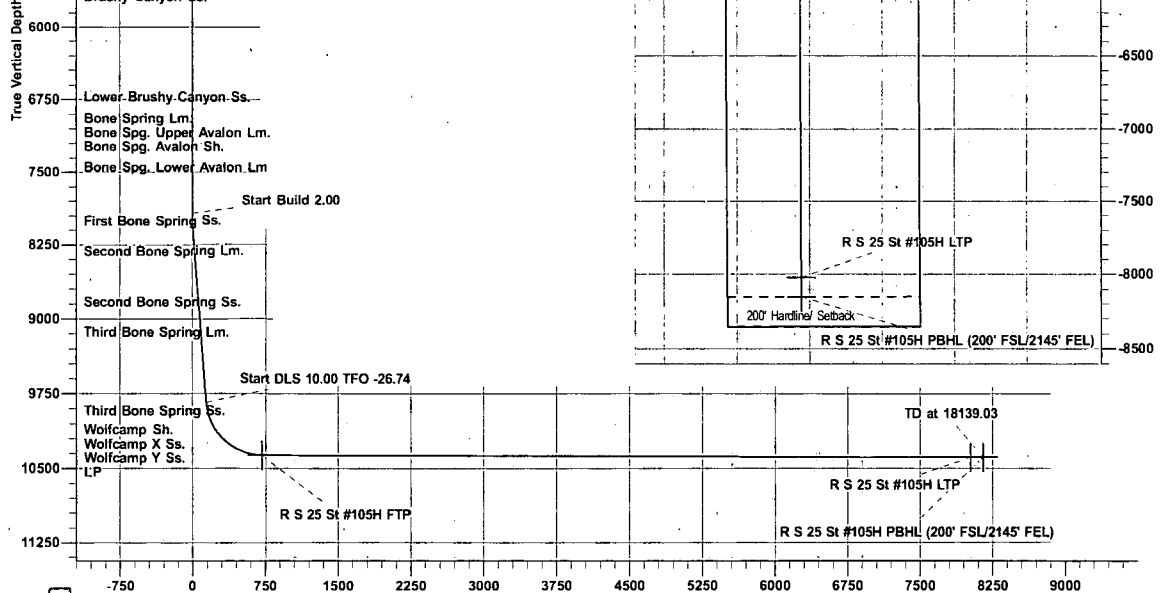
#### SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S    | +E/-W  | Dleg  | TFace  | VSec    |
|-----|----------|-------|--------|----------|----------|--------|-------|--------|---------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |
| 2   | 7921.00  | 0.00  | 0.00   | 7921.00  | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |
| 3   | 8170.77  | 5.00  | 206.39 | 8170.45  | -9.75    | -4.84  | 2.00  | 206.39 | 9.73    |
| 4   | 9843.71  | 5.00  | 206.39 | 9837.04  | -140.23  | -69.59 | 0.00  | 0.00   | 139.93  |
| 5   | 10897.33 | 89.85 | 179.75 | 10365.00 | -710.00  | -87.70 | 10.00 | -26.74 | 709.61  |
| 6   | 18009.03 | 89.85 | 179.75 | 10384.65 | -8021.40 | -55.18 | 0.00  | 0.00   | 8021.08 |
| 7   | 18139.03 | 89.85 | 179.75 | 10385.00 | -8151.40 | -54.60 | 0.00  | 0.00   | 8151.08 |



#### FORMATION TOP DETAILS

| TVDPath  | Formation                  |
|----------|----------------------------|
| 228.00   | Rustler Anh.               |
| 304.00   | Base Rustler Anh.          |
| 325.00   | Salado Sh. Lm.             |
| 433.00   | Est. Top of Salt           |
| 3010.00  | Base Salt                  |
| 3284.00  | Lamar Lm. (Del Mtn Grp.)   |
| 3306.00  | Bell Canyon Ss.            |
| 4148.00  | Cherry Canyon Ss.          |
| 5761.00  | Brushy Canyon Ss.          |
| 6796.00  | Lower Brushy Canyon Ss.    |
| 7057.00  | Bone Spring Lm.            |
| 7154.00  | Avalon Ss.                 |
| 7223.00  | Bone Spg. Upper Avalon Lm. |
| 7310.00  | Bone Spg. Avalon Sh.       |
| 7518.00  | Bone Spg. Lower Avalon Lm. |
| 8077.00  | First Bone Spring Ss.      |
| 8391.00  | Second Bone Spring Lm.     |
| 8902.00  | Second Bone Spring Ss.     |
| 9207.00  | Third Bone Spring Lm.      |
| 9994.00  | Third Bone Spring Ss.      |
| 10306.00 | Wolfcamp Sh.               |
| 10346.00 | Wolfcamp X Ss.             |
| 10365.00 | Wolfcamp Y Ss.             |
|          | LP                         |



The customer should only rely on this document after independently verifying all points, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Prototype are at the sole risk and responsibility of the user.

Plan: PERMIT (#105H/OH)

Created By: Matthew May Date: 7:18, May 31 2019



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project:    | Eddy County, NM (NAD-27)             |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |                       |                   |                 |
|-----------------------|-----------------------|-------------------|-----------------|
| Site:                 | Remuda South 25 State |                   |                 |
| Site Position:        |                       | Northing:         | 464,609.70 usft |
| From:                 | Map                   | Easting:          | 620,263.40 usft |
| Position Uncertainty: | 0.00 usft             | Slot Radius:      | 13-3/16 "       |
|                       |                       | Latitude:         | 32.2767294      |
|                       |                       | Longitude:        | -103.9442083    |
|                       |                       | Grid Convergence: | 0.21 °          |

|                      |           |                     |           |                 |               |              |
|----------------------|-----------|---------------------|-----------|-----------------|---------------|--------------|
| Well                 | #105H     |                     |           |                 |               |              |
| Well Position        | +N/-S     | 30.70 usft          | Northing: | 464,640.40 usft | Latitude:     | 32.2767874   |
|                      | +E/-W     | 2,617.00 usft       | Easting:  | 622,880.40 usft | Longitude:    | -103.9357405 |
| Position Uncertainty | 0.00 usft | Wellhead Elevation: | 0.00 usft | Ground Level:   | 3,061.00 usft |              |

|           |            |             |                    |                  |                        |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore  | OH         |             |                    |                  |                        |
| Magnetics | Model Name | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF2015   | 05/31/19    | 6.92               | 60.03            | 47,733                 |

|                   |                            |                 |                 |                    |
|-------------------|----------------------------|-----------------|-----------------|--------------------|
| Design:           |                            | PERMIT          |                 |                    |
| Audit Notes:      |                            |                 |                 |                    |
| Version:          |                            | Phase:          | PLAN            | Tie On Depth: 0.00 |
| Vertical Section: | Depth From (TVD)<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Direction<br>(°)   |
|                   | 0.00                       | 0.00            | 0.00            | 179.75             |

|                       |                 |             |                       |              |              |                         |                        |                       |         |                    |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|--------------------|
| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |                    |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target             |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 7,921.00              | 0.00            | 0.00        | 7,921.00              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 8,170.77              | 5.00            | 206.39      | 8,170.45              | -9.75        | -4.84        | 2.00                    | 2.00                   | 0.00                  | 206.39  |                    |
| 9,843.71              | 5.00            | 206.39      | 9,837.04              | -140.23      | -69.59       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                    |
| 10,697.53             | 89.85           | 179.75      | 10,365.00             | -710.00      | -87.70       | 10.00                   | 9.94                   | -3.12                 | -26.74  | R S 25 St #105H F  |
| 18,009.03             | 89.85           | 179.75      | 10,384.65             | -8,021.40    | -55.18       | 0.00                    | 0.00                   | 0.00                  | 0.00    | R S 25 St #105H L1 |
| 18,139.04             | 89.85           | 179.75      | 10,385.00             | -8,151.40    | -54.60       | 0.00                    | 0.00                   | 0.00                  | 0.00    | R S 25 St #105H PI |



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

## Planned 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) |
|---------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.00                            | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 100.00                          | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                          | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 228.00                          | 0.00            | 0.00        | 228.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler Anh.</b>             |                 |             |                       |              |              |                         |                         |                        |                       |
| 300.00                          | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 304.00                          | 0.00            | 0.00        | 304.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Rustler Anh.</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 325.00                          | 0.00            | 0.00        | 325.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Salado Sh. Lm.</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 400.00                          | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 433.00                          | 0.00            | 0.00        | 433.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Est. Top of Salt</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 500.00                          | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                          | 0.00            | 0.00        | 600.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                          | 0.00            | 0.00        | 700.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                          | 0.00            | 0.00        | 800.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                          | 0.00            | 0.00        | 900.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                        | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                        | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                        | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                        | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                        | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                        | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                        | 0.00            | 0.00        | 1,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                        | 0.00            | 0.00        | 1,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                        | 0.00            | 0.00        | 1,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,900.00                        | 0.00            | 0.00        | 1,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                        | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                        | 0.00            | 0.00        | 2,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                        | 0.00            | 0.00        | 2,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                        | 0.00            | 0.00        | 2,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                        | 0.00            | 0.00        | 2,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                        | 0.00            | 0.00        | 2,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                        | 0.00            | 0.00        | 2,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                        | 0.00            | 0.00        | 2,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                        | 0.00            | 0.00        | 2,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                        | 0.00            | 0.00        | 2,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                        | 0.00            | 0.00        | 3,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,010.00                        | 0.00            | 0.00        | 3,010.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Salt</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,100.00                        | 0.00            | 0.00        | 3,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                        | 0.00            | 0.00        | 3,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,284.00                        | 0.00            | 0.00        | 3,284.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Lamar Lm. (Del Mtn Grp.)</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,300.00                        | 0.00            | 0.00        | 3,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,306.00                        | 0.00            | 0.00        | 3,306.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Bell Canyon Ss.</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,400.00                        | 0.00            | 0.00        | 3,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                        | 0.00            | 0.00        | 3,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                        | 0.00            | 0.00        | 3,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                        | 0.00            | 0.00        | 3,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                        | 0.00            | 0.00        | 3,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

## Planned Survey

| Measured Depth (usft)             | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 3,900.00                          | 0.00            | 0.00        | 3,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                          | 0.00            | 0.00        | 4,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                          | 0.00            | 0.00        | 4,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,148.00                          | 0.00            | 0.00        | 4,148.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Cherry Canyon Ss.</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,200.00                          | 0.00            | 0.00        | 4,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                          | 0.00            | 0.00        | 4,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                          | 0.00            | 0.00        | 4,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                          | 0.00            | 0.00        | 4,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,600.00                          | 0.00            | 0.00        | 4,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                          | 0.00            | 0.00        | 4,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                          | 0.00            | 0.00        | 4,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                          | 0.00            | 0.00        | 4,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                          | 0.00            | 0.00        | 5,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                          | 0.00            | 0.00        | 5,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                          | 0.00            | 0.00        | 5,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                          | 0.00            | 0.00        | 5,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00                          | 0.00            | 0.00        | 5,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00                          | 0.00            | 0.00        | 5,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00                          | 0.00            | 0.00        | 5,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00                          | 0.00            | 0.00        | 5,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,761.00                          | 0.00            | 0.00        | 5,761.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Brushy Canyon Ss.</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,800.00                          | 0.00            | 0.00        | 5,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                          | 0.00            | 0.00        | 5,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00                          | 0.00            | 0.00        | 6,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00                          | 0.00            | 0.00        | 6,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00                          | 0.00            | 0.00        | 6,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00                          | 0.00            | 0.00        | 6,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00                          | 0.00            | 0.00        | 6,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00                          | 0.00            | 0.00        | 6,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00                          | 0.00            | 0.00        | 6,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00                          | 0.00            | 0.00        | 6,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,796.00                          | 0.00            | 0.00        | 6,796.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Lower Brushy Canyon Ss.</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 6,800.00                          | 0.00            | 0.00        | 6,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00                          | 0.00            | 0.00        | 6,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00                          | 0.00            | 0.00        | 7,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,057.00                          | 0.00            | 0.00        | 7,057.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spring Lm.</b>            |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,100.00                          | 0.00            | 0.00        | 7,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,154.00                          | 0.00            | 0.00        | 7,154.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Avalon Ss.</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,200.00                          | 0.00            | 0.00        | 7,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,223.00                          | 0.00            | 0.00        | 7,223.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spg. Upper Avalon Lm.</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,300.00                          | 0.00            | 0.00        | 7,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,310.00                          | 0.00            | 0.00        | 7,310.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spg. Avalon Sh.</b>       |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,400.00                          | 0.00            | 0.00        | 7,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00                          | 0.00            | 0.00        | 7,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,518.00                          | 0.00            | 0.00        | 7,518.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spg. Lower Avalon Lm</b>  |                 |             |                       |              |              |                         |                         |                        |                       |



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

## Planned 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) |
|-------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 7,600.00                      | 0.00            | 0.00        | 7,600.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00                      | 0.00            | 0.00        | 7,700.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00                      | 0.00            | 0.00        | 7,800.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00                      | 0.00            | 0.00        | 7,900.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 7,921.00                      | 0.00            | 0.00        | 7,921.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00                      | 1.58            | 206.39      | 7,999.99              | -0.98        | -0.48        | 0.97                    | 2.00                    | 2.00                   | 0.00                  |
| 8,077.08                      | 3.12            | 206.39      | 8,077.00              | -3.81        | -1.89        | 3.80                    | 2.00                    | 2.00                   | 0.00                  |
| <b>First Bone Spring Ss.</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,100.00                      | 3.58            | 206.39      | 8,099.88              | -5.01        | -2.49        | 5.00                    | 2.00                    | 2.00                   | 0.00                  |
| 8,170.77                      | 5.00            | 206.39      | 8,170.45              | -9.75        | -4.84        | 9.73                    | 2.00                    | 2.00                   | 0.00                  |
| 8,200.00                      | 5.00            | 206.39      | 8,199.57              | -12.03       | -5.97        | 12.00                   | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00                      | 5.00            | 206.39      | 8,299.19              | -19.83       | -9.84        | 19.78                   | 0.00                    | 0.00                   | 0.00                  |
| 8,392.16                      | 5.00            | 206.39      | 8,391.00              | -27.01       | -13.41       | 26.96                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Lm.</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,400.00                      | 5.00            | 206.39      | 8,398.81              | -27.63       | -13.71       | 27.57                   | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                      | 5.00            | 206.39      | 8,498.43              | -35.43       | -17.58       | 35.35                   | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                      | 5.00            | 206.39      | 8,598.05              | -43.23       | -21.45       | 43.13                   | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                      | 5.00            | 206.39      | 8,697.67              | -51.03       | -25.32       | 50.91                   | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                      | 5.00            | 206.39      | 8,797.29              | -58.83       | -29.19       | 58.70                   | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00                      | 5.00            | 206.39      | 8,896.91              | -66.63       | -33.06       | 66.48                   | 0.00                    | 0.00                   | 0.00                  |
| 8,905.11                      | 5.00            | 206.39      | 8,902.00              | -67.02       | -33.26       | 66.88                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Ss.</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,000.00                      | 5.00            | 206.39      | 8,996.53              | -74.43       | -36.93       | 74.26                   | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00                      | 5.00            | 206.39      | 9,096.15              | -82.22       | -40.81       | 82.05                   | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                      | 5.00            | 206.39      | 9,195.77              | -90.02       | -44.68       | 89.83                   | 0.00                    | 0.00                   | 0.00                  |
| 9,211.27                      | 5.00            | 206.39      | 9,207.00              | -90.90       | -45.11       | 90.71                   | 0.00                    | 0.00                   | 0.00                  |
| <b>Third Bone Spring Lm.</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,300.00                      | 5.00            | 206.39      | 9,295.39              | -97.82       | -48.55       | 97.61                   | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                      | 5.00            | 206.39      | 9,395.02              | -105.62      | -52.42       | 105.39                  | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                      | 5.00            | 206.39      | 9,494.64              | -113.42      | -56.29       | 113.18                  | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                      | 5.00            | 206.39      | 9,594.26              | -121.22      | -60.16       | 120.96                  | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                      | 5.00            | 206.39      | 9,693.88              | -129.02      | -64.03       | 128.74                  | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                      | 5.00            | 206.39      | 9,793.50              | -136.82      | -67.90       | 136.53                  | 0.00                    | 0.00                   | 0.00                  |
| 9,843.71                      | 5.00            | 206.39      | 9,837.04              | -140.23      | -69.59       | 139.93                  | 0.00                    | 0.00                   | 0.00                  |
| 9,850.00                      | 5.56            | 203.47      | 9,843.30              | -140.76      | -69.84       | 140.45                  | 10.00                   | 9.04                   | -46.43                |
| 9,900.00                      | 10.34           | 192.15      | 9,892.81              | -147.37      | -71.75       | 147.06                  | 10.00                   | 9.54                   | -22.64                |
| 9,950.00                      | 15.25           | 188.01      | 9,941.56              | -158.28      | -73.61       | 157.95                  | 10.00                   | 9.84                   | -8.30                 |
| 10,000.00                     | 20.21           | 185.85      | 9,989.17              | -173.39      | -75.41       | 173.06                  | 10.00                   | 9.92                   | -4.31                 |
| 10,005.16                     | 20.73           | 185.69      | 9,994.00              | -175.19      | -75.59       | 174.86                  | 10.00                   | 9.94                   | -3.20                 |
| <b>Third Bone Spring Ss.</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,050.00                     | 25.19           | 184.52      | 10,035.28             | -192.60      | -77.13       | 192.26                  | 10.00                   | 9.95                   | -2.60                 |
| 10,100.00                     | 30.17           | 183.61      | 10,079.54             | -215.76      | -78.76       | 215.42                  | 10.00                   | 9.96                   | -1.83                 |
| 10,150.00                     | 35.16           | 182.93      | 10,121.62             | -242.69      | -80.28       | 242.34                  | 10.00                   | 9.97                   | -1.35                 |
| 10,200.00                     | 40.14           | 182.40      | 10,161.20             | -273.19      | -81.70       | 272.83                  | 10.00                   | 9.98                   | -1.05                 |
| 10,250.00                     | 45.14           | 181.98      | 10,197.97             | -307.03      | -82.99       | 306.66                  | 10.00                   | 9.98                   | -0.86                 |
| 10,300.00                     | 50.13           | 181.62      | 10,231.65             | -343.94      | -84.14       | 343.57                  | 10.00                   | 9.99                   | -0.72                 |
| 10,350.00                     | 55.12           | 181.31      | 10,261.99             | -383.65      | -85.15       | 383.27                  | 10.00                   | 9.99                   | -0.62                 |
| 10,400.00                     | 60.12           | 181.03      | 10,288.76             | -425.85      | -86.00       | 425.47                  | 10.00                   | 9.99                   | -0.55                 |
| 10,436.67                     | 63.78           | 180.85      | 10,306.00             | -458.20      | -86.53       | 457.82                  | 10.00                   | 9.99                   | -0.50                 |
| <b>Wolfcamp Sh.</b>           |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,450.00                     | 65.11           | 180.78      | 10,311.75             | -470.23      | -86.70       | 469.85                  | 10.00                   | 9.99                   | -0.48                 |
| 10,500.00                     | 70.11           | 180.55      | 10,330.79             | -516.44      | -87.24       | 516.06                  | 10.00                   | 9.99                   | -0.46                 |
| 10,550.00                     | 75.10           | 180.34      | 10,345.73             | -564.14      | -87.61       | 563.75                  | 10.00                   | 9.99                   | -0.43                 |



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

## Planned 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 10,551.04             | 75.21           | 180.33      | 10,346.00             | -565.15      | -87.61       | 564.76                  | 10.00                   | 9.99                   | -0.42                 |
| <b>Wolfcamp X Ss.</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,600.00             | 80.10           | 180.13      | 10,356.46             | -612.96      | -87.81       | 612.57                  | 10.00                   | 9.99                   | -0.41                 |
| 10,650.00             | 85.10           | 179.93      | 10,362.90             | -662.53      | -87.83       | 662.14                  | 10.00                   | 9.99                   | -0.40                 |
| 10,697.53             | 89.85           | 179.75      | 10,365.00             | -710.00      | -87.70       | 709.61                  | 10.00                   | 9.99                   | -0.39                 |
| <b>LP</b>             |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,700.00             | 89.85           | 179.75      | 10,365.01             | -712.47      | -87.69       | 712.08                  | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00             | 89.85           | 179.75      | 10,365.28             | -812.46      | -87.24       | 812.08                  | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00             | 89.85           | 179.75      | 10,365.54             | -912.46      | -86.80       | 912.08                  | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00             | 89.85           | 179.75      | 10,365.81             | -1,012.46    | -86.35       | 1,012.08                | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00             | 89.85           | 179.75      | 10,366.08             | -1,112.46    | -85.91       | 1,112.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00             | 89.85           | 179.75      | 10,366.35             | -1,212.46    | -85.47       | 1,212.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00             | 89.85           | 179.75      | 10,366.62             | -1,312.46    | -85.02       | 1,312.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00             | 89.85           | 179.75      | 10,366.89             | -1,412.46    | -84.58       | 1,412.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00             | 89.85           | 179.75      | 10,367.16             | -1,512.46    | -84.13       | 1,512.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00             | 89.85           | 179.75      | 10,367.43             | -1,612.45    | -83.69       | 1,612.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00             | 89.85           | 179.75      | 10,367.69             | -1,712.45    | -83.24       | 1,712.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00             | 89.85           | 179.75      | 10,367.96             | -1,812.45    | -82.80       | 1,812.07                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00             | 89.85           | 179.75      | 10,368.23             | -1,912.45    | -82.35       | 1,912.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00             | 89.85           | 179.75      | 10,368.50             | -2,012.45    | -81.91       | 2,012.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00             | 89.85           | 179.75      | 10,368.77             | -2,112.45    | -81.46       | 2,112.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00             | 89.85           | 179.75      | 10,369.04             | -2,212.45    | -81.02       | 2,212.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00             | 89.85           | 179.75      | 10,369.31             | -2,312.44    | -80.57       | 2,312.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00             | 89.85           | 179.75      | 10,369.58             | -2,412.44    | -80.13       | 2,412.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00             | 89.85           | 179.75      | 10,369.84             | -2,512.44    | -79.68       | 2,512.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00             | 89.85           | 179.75      | 10,370.11             | -2,612.44    | -79.24       | 2,612.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00             | 89.85           | 179.75      | 10,370.38             | -2,712.44    | -78.79       | 2,712.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00             | 89.85           | 179.75      | 10,370.65             | -2,812.44    | -78.35       | 2,812.07                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00             | 89.85           | 179.75      | 10,370.92             | -2,912.44    | -77.90       | 2,912.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00             | 89.85           | 179.75      | 10,371.19             | -3,012.43    | -77.46       | 3,012.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00             | 89.85           | 179.75      | 10,371.46             | -3,112.43    | -77.01       | 3,112.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00             | 89.85           | 179.75      | 10,371.73             | -3,212.43    | -76.57       | 3,212.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00             | 89.85           | 179.75      | 10,371.99             | -3,312.43    | -76.12       | 3,312.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00             | 89.85           | 179.75      | 10,372.26             | -3,412.43    | -75.68       | 3,412.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00             | 89.85           | 179.75      | 10,372.53             | -3,512.43    | -75.23       | 3,512.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00             | 89.85           | 179.75      | 10,372.80             | -3,612.43    | -74.79       | 3,612.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00             | 89.85           | 179.75      | 10,373.07             | -3,712.43    | -74.34       | 3,712.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00             | 89.85           | 179.75      | 10,373.34             | -3,812.42    | -73.90       | 3,812.07                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00             | 89.85           | 179.75      | 10,373.61             | -3,912.42    | -73.46       | 3,912.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00             | 89.85           | 179.75      | 10,373.88             | -4,012.42    | -73.01       | 4,012.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00             | 89.85           | 179.75      | 10,374.14             | -4,112.42    | -72.57       | 4,112.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00             | 89.85           | 179.75      | 10,374.41             | -4,212.42    | -72.12       | 4,212.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00             | 89.85           | 179.75      | 10,374.68             | -4,312.42    | -71.68       | 4,312.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00             | 89.85           | 179.75      | 10,374.95             | -4,412.42    | -71.23       | 4,412.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00             | 89.85           | 179.75      | 10,375.22             | -4,512.41    | -70.79       | 4,512.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00             | 89.85           | 179.75      | 10,375.49             | -4,612.41    | -70.34       | 4,612.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00             | 89.85           | 179.75      | 10,375.76             | -4,712.41    | -69.90       | 4,712.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00             | 89.85           | 179.75      | 10,376.03             | -4,812.41    | -69.45       | 4,812.06                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00             | 89.85           | 179.75      | 10,376.29             | -4,912.41    | -69.01       | 4,912.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00             | 89.85           | 179.75      | 10,376.56             | -5,012.41    | -68.56       | 5,012.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00             | 89.85           | 179.75      | 10,376.83             | -5,112.41    | -68.12       | 5,112.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00             | 89.85           | 179.75      | 10,377.10             | -5,212.41    | -67.67       | 5,212.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00             | 89.85           | 179.75      | 10,377.37             | -5,312.40    | -67.23       | 5,312.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00             | 89.85           | 179.75      | 10,377.64             | -5,412.40    | -66.78       | 5,412.06                | 0.00                    | 0.00                   | 0.00                  |



# Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
| Database: | EDM 5000.1.13 Single User Db | Local Co-ordinate Reference: | Well #105H              |
| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

## Planned 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 15,500.00             | 89.85           | 179.75      | 10,377.91             | -5,512.40    | -66.34       | 5,512.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00             | 89.85           | 179.75      | 10,378.18             | -5,612.40    | -65.89       | 5,612.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00             | 89.85           | 179.75      | 10,378.45             | -5,712.40    | -65.45       | 5,712.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00             | 89.85           | 179.75      | 10,378.71             | -5,812.40    | -65.00       | 5,812.06                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00             | 89.85           | 179.75      | 10,378.98             | -5,912.40    | -64.56       | 5,912.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00             | 89.85           | 179.75      | 10,379.25             | -6,012.39    | -64.11       | 6,012.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00             | 89.85           | 179.75      | 10,379.52             | -6,112.39    | -63.67       | 6,112.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00             | 89.85           | 179.75      | 10,379.79             | -6,212.39    | -63.22       | 6,212.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,300.00             | 89.85           | 179.75      | 10,380.06             | -6,312.39    | -62.78       | 6,312.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,400.00             | 89.85           | 179.75      | 10,380.33             | -6,412.39    | -62.34       | 6,412.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,500.00             | 89.85           | 179.75      | 10,380.60             | -6,512.39    | -61.89       | 6,512.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.00             | 89.85           | 179.75      | 10,380.86             | -6,612.39    | -61.45       | 6,612.06                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.00             | 89.85           | 179.75      | 10,381.13             | -6,712.38    | -61.00       | 6,712.05                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.00             | 89.85           | 179.75      | 10,381.40             | -6,812.38    | -60.56       | 6,812.05                | 0.00                    | 0.00                   | 0.00                  |
| 16,900.00             | 89.85           | 179.75      | 10,381.67             | -6,912.38    | -60.11       | 6,912.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,000.00             | 89.85           | 179.75      | 10,381.94             | -7,012.38    | -59.67       | 7,012.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,100.00             | 89.85           | 179.75      | 10,382.21             | -7,112.38    | -59.22       | 7,112.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,200.00             | 89.85           | 179.75      | 10,382.48             | -7,212.38    | -58.78       | 7,212.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,300.00             | 89.85           | 179.75      | 10,382.75             | -7,312.38    | -58.33       | 7,312.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,400.00             | 89.85           | 179.75      | 10,383.01             | -7,412.38    | -57.89       | 7,412.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,500.00             | 89.85           | 179.75      | 10,383.28             | -7,512.37    | -57.44       | 7,512.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,600.00             | 89.85           | 179.75      | 10,383.55             | -7,612.37    | -57.00       | 7,612.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,700.00             | 89.85           | 179.75      | 10,383.82             | -7,712.37    | -56.55       | 7,712.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,800.00             | 89.85           | 179.75      | 10,384.09             | -7,812.37    | -56.11       | 7,812.05                | 0.00                    | 0.00                   | 0.00                  |
| 17,900.00             | 89.85           | 179.75      | 10,384.36             | -7,912.37    | -55.66       | 7,912.05                | 0.00                    | 0.00                   | 0.00                  |
| 18,009.03             | 89.85           | 179.75      | 10,384.65             | -8,021.40    | -55.18       | 8,021.08                | 0.00                    | 0.00                   | 0.00                  |
| 18,100.00             | 89.85           | 179.75      | 10,384.90             | -8,112.37    | -54.77       | 8,112.05                | 0.00                    | 0.00                   | 0.00                  |
| 18,139.04             | 89.85           | 179.75      | 10,385.00             | -8,151.40    | -54.60       | 8,151.08                | 0.00                    | 0.00                   | 0.00                  |

## Design Targets

| Target Name                                                                                                                       | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude   | Longitude    |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------|--------------|
| R S 25 St #105H SHL<br>- hit/miss target<br>- Shape<br>- Point                                                                    | 0.00          | 0.00         | 0.00       | 0.00         | 0.00         | 464,640.40      | 622,880.40     | 32.2767874 | -103.9357405 |
| R S 25 St #105H FTP<br>- plan hits target center<br>- Point                                                                       | 0.00          | 0.00         | 10,365.00  | -710.00      | -87.70       | 463,930.40      | 622,792.70     | 32.2748365 | -103.9360328 |
| R S 25 St #105H LTP<br>- plan misses target center by 0.02usft at 18009.03usft MD (10384.65 TVD, -8021.40 N, -55.18 E)<br>- Point | 0.00          | 0.00         | 10,384.65  | -8,021.40    | -55.20       | 456,619.00      | 622,825.20     | 32.2547378 | -103.9360152 |
| R S 25 St #105H PBF<br>- plan hits target center<br>- Point                                                                       | 0.00          | 0.00         | 10,385.00  | -8,151.40    | -54.60       | 456,489.00      | 622,825.80     | 32.2543805 | -103.9360148 |



## Planning Report

|           |                              |                              |                         |
|-----------|------------------------------|------------------------------|-------------------------|
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| Company:  | XTO Energy                   | TVD Reference:               | RKB = 22' @ 3083.00usft |
| Project:  | Eddy County, NM (NAD-27)     | MD Reference:                | RKB = 22' @ 3083.00usft |
| Site:     | Remuda South 25 State        | North Reference:             | Grid                    |
| Well:     | #105H                        | Survey Calculation Method:   | Minimum Curvature       |
| Wellbore: | OH                           |                              |                         |
| Design:   | PERMIT                       |                              |                         |

| Formations            |                       |                            |           |         |                   |  |
|-----------------------|-----------------------|----------------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                       | Lithology | Dip (°) | Dip Direction (°) |  |
| 228.00                | 228.00                | Rustler Anh.               |           |         |                   |  |
| 304.00                | 304.00                | Base Rustler Anh.          |           |         |                   |  |
| 325.00                | 325.00                | Salado Sh. Lm.             |           |         |                   |  |
| 433.00                | 433.00                | Est. Top of Salt           |           |         |                   |  |
| 3,010.00              | 3,010.00              | Base Salt                  |           |         |                   |  |
| 3,284.00              | 3,284.00              | Lamar Lm. (Del Mtn Grp.)   |           |         |                   |  |
| 3,306.00              | 3,306.00              | Bell Canyon Ss.            |           |         |                   |  |
| 4,148.00              | 4,148.00              | Cherry Canyon Ss.          |           |         |                   |  |
| 5,761.00              | 5,761.00              | Brushy Canyon Ss.          |           |         |                   |  |
| 6,796.00              | 6,796.00              | Lower Brushy Canyon Ss.    |           |         |                   |  |
| 7,057.00              | 7,057.00              | Bone Spring Lm.            |           |         |                   |  |
| 7,154.00              | 7,154.00              | Avalon Ss.                 |           |         |                   |  |
| 7,223.00              | 7,223.00              | Bone Spg. Upper Avalon Lm. |           |         |                   |  |
| 7,310.00              | 7,310.00              | Bone Spg. Avalon Sh.       |           |         |                   |  |
| 7,518.00              | 7,518.00              | Bone Spg. Lower Avalon Lm  |           |         |                   |  |
| 8,077.08              | 8,077.00              | First Bone Spring Ss.      |           |         |                   |  |
| 8,392.16              | 8,391.00              | Second Bone Spring Lm.     |           |         |                   |  |
| 8,905.11              | 8,902.00              | Second Bone Spring Ss.     |           |         |                   |  |
| 9,211.27              | 9,207.00              | Third Bone Spring Lm.      |           |         |                   |  |
| 10,005.16             | 9,994.00              | Third Bone Spring Ss.      |           |         |                   |  |
| 10,436.67             | 10,306.00             | Wolfcamp Sh.               |           |         |                   |  |
| 10,551.04             | 10,346.00             | Wolfcamp X Ss.             |           |         |                   |  |
| 10,697.53             | 10,365.00             | LP                         |           |         |                   |  |