

**NM STATE DRILLING PERMITTING**

**Estanda SED State 702H**

|              |                    | Deepest TVD | 10888         | KOP         |              |               | 10302  | End of Curve  | 11266       | Measured depth |                  | 16397 |           |
|--------------|--------------------|-------------|---------------|-------------|--------------|---------------|--------|---------------|-------------|----------------|------------------|-------|-----------|
| Casing Type  | Fluid Type         | Mud Weight  | Hole Size     | Casing Size | Casing Grade | Casing Weight | Top MD | Setting Depth | Lead Cement | Tail Cement    | Total Sks Cement | TOC   |           |
| Surface      | FW/Native          | 8.5 - 10.0  | 17.5          | 13.375      | J-55 LTC     | 54.5          | 0      | 1250          | 743         | 289            | 1032             | 0     |           |
| Intermediate | Brine / OBM        | 9.0-10.3    | 12.25         | 9.625       | J-55 LTC     | 40            | 0      | 5039          | 776         | 488            | 1264             | 1710  | 1st Stage |
| DV Tool      |                    |             |               |             |              |               |        | 1710          | 394         | 17             | 411              | 0     | 2nd Stage |
| Production   | FW/Cut Brine / OBM | 9.0-10.5    | 8-3/4" to EOC | 5.5         | P110 BTC     | 17            | 0      | 16397         | 1147        | 1136           | 2282             | 4539  |           |
|              | Cut Brine / OBM    | 9.3         | 8-1/2" to TD  |             |              |               |        |               |             |                |                  |       |           |

**Max Expected Surface Pressure**  
2870

**BOP**  
Cameron 5M Double Ram BOP  
Test Pressure 5000

**Total Vertical Section** 5131

**Contingencies**

1. XTO Requests option to use OBM in Intermediate hole section
2. Should losses be seen from 9-5/8" shoe to landing point, 4-string contingency may be utilized
3. XTO requests variance to have the option to batch drill this well. XTO will set intermediate csg, ensure cement is circulated to surface and well is dead. With floats holding, and no flow on annulus, a TA cap will be installed as per GE recommendations. XTO will contact the state before skidding to the other well. Once all surface and intermediate are completed on the pad, XTO will begin drilling the production hole of each well.
4. DV Tool may be set in intermediate fr/ 1300' - 5000'
5. OBM may be used in production hole
6. If cmt is not circulated to surface on 5.5" casing, it will be brought at least 500' into intermediate shoe
7. 8.5" lateral may be drilled if no issues in 8.75" hole



## **XTO Energy**

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

**Estancia Sed**

**#702H**

**OH**

**Plan: PERMIT**

## **Standard Planning Report**

**26 June, 2019**

**HOBBS OCD**

**JUL 01 2019**

**RECEIVED**



Project: Lea County, NM (NAD-27)  
Site: Estancia Sed  
Well: #702H  
Wellbore: OH  
Design: PERMIT

PROJECT DETAILS: Lea 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

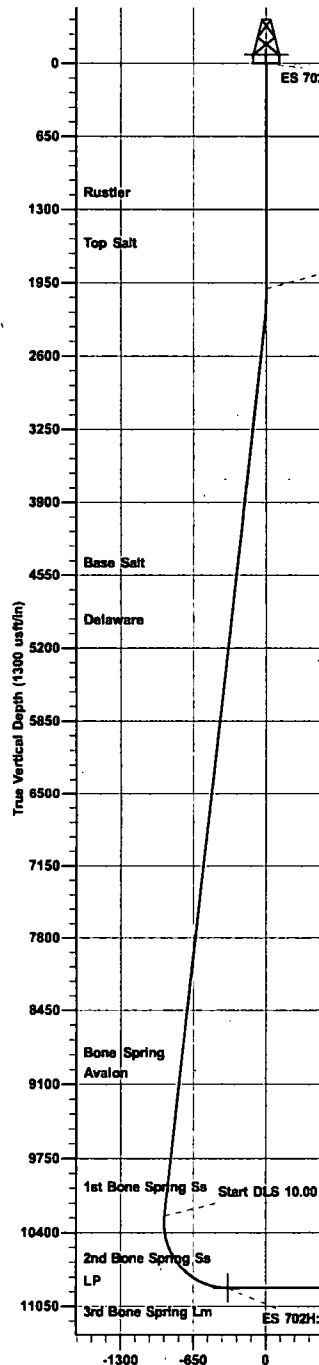
| Name                                | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Latitude   | Longitude    | Shape |
|-------------------------------------|----------|---------|--------|-----------|-----------|------------|--------------|-------|
| ES 702H: SHL (439' FSL & 1204' FWL) | 0.00     | 0.00    | 0.00   | 457250.50 | 721941.20 | 32.2550585 | -103.6153954 | Point |
| ES 702H: FTP                        | 10888.00 | -338.60 | 117.80 | 456911.90 | 722059.00 | 32.2541256 | -103.6150217 | Point |
| ES 702H: LTP                        | 10888.00 | 4742.30 | 91.30  | 481992.80 | 722032.50 | 32.2680923 | -103.6149974 | Point |
| ES 702H: PBHL (50' FNL & 1320' FWL) | 10888.00 | 4792.30 | 91.10  | 462042.80 | 722032.30 | 32.2682297 | -103.6149970 | Point |

#### WELL DETAILS: #702H

|                                                              |       |           |              |
|--------------------------------------------------------------|-------|-----------|--------------|
| Rig Name:<br>RKB = 17 @ 3663.00usft<br>Ground Level: 3648.00 |       |           |              |
| +N/-S                                                        | +E/-W | Northing  | Latitude     |
| 0.00                                                         | 0.00  | 457250.50 | 32.2550585   |
|                                                              |       | Easting   | Longitude    |
|                                                              |       | 721941.20 | -103.6153954 |

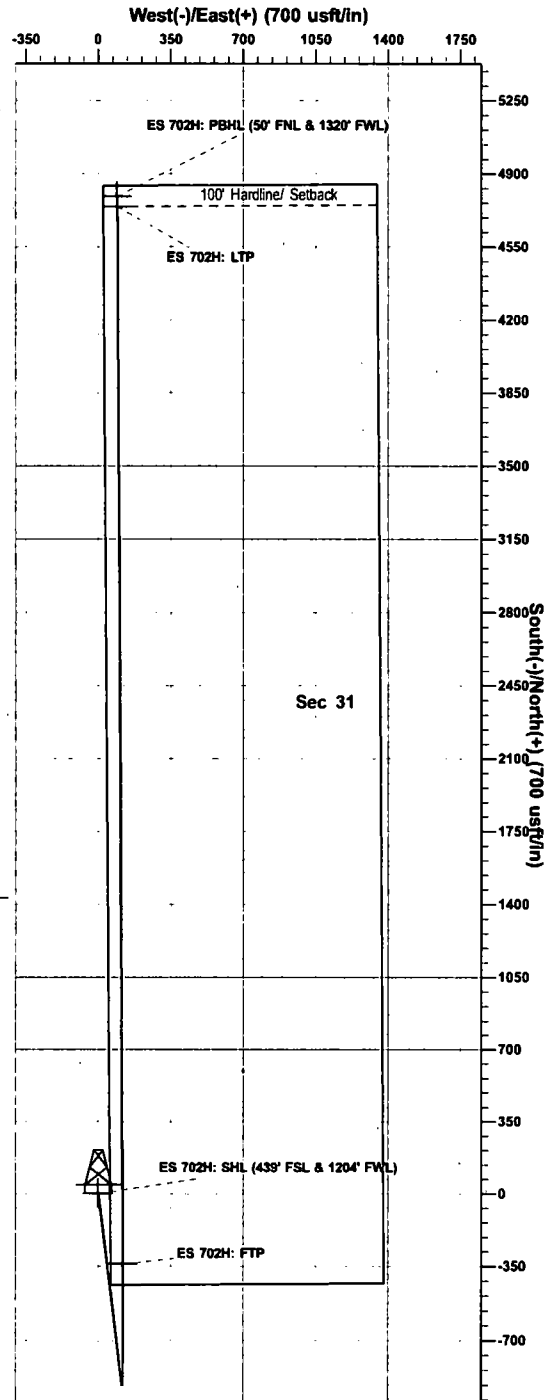
#### SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | Dleg  | TFace   | Vsect   |
|-----|----------|-------|--------|----------|---------|--------|-------|---------|---------|
| 1   | 0.00     | 0.00  | 0.00   | 0.00     | 0.00    | 0.00   | 0.00  | 0.00    | 0.00    |
| 2   | 2000.00  | 0.00  | 0.00   | 2000.00  | 0.00    | 0.00   | 0.00  | 0.00    | 0.00    |
| 3   | 2322.83  | 6.45  | 172.95 | 2321.85  | -18.01  | 2.23   | 2.00  | 172.85  | -18.02  |
| 4   | 10302.39 | 6.45  | 172.95 | 10251.15 | -908.01 | 112.29 | 0.00  | 0.00    | -908.59 |
| 5   | 11256.47 | 80.00 | 359.70 | 10888.00 | -338.60 | 117.80 | 10.00 | -173.21 | -339.21 |
| 6   | 16347.43 | 80.00 | 359.70 | 10888.00 | 4742.30 | 91.36  | 0.00  | 0.00    | 4741.76 |
| 7   | 16397.43 | 90.00 | 359.70 | 10888.00 | 4792.30 | 91.10  | 0.00  | 0.00    | 4791.76 |



#### FORMATION TOP DETAILS

| TVDPATH  | Formation          |
|----------|--------------------|
| 1213.00  | Rustler            |
| 1663.00  | Top Salt           |
| 4563.00  | Base Salt          |
| 5013.00  | Delaware           |
| 8913.00  | Bone Spring        |
| 9083.00  | Avalon             |
| 10083.00 | 1st Bone Spring Ss |
| 10688.00 | 2nd Bone Spring Ss |
| 10888.00 | LP                 |



#### Vertical Section at 359.70° (1300 usft/in)

The customer should only rely on this document after independently verifying all paths, 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 (#702H/OH)

Created By: Matthew May Date: 10:03, June 26 2019

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|                                    |                                                |                                  |
|------------------------------------|------------------------------------------------|----------------------------------|
| <sup>1</sup> API Number<br>30-025- | <sup>2</sup> Pool Code                         | <sup>3</sup> Pool Name           |
| <sup>4</sup> Property Code         | <sup>5</sup> Property Name<br>ESTANCIA SED     | <sup>6</sup> Well Number<br>702H |
| <sup>7</sup> OGRID No.<br>005380   | <sup>8</sup> Operator Name<br>XTO ENERGY, INC. | <sup>9</sup> Elevation<br>3,646' |

<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| 4             | 31      | 23 S     | 33 E  |         | 439           | SOUTH            | 1,204         | WEST           | LEA    |

<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C             | 31      | 23 S     | 33 E  |         | 50            | NORTH            | 1,320         | WEST           | LEA    |

|                               |                               |                                  |                         |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

**16**

**CORNER COORDINATES TABLE**  
NAD 83 NME

|   |                                |
|---|--------------------------------|
| A | Y= 456,876.5 N, X= 764,505.6 E |
| B | Y= 456,870.3 N, X= 763,185.1 E |
| C | Y= 459,517.1 N, X= 764,488.1 E |
| D | Y= 459,510.5 N, X= 763,165.8 E |
| E | Y= 462,159.2 N, X= 764,470.7 E |
| F | Y= 462,151.3 N, X= 763,149.5 E |

**CORNER COORDINATES TABLE**  
NAD 27 NME

|   |                                |
|---|--------------------------------|
| A | Y= 456,817.8 N, X= 723,321.8 E |
| B | Y= 456,811.6 N, X= 722,001.3 E |
| C | Y= 459,458.3 N, X= 723,304.4 E |
| D | Y= 459,451.7 N, X= 721,982.1 E |
| E | Y= 462,100.4 N, X= 723,287.0 E |
| F | Y= 462,092.4 N, X= 721,985.9 E |

**GEODETIC COORDINATES**  
NAD 83 NME  
SURFACE LOCATION  
Y= 457,309.2  
X= 763,125.0  
LAT.= 32.255181°N  
LONG.= 103.615876°W

**LAST TAKE POINT**  
NAD 83 NME  
Y= 462,051.7  
X= 763,216.1  
LAT.= 32.268215°N  
LONG.= 103.615479°W

**GEODETIC COORDINATES**  
NAD 27 NME  
SURFACE LOCATION  
Y= 457,250.5  
X= 721,941.2  
LAT.= 32.255058°N  
LONG.= 103.615395°W

**LAST TAKE POINT**  
NAD 27 NME  
Y= 461,992.8  
X= 722,032.5  
LAT.= 32.268092°N  
LONG.= 103.614998°W

**FIRST TAKE POINT**  
NAD 83 NME  
Y= 456,970.6  
X= 763,242.8  
LAT.= 32.254248°N  
LONG.= 103.615502°W

**BOTTOM HOLE LOCATION**  
NAD 83 NME  
Y= 462,101.7  
X= 763,215.9  
LAT.= 32.268352°N  
LONG.= 103.615479°W

**FIRST TAKE POINT**  
NAD 27 NME  
Y= 456,911.9  
X= 722,059.0  
LAT.= 32.254125°N  
LONG.= 103.615022°W

**BOTTOM HOLE LOCATION**  
NAD 27 NME  
Y= 462,042.8  
X= 722,032.3  
LAT.= 32.268230°N  
LONG.= 103.614997°W

**17 OPERATOR CERTIFICATION**

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

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

**18 SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

05-21-2019  
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP 23786  
Certificate Number

RR 2018112878



## Planning Report

|                  |                              |                                     |                         |
|------------------|------------------------------|-------------------------------------|-------------------------|
| <b>Database:</b> | EDM 5000.1.13 Single User Db | <b>Local Co-ordinate Reference:</b> | Well #702H              |
| <b>Company:</b>  | XTO Energy                   | <b>TVD Reference:</b>               | RKB = 17' @ 3663.00usft |
| <b>Project:</b>  | Lea County, NM (NAD-27)      | <b>MD Reference:</b>                | RKB = 17' @ 3663.00usft |
| <b>Site:</b>     | Estancia Sed                 | <b>North Reference:</b>             | Grid                    |
| <b>Well:</b>     | #702H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature       |
| <b>Wellbore:</b> | OH                           |                                     |                         |
| <b>Design:</b>   | PERMIT                       |                                     |                         |

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

|                              |              |                          |                 |
|------------------------------|--------------|--------------------------|-----------------|
| <b>Site</b>                  | Estancia Sed |                          |                 |
| <b>Site Position:</b>        |              | <b>Northing:</b>         | 457,155.00 usft |
| <b>From:</b>                 | Map          | <b>Easting:</b>          | 721,273.30 usft |
| <b>Position Uncertainty:</b> | 0.00 usft    | <b>Slot Radius:</b>      | 13-3/16 "       |
|                              |              | <b>Latitude:</b>         | 32.2548083      |
|                              |              | <b>Longitude:</b>        | -103.6175578    |
|                              |              | <b>Grid Convergence:</b> | 0.38 °          |

|                             |              |                            |                  |
|-----------------------------|--------------|----------------------------|------------------|
| <b>Well</b>                 | #702H        |                            |                  |
| <b>Well Position</b>        | <b>+N/-S</b> | 95.50 usft                 | <b>Northing:</b> |
|                             | <b>+E/-W</b> | 667.90 usft                | <b>Easting:</b>  |
| <b>Position Uncertainty</b> | 0.00 usft    | <b>Wellhead Elevation:</b> | 0.00 usft        |
|                             |              | <b>Latitude:</b>           | 32.2550585       |
|                             |              | <b>Longitude:</b>          | -103.6153954     |
|                             |              | <b>Ground Level:</b>       | 3,646.00 usft    |

**Wellbore** OH

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  |                   |                    | (°)                | (°)              | (nT)                  |
|                  | IGRF2015          | 06/26/19           | 6.76               | 60.06            | 47,742                |

**Design** PERMIT

### Audit Notes:

**Version:** Phase: PLAN Tie On Depth: 0.00

|                          |                         |              |              |                  |
|--------------------------|-------------------------|--------------|--------------|------------------|
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b> | <b>+E/-W</b> | <b>Direction</b> |
|                          | (usft)                  | (usft)       | (usft)       | (°)              |
|                          | 0.00                    | 0.00         | 0.00         | 359.70           |

### 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    |                   |
| 2,000.00              | 0.00            | 0.00        | 2,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |                   |
| 2,322.63              | 6.45            | 172.95      | 2,321.95              | -18.01       | 2.23         | 2.00                    | 2.00                   | 0.00                  | 172.95  |                   |
| 10,302.39             | 6.45            | 172.95      | 10,251.15             | -908.01      | 112.29       | 0.00                    | 0.00                   | 0.00                  | 0.00    |                   |
| 11,266.47             | 90.00           | 359.70      | 10,888.00             | -338.60      | 117.80       | 10.00                   | 8.67                   | -17.97                | -173.21 | ES 702H: FTP      |
| 16,347.43             | 90.00           | 359.70      | 10,888.00             | 4,742.30     | 91.36        | 0.00                    | 0.00                   | 0.00                  | 0.00    | ES 702H: LTP      |
| 16,397.43             | 90.00           | 359.70      | 10,888.00             | 4,792.30     | 91.10        | 0.00                    | 0.00                   | 0.00                  | 0.00    | ES 702H: PBHL (50 |



## Planning Report

**Database:** EDM 5000.1.13 Single User Db  
**Company:** XTO Energy  
**Project:** Lea County, NM (NAD-27)  
**Site:** Estancia Sed  
**Well:** #702H  
**Wellbore:** OH  
**Design:** PERMIT

**Local Co-ordinate Reference:** Well #702H  
**TVD Reference:** RKB = 17' @ 3663.00usft  
**MD Reference:** RKB = 17' @ 3663.00usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Bulld 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                  |
| 300.00                | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 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                  |
| 1,213.00              | 0.00            | 0.00        | 1,213.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 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                  |
| 1,663.00              | 0.00            | 0.00        | 1,663.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Top Salt</b>       |                 |             |                       |              |              |                         |                         |                        |                       |
| 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              | 2.00            | 172.95      | 2,099.98              | -1.73        | 0.21         | -1.73                   | 2.00                    | 2.00                   | 0.00                  |
| 2,200.00              | 4.00            | 172.95      | 2,199.84              | -6.93        | 0.86         | -6.93                   | 2.00                    | 2.00                   | 0.00                  |
| 2,300.00              | 6.00            | 172.95      | 2,299.45              | -15.57       | 1.93         | -15.58                  | 2.00                    | 2.00                   | 0.00                  |
| 2,322.63              | 6.45            | 172.95      | 2,321.95              | -18.01       | 2.23         | -18.02                  | 2.00                    | 2.00                   | 0.00                  |
| 2,400.00              | 6.45            | 172.95      | 2,398.83              | -26.64       | 3.29         | -26.66                  | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00              | 6.45            | 172.95      | 2,498.19              | -37.79       | 4.67         | -37.82                  | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00              | 6.45            | 172.95      | 2,597.56              | -48.95       | 6.05         | -48.98                  | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00              | 6.45            | 172.95      | 2,696.93              | -60.10       | 7.43         | -60.14                  | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00              | 6.45            | 172.95      | 2,796.29              | -71.25       | 8.81         | -71.30                  | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00              | 6.45            | 172.95      | 2,895.66              | -82.41       | 10.19        | -82.46                  | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00              | 6.45            | 172.95      | 2,995.03              | -93.56       | 11.57        | -93.62                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00              | 6.45            | 172.95      | 3,094.39              | -104.71      | 12.95        | -104.78                 | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00              | 6.45            | 172.95      | 3,193.76              | -115.87      | 14.33        | -115.94                 | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00              | 6.45            | 172.95      | 3,293.13              | -127.02      | 15.71        | -127.10                 | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00              | 6.45            | 172.95      | 3,392.49              | -138.17      | 17.09        | -138.26                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00              | 6.45            | 172.95      | 3,491.86              | -149.33      | 18.47        | -149.42                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00              | 6.45            | 172.95      | 3,591.23              | -160.48      | 19.85        | -160.58                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00              | 6.45            | 172.95      | 3,690.59              | -171.63      | 21.23        | -171.74                 | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00              | 6.45            | 172.95      | 3,789.96              | -182.79      | 22.61        | -182.90                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00              | 6.45            | 172.95      | 3,889.33              | -193.94      | 23.98        | -194.06                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00              | 6.45            | 172.95      | 3,988.69              | -205.09      | 25.36        | -205.22                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00              | 6.45            | 172.95      | 4,088.06              | -216.25      | 26.74        | -216.38                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00              | 6.45            | 172.95      | 4,187.43              | -227.40      | 28.12        | -227.54                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00              | 6.45            | 172.95      | 4,286.79              | -238.55      | 29.50        | -238.70                 | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00              | 6.45            | 172.95      | 4,386.16              | -249.71      | 30.88        | -249.86                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00              | 6.45            | 172.95      | 4,485.52              | -260.86      | 32.26        | -261.02                 | 0.00                    | 0.00                   | 0.00                  |
| 4,577.97              | 6.45            | 172.95      | 4,563.00              | -269.55      | 33.34        | -269.73                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Salt</b>      |                 |             |                       |              |              |                         |                         |                        |                       |



# Planning Report

Database: EDM 5000.1.13 Single User Db  
 Company: XTO Energy  
 Project: Lea County, NM (NAD-27)  
 Site: Estancia Sed  
 Well: #702H  
 Wellbore: OH  
 Design: PERMIT

Local Co-ordinate Reference: Well #702H  
 TVD Reference: RKB = 17' @ 3663.00usft  
 MD Reference: RKB = 17' @ 3663.00usft  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

## 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 4,600.00              | 6.45            | 172.95      | 4,584.89              | -272.01      | 33.64        | -272.18                 | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00              | 6.45            | 172.95      | 4,684.26              | -283.17      | 35.02        | -283.34                 | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00              | 6.45            | 172.95      | 4,783.62              | -294.32      | 36.40        | -294.51                 | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00              | 6.45            | 172.95      | 4,882.99              | -305.47      | 37.78        | -305.67                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00              | 6.45            | 172.95      | 4,982.36              | -316.63      | 39.16        | -316.83                 | 0.00                    | 0.00                   | 0.00                  |
| 5,030.84              | 6.45            | 172.95      | 5,013.00              | -320.06      | 39.58        | -320.27                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Delaware</b>       |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,100.00              | 6.45            | 172.95      | 5,081.72              | -327.78      | 40.54        | -327.99                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00              | 6.45            | 172.95      | 5,181.09              | -338.93      | 41.92        | -339.15                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00              | 6.45            | 172.95      | 5,280.46              | -350.08      | 43.30        | -350.31                 | 0.00                    | 0.00                   | 0.00                  |
| 5,400.00              | 6.45            | 172.95      | 5,379.82              | -361.24      | 44.67        | -361.47                 | 0.00                    | 0.00                   | 0.00                  |
| 5,500.00              | 6.45            | 172.95      | 5,479.19              | -372.39      | 46.05        | -372.63                 | 0.00                    | 0.00                   | 0.00                  |
| 5,600.00              | 6.45            | 172.95      | 5,578.56              | -383.54      | 47.43        | -383.79                 | 0.00                    | 0.00                   | 0.00                  |
| 5,700.00              | 6.45            | 172.95      | 5,677.92              | -394.70      | 48.81        | -394.95                 | 0.00                    | 0.00                   | 0.00                  |
| 5,800.00              | 6.45            | 172.95      | 5,777.29              | -405.85      | 50.19        | -406.11                 | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00              | 6.45            | 172.95      | 5,876.66              | -417.00      | 51.57        | -417.27                 | 0.00                    | 0.00                   | 0.00                  |
| 6,000.00              | 6.45            | 172.95      | 5,976.02              | -428.16      | 52.95        | -428.43                 | 0.00                    | 0.00                   | 0.00                  |
| 6,100.00              | 6.45            | 172.95      | 6,075.39              | -439.31      | 54.33        | -439.59                 | 0.00                    | 0.00                   | 0.00                  |
| 6,200.00              | 6.45            | 172.95      | 6,174.76              | -450.46      | 55.71        | -450.75                 | 0.00                    | 0.00                   | 0.00                  |
| 6,300.00              | 6.45            | 172.95      | 6,274.12              | -461.62      | 57.09        | -461.91                 | 0.00                    | 0.00                   | 0.00                  |
| 6,400.00              | 6.45            | 172.95      | 6,373.49              | -472.77      | 58.47        | -473.07                 | 0.00                    | 0.00                   | 0.00                  |
| 6,500.00              | 6.45            | 172.95      | 6,472.86              | -483.92      | 59.85        | -484.23                 | 0.00                    | 0.00                   | 0.00                  |
| 6,600.00              | 6.45            | 172.95      | 6,572.22              | -495.08      | 61.23        | -495.39                 | 0.00                    | 0.00                   | 0.00                  |
| 6,700.00              | 6.45            | 172.95      | 6,671.59              | -506.23      | 62.61        | -506.55                 | 0.00                    | 0.00                   | 0.00                  |
| 6,800.00              | 6.45            | 172.95      | 6,770.95              | -517.38      | 63.99        | -517.71                 | 0.00                    | 0.00                   | 0.00                  |
| 6,900.00              | 6.45            | 172.95      | 6,870.32              | -528.54      | 65.36        | -528.87                 | 0.00                    | 0.00                   | 0.00                  |
| 7,000.00              | 6.45            | 172.95      | 6,969.69              | -539.69      | 66.74        | -540.03                 | 0.00                    | 0.00                   | 0.00                  |
| 7,100.00              | 6.45            | 172.95      | 7,069.05              | -550.84      | 68.12        | -551.19                 | 0.00                    | 0.00                   | 0.00                  |
| 7,200.00              | 6.45            | 172.95      | 7,168.42              | -562.00      | 69.50        | -562.35                 | 0.00                    | 0.00                   | 0.00                  |
| 7,300.00              | 6.45            | 172.95      | 7,267.79              | -573.15      | 70.88        | -573.51                 | 0.00                    | 0.00                   | 0.00                  |
| 7,400.00              | 6.45            | 172.95      | 7,367.15              | -584.30      | 72.26        | -584.67                 | 0.00                    | 0.00                   | 0.00                  |
| 7,500.00              | 6.45            | 172.95      | 7,466.52              | -595.46      | 73.64        | -595.83                 | 0.00                    | 0.00                   | 0.00                  |
| 7,600.00              | 6.45            | 172.95      | 7,565.89              | -606.61      | 75.02        | -606.99                 | 0.00                    | 0.00                   | 0.00                  |
| 7,700.00              | 6.45            | 172.95      | 7,665.25              | -617.76      | 76.40        | -618.16                 | 0.00                    | 0.00                   | 0.00                  |
| 7,800.00              | 6.45            | 172.95      | 7,764.62              | -628.92      | 77.78        | -629.32                 | 0.00                    | 0.00                   | 0.00                  |
| 7,900.00              | 6.45            | 172.95      | 7,863.99              | -640.07      | 79.16        | -640.48                 | 0.00                    | 0.00                   | 0.00                  |
| 8,000.00              | 6.45            | 172.95      | 7,963.35              | -651.22      | 80.54        | -651.64                 | 0.00                    | 0.00                   | 0.00                  |
| 8,100.00              | 6.45            | 172.95      | 8,062.72              | -662.38      | 81.92        | -662.80                 | 0.00                    | 0.00                   | 0.00                  |
| 8,200.00              | 6.45            | 172.95      | 8,162.09              | -673.53      | 83.30        | -673.96                 | 0.00                    | 0.00                   | 0.00                  |
| 8,300.00              | 6.45            | 172.95      | 8,261.45              | -684.68      | 84.68        | -685.12                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00              | 6.45            | 172.95      | 8,360.82              | -695.84      | 86.05        | -696.28                 | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00              | 6.45            | 172.95      | 8,460.19              | -706.99      | 87.43        | -707.44                 | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00              | 6.45            | 172.95      | 8,559.55              | -718.14      | 88.81        | -718.60                 | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00              | 6.45            | 172.95      | 8,658.92              | -729.30      | 90.19        | -729.76                 | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00              | 6.45            | 172.95      | 8,758.28              | -740.45      | 91.57        | -740.92                 | 0.00                    | 0.00                   | 0.00                  |
| 8,900.00              | 6.45            | 172.95      | 8,857.65              | -751.60      | 92.95        | -752.08                 | 0.00                    | 0.00                   | 0.00                  |
| 8,955.70              | 6.45            | 172.95      | 8,913.00              | -757.82      | 93.72        | -758.30                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spring</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,000.00              | 6.45            | 172.95      | 8,957.02              | -762.76      | 94.33        | -763.24                 | 0.00                    | 0.00                   | 0.00                  |
| 9,100.00              | 6.45            | 172.95      | 9,056.38              | -773.91      | 95.71        | -774.40                 | 0.00                    | 0.00                   | 0.00                  |
| 9,106.66              | 6.45            | 172.95      | 9,063.00              | -774.65      | 95.80        | -775.14                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Avalon</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,200.00              | 6.45            | 172.95      | 9,155.75              | -785.06      | 97.09        | -785.56                 | 0.00                    | 0.00                   | 0.00                  |



## Planning Report

|                  |                              |                                     |                         |
|------------------|------------------------------|-------------------------------------|-------------------------|
| <b>Database:</b> | EDM 5000.1.13 Single User Db | <b>Local Co-ordinate Reference:</b> | Well #702H              |
| <b>Company:</b>  | XTO Energy                   | <b>TVD Reference:</b>               | RKB = 17' @ 3663.00usft |
| <b>Project:</b>  | Lea County, NM (NAD-27)      | <b>MD Reference:</b>                | RKB = 17' @ 3663.00usft |
| <b>Site:</b>     | Estancia Sed                 | <b>North Reference:</b>             | Grid                    |
| <b>Well:</b>     | #702H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature       |
| <b>Wellbore:</b> | OH                           |                                     |                         |
| <b>Design:</b>   | 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) |
|---------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 9,300.00                  | 6.45            | 172.95      | 9,255.12              | -796.22      | 98.47        | -796.72                 | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                  | 6.45            | 172.95      | 9,354.48              | -807.37      | 99.85        | -807.88                 | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                  | 6.45            | 172.95      | 9,453.85              | -818.52      | 101.23       | -819.04                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                  | 6.45            | 172.95      | 9,553.22              | -829.68      | 102.61       | -830.20                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                  | 6.45            | 172.95      | 9,652.58              | -840.83      | 103.99       | -841.36                 | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                  | 6.45            | 172.95      | 9,751.95              | -851.98      | 105.37       | -852.52                 | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                  | 6.45            | 172.95      | 9,851.32              | -863.14      | 106.74       | -863.68                 | 0.00                    | 0.00                   | 0.00                  |
| 10,000.00                 | 6.45            | 172.95      | 9,950.68              | -874.29      | 108.12       | -874.84                 | 0.00                    | 0.00                   | 0.00                  |
| 10,100.00                 | 6.45            | 172.95      | 10,050.05             | -885.44      | 109.50       | -886.00                 | 0.00                    | 0.00                   | 0.00                  |
| 10,113.03                 | 6.45            | 172.95      | 10,063.00             | -886.90      | 109.68       | -887.46                 | 0.00                    | 0.00                   | 0.00                  |
| <b>1st Bone Spring Ss</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,200.00                 | 6.45            | 172.95      | 10,149.42             | -896.60      | 110.88       | -897.16                 | 0.00                    | 0.00                   | 0.00                  |
| 10,302.39                 | 6.45            | 172.95      | 10,251.15             | -908.01      | 112.29       | -908.59                 | 0.00                    | 0.00                   | 0.00                  |
| 10,350.00                 | 1.81            | 154.88      | 10,298.63             | -911.35      | 112.94       | -911.93                 | 10.00                   | -9.74                  | -37.95                |
| 10,400.00                 | 3.44            | 12.49       | 10,348.61             | -910.61      | 113.60       | -911.19                 | 10.00                   | 3.25                   | -284.79               |
| 10,450.00                 | 8.39            | 4.88        | 10,398.32             | -905.51      | 114.24       | -906.09                 | 10.00                   | 9.90                   | -15.22                |
| 10,500.00                 | 13.37           | 2.91        | 10,447.41             | -896.09      | 114.84       | -896.68                 | 10.00                   | 9.97                   | -3.94                 |
| 10,550.00                 | 18.37           | 2.00        | 10,495.49             | -882.43      | 115.41       | -883.02                 | 10.00                   | 9.99                   | -1.82                 |
| 10,600.00                 | 23.37           | 1.47        | 10,542.20             | -864.64      | 115.94       | -865.23                 | 10.00                   | 9.99                   | -1.06                 |
| 10,650.00                 | 28.36           | 1.11        | 10,587.17             | -842.84      | 116.42       | -843.43                 | 10.00                   | 10.00                  | -0.70                 |
| 10,700.00                 | 33.36           | 0.86        | 10,630.08             | -817.20      | 116.86       | -817.80                 | 10.00                   | 10.00                  | -0.51                 |
| 10,750.00                 | 38.36           | 0.66        | 10,670.59             | -787.92      | 117.25       | -788.52                 | 10.00                   | 10.00                  | -0.39                 |
| 10,772.56                 | 40.62           | 0.59        | 10,688.00             | -773.57      | 117.40       | -774.18                 | 10.00                   | 10.00                  | -0.33                 |
| <b>2nd Bone Spring Ss</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,800.00                 | 43.36           | 0.51        | 10,708.39             | -755.22      | 117.58       | -755.83                 | 10.00                   | 10.00                  | -0.30                 |
| 10,850.00                 | 48.36           | 0.38        | 10,743.20             | -719.35      | 117.86       | -719.96                 | 10.00                   | 10.00                  | -0.26                 |
| 10,900.00                 | 53.36           | 0.27        | 10,774.76             | -680.59      | 118.07       | -681.20                 | 10.00                   | 10.00                  | -0.22                 |
| 10,950.00                 | 58.36           | 0.17        | 10,802.81             | -639.22      | 118.23       | -639.83                 | 10.00                   | 10.00                  | -0.19                 |
| 11,000.00                 | 63.36           | 0.08        | 10,827.15             | -595.56      | 118.33       | -596.17                 | 10.00                   | 10.00                  | -0.17                 |
| 11,050.00                 | 68.36           | 0.00        | 10,847.60             | -549.95      | 118.36       | -550.56                 | 10.00                   | 10.00                  | -0.16                 |
| 11,100.00                 | 73.36           | 359.93      | 10,863.99             | -502.73      | 118.33       | -503.35                 | 10.00                   | 10.00                  | -0.15                 |
| 11,150.00                 | 78.35           | 359.86      | 10,876.21             | -454.26      | 118.25       | -454.88                 | 10.00                   | 10.00                  | -0.14                 |
| 11,200.00                 | 83.35           | 359.79      | 10,884.15             | -404.92      | 118.09       | -405.53                 | 10.00                   | 10.00                  | -0.14                 |
| 11,250.00                 | 88.35           | 359.72      | 10,887.76             | -355.06      | 117.88       | -355.67                 | 10.00                   | 10.00                  | -0.13                 |
| 11,266.47                 | 90.00           | 359.70      | 10,888.00             | -338.60      | 117.80       | -339.21                 | 10.00                   | 10.00                  | -0.13                 |
| <b>LP</b>                 |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,300.00                 | 90.00           | 359.70      | 10,888.00             | -305.07      | 117.63       | -305.68                 | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                 | 90.00           | 359.70      | 10,888.00             | -205.07      | 117.11       | -205.68                 | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                 | 90.00           | 359.70      | 10,888.00             | -105.07      | 116.58       | -105.68                 | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                 | 90.00           | 359.70      | 10,888.00             | -5.07        | 116.06       | -5.68                   | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                 | 90.00           | 359.70      | 10,888.00             | 94.93        | 115.54       | 94.32                   | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                 | 90.00           | 359.70      | 10,888.00             | 194.93       | 115.02       | 194.32                  | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                 | 90.00           | 359.70      | 10,888.00             | 294.93       | 114.50       | 294.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                 | 90.00           | 359.70      | 10,888.00             | 394.92       | 113.98       | 394.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                 | 90.00           | 359.70      | 10,888.00             | 494.92       | 113.46       | 494.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00                 | 90.00           | 359.70      | 10,888.00             | 594.92       | 112.94       | 594.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00                 | 90.00           | 359.70      | 10,888.00             | 694.92       | 112.42       | 694.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                 | 90.00           | 359.70      | 10,888.00             | 794.92       | 111.90       | 794.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                 | 90.00           | 359.70      | 10,888.00             | 894.92       | 111.38       | 894.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                 | 90.00           | 359.70      | 10,888.00             | 994.92       | 110.86       | 994.32                  | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                 | 90.00           | 359.70      | 10,888.00             | 1,094.92     | 110.34       | 1,094.32                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                 | 90.00           | 359.70      | 10,888.00             | 1,194.91     | 109.82       | 1,194.32                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                 | 90.00           | 359.70      | 10,888.00             | 1,294.91     | 109.30       | 1,294.32                | 0.00                    | 0.00                   | 0.00                  |



## Planning Report

**Database:** EDM 5000.1.13 Single User Db  
**Company:** XTO Energy  
**Project:** Lea County, NM (NAD-27)  
**Site:** Estancia Sed  
**Well:** #702H  
**Wellbore:** OH  
**Design:** PERMIT

**Local Co-ordinate Reference:** Well #702H  
**TVD Reference:** RKB = 17' @ 3663.00usft  
**MD Reference:** RKB = 17' @ 3663.00usft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### 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) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 13,000.00             | 90.00           | 359.70      | 10,888.00             | 1,394.91     | 108.78       | 1,394.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00             | 90.00           | 359.70      | 10,888.00             | 1,494.91     | 108.26       | 1,494.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00             | 90.00           | 359.70      | 10,888.00             | 1,594.91     | 107.74       | 1,594.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00             | 90.00           | 359.70      | 10,888.00             | 1,694.91     | 107.22       | 1,694.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00             | 90.00           | 359.70      | 10,888.00             | 1,794.91     | 106.70       | 1,794.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00             | 90.00           | 359.70      | 10,888.00             | 1,894.90     | 106.18       | 1,894.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00             | 90.00           | 359.70      | 10,888.00             | 1,994.90     | 105.66       | 1,994.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00             | 90.00           | 359.70      | 10,888.00             | 2,094.90     | 105.14       | 2,094.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00             | 90.00           | 359.70      | 10,888.00             | 2,194.90     | 104.62       | 2,194.32                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00             | 90.00           | 359.70      | 10,888.00             | 2,294.90     | 104.10       | 2,294.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00             | 90.00           | 359.70      | 10,888.00             | 2,394.90     | 103.58       | 2,394.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00             | 90.00           | 359.70      | 10,888.00             | 2,494.90     | 103.06       | 2,494.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00             | 90.00           | 359.70      | 10,888.00             | 2,594.90     | 102.53       | 2,594.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00             | 90.00           | 359.70      | 10,888.00             | 2,694.89     | 102.01       | 2,694.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00             | 90.00           | 359.70      | 10,888.00             | 2,794.89     | 101.49       | 2,794.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00             | 90.00           | 359.70      | 10,888.00             | 2,894.89     | 100.97       | 2,894.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00             | 90.00           | 359.70      | 10,888.00             | 2,994.89     | 100.45       | 2,994.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00             | 90.00           | 359.70      | 10,888.00             | 3,094.89     | 99.93        | 3,094.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00             | 90.00           | 359.70      | 10,888.00             | 3,194.89     | 99.41        | 3,194.32                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00             | 90.00           | 359.70      | 10,888.00             | 3,294.89     | 98.89        | 3,294.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00             | 90.00           | 359.70      | 10,888.00             | 3,394.88     | 98.37        | 3,394.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00             | 90.00           | 359.70      | 10,888.00             | 3,494.88     | 97.85        | 3,494.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00             | 90.00           | 359.70      | 10,888.00             | 3,594.88     | 97.33        | 3,594.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00             | 90.00           | 359.70      | 10,888.00             | 3,694.88     | 96.81        | 3,694.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00             | 90.00           | 359.70      | 10,888.00             | 3,794.88     | 96.29        | 3,794.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00             | 90.00           | 359.70      | 10,888.00             | 3,894.88     | 95.77        | 3,894.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00             | 90.00           | 359.70      | 10,888.00             | 3,994.88     | 95.25        | 3,994.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00             | 90.00           | 359.70      | 10,888.00             | 4,094.87     | 94.73        | 4,094.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00             | 90.00           | 359.70      | 10,888.00             | 4,194.87     | 94.21        | 4,194.32                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00             | 90.00           | 359.70      | 10,888.00             | 4,294.87     | 93.69        | 4,294.32                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00             | 90.00           | 359.70      | 10,888.00             | 4,394.87     | 93.17        | 4,394.32                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00             | 90.00           | 359.70      | 10,888.00             | 4,494.87     | 92.65        | 4,494.32                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00             | 90.00           | 359.70      | 10,888.00             | 4,594.87     | 92.13        | 4,594.32                | 0.00                    | 0.00                   | 0.00                  |
| 16,300.00             | 90.00           | 359.70      | 10,888.00             | 4,694.87     | 91.61        | 4,694.32                | 0.00                    | 0.00                   | 0.00                  |
| 16,347.43             | 90.00           | 359.70      | 10,888.00             | 4,742.30     | 91.36        | 4,741.76                | 0.00                    | 0.00                   | 0.00                  |
| 16,397.43             | 90.00           | 359.70      | 10,888.00             | 4,792.30     | 91.10        | 4,791.76                | 0.00                    | 0.00                   | 0.00                  |



## Planning Report

|                  |                              |                                     |                         |
|------------------|------------------------------|-------------------------------------|-------------------------|
| <b>Database:</b> | EDM 5000.1.13 Single User Db | <b>Local Co-ordinate Reference:</b> | Well #702H              |
| <b>Company:</b>  | XTO Energy                   | <b>TVD Reference:</b>               | RKB = 17' @ 3663.00usft |
| <b>Project:</b>  | Lea County, NM (NAD-27)      | <b>MD Reference:</b>                | RKB = 17' @ 3663.00usft |
| <b>Site:</b>     | Estancia Sed                 | <b>North Reference:</b>             | Grid                    |
| <b>Well:</b>     | #702H                        | <b>Survey Calculation Method:</b>   | Minimum Curvature       |
| <b>Wellbore:</b> | OH                           |                                     |                         |
| <b>Design:</b>   | PERMIT                       |                                     |                         |

### Design Targets

| Target Name<br>- hit/miss target<br>- Shape                                                                              | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude   | Longitude    |
|--------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------|--------------|
| ES 702H: SHL (439' F<br>- plan hits target center<br>- Point                                                             | 0.00             | 0.00            | 0.00          | 0.00            | 0.00            | 457,250.50         | 721,941.20        | 32.2550585 | -103.6153954 |
| ES 702H: PBHL (50' F<br>- plan hits target center<br>- Point                                                             | 0.00             | 0.00            | 10,888.00     | 4,792.30        | 91.10           | 462,042.80         | 722,032.30        | 32.2682297 | -103.6149969 |
| ES 702H: LTP<br>- plan misses target center by 0.06usft at 16347.43usft MD (10888.00 TVD, 4742.30 N, 91.36 E)<br>- Point | 0.00             | 0.00            | 10,888.00     | 4,742.30        | 91.30           | 461,992.80         | 722,032.50        | 32.2680923 | -103.6149974 |
| ES 702H: FTP<br>- plan hits target center<br>- Point                                                                     | 0.00             | 0.00            | 10,888.00     | -338.60         | 117.80          | 456,911.90         | 722,059.00        | 32.2541256 | -103.6150217 |

### Formations

| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Name               | Lithology | Dip<br>(°) | Dip<br>Direction<br>(°) |
|-----------------------------|-----------------------------|--------------------|-----------|------------|-------------------------|
| 1,213.00                    | 1,213.00                    | Rustler            |           |            |                         |
| 1,663.00                    | 1,663.00                    | Top Salt           |           |            |                         |
| 4,577.97                    | 4,563.00                    | Base Salt          |           |            |                         |
| 5,030.84                    | 5,013.00                    | Delaware           |           |            |                         |
| 8,955.70                    | 8,913.00                    | Bone Spring        |           |            |                         |
| 9,106.66                    | 9,063.00                    | Avalon             |           |            |                         |
| 10,113.03                   | 10,063.00                   | 1st Bone Spring Ss |           |            |                         |
| 10,772.56                   | 10,688.00                   | 2nd Bone Spring Ss |           |            |                         |
| 11,266.47                   | 10,888.00                   | LP                 |           |            |                         |