

EXTRACTION OIL & GAS

WELD COUNTY

Sec 17-T7N-R67W

WALT 17W-20-9N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

16 August, 2018



Project: WELD COUNTY
Site: Sec 17-T7N-R67W
Well: WALT 17W-20-9N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL 1



Azimuths to True North
Magnetic North: 8.18°
Magnetic Field
Strength: 52333.0nT
Dip Angle: 66.94°
Date: 8/15/2018
Model: IGRF2015

WELL DETAILS: WALT 17W-20-9N

| +N/-S | +E/-W | Northing | Easting | 5106.00 | Latitude | Longitude | Slot |
|-------|-------|------------|------------|---------|----------|-----------|----------|
| 0.00 | 0.00 | 1453085.80 | 3164157.84 | 40° 34' | 32.225 N | 104° 54' | 32.584 W |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | Vsect | Target |
|-----|----------|-------|--------|---------|----------|----------|-------|--------|---------|------------------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2 | 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 | 1198.72 | 13.97 | 159.68 | 1191.81 | -79.51 | 29.44 | 2.00 | 159.68 | -15.44 | |
| 4 | 6167.95 | 13.97 | 159.68 | 6013.97 | -1204.87 | 446.08 | 0.00 | 0.00 | -233.90 | |
| 5 | 7112.52 | 90.00 | 268.46 | 6615.00 | -1361.80 | -121.12 | 10.00 | 108.26 | 351.77 | WALT 17W-9N - LP |
| 6 | 16280.97 | 90.00 | 268.46 | 6615.00 | -1608.51 | -9286.26 | 0.00 | 0.00 | 9424.53 | WALT 17W-9N - PB |

ANNOTATIONS

| +N/-S | +E/-W | Vsect | Departure | Annotation |
|----------|----------|---------|-----------|----------------------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | Start Build 2.00 |
| -79.51 | 29.44 | -15.44 | 84.79 | Start 4969.23 hold at 1198.72 MD |
| -1204.87 | 446.08 | -233.90 | 1284.79 | Start DLS 10.00 TFO 108.26 |
| -1361.80 | -121.12 | 351.77 | 1904.64 | Start 9168.45 hold at 7112.52 MD |
| -1608.51 | -9286.26 | 9424.53 | 11073.09 | TD at 16280.97 |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape | |
|---------------------------|---------|----------|----------|------------|------------|----------|-----------|-------------------|-------|
| WALT 17W-9N - LP | 6615.00 | -1361.80 | -121.12 | 1451723.23 | 3164045.79 | 40° 34' | 18.768 N | 104° 54' 34.153 W | Point |
| - plan hits target center | | | | | | | | | |
| WALT 17W-9N - PBHL | 6615.00 | -1608.51 | -9286.26 | 1451415.45 | 3154882.51 | 40° 34' | 16.313 N | 104° 56' 32.921 W | Point |
| - plan hits target center | | | | | | | | | |

FORMATION TOP DETAILS

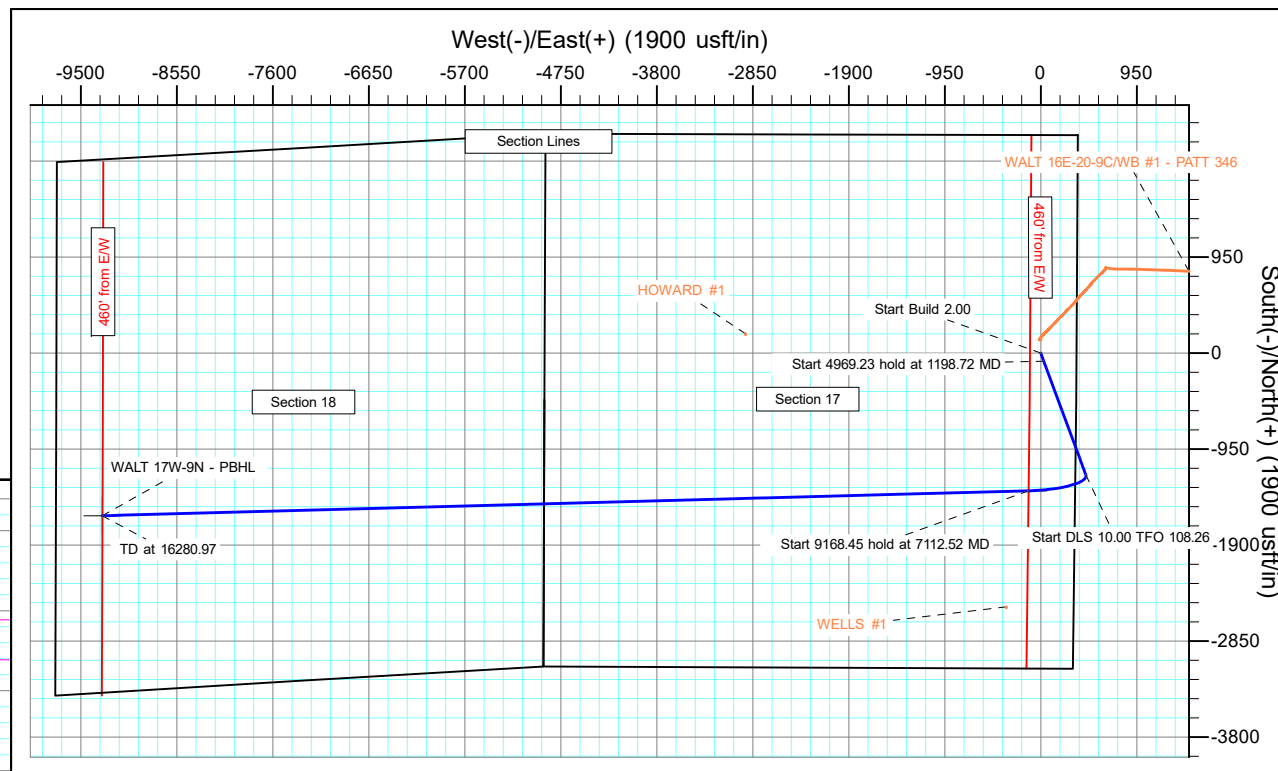
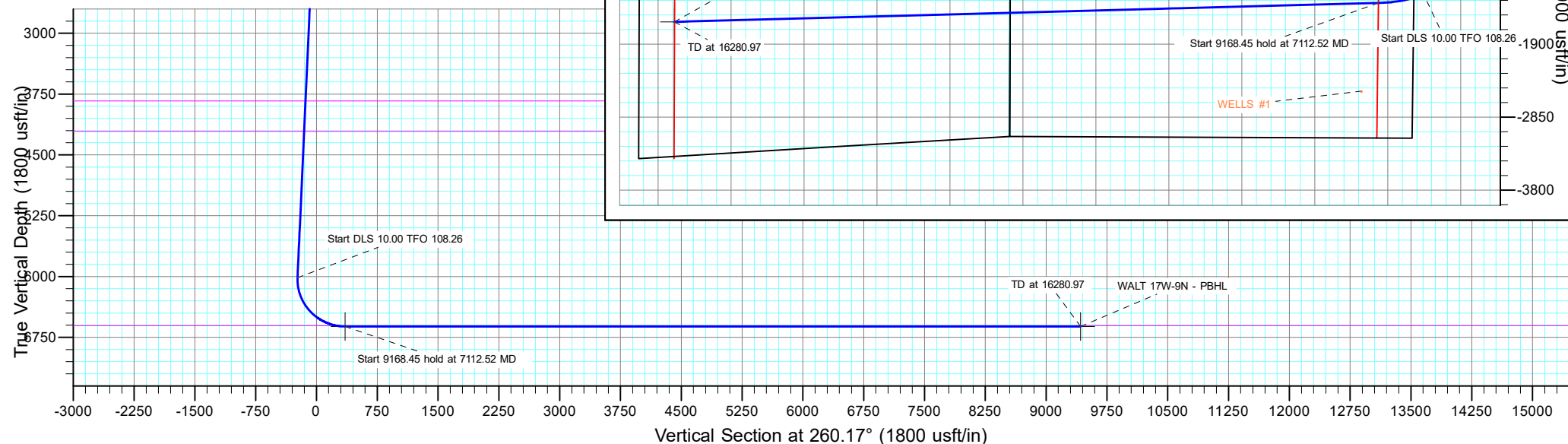
| TVDPath | MDPath | Formation |
|---------|---------|-----------|
| 3835.00 | 3922.52 | SUSSEX |
| 4210.00 | 4308.96 | SHANNON |
| 6605.00 | 7003.85 | NIORARA |

PROJECT DETAILS: WELD COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

SHL:
2157' FNL, 353' FEL
Sec 17-T7N-R67W
LP:
1761' FSL, 460' FEL
Sec 17-T7N-R67W
BHL:
1750' FSL, 460' FWL
Sec 18-T7N-R67W



Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | WELD COUNTY | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|-----------------------|-----------|-----------------|-------------------|-------------------|-------------------|
| Site | | Sec 17-T7N-R67W | | | |
| Site Position: | | Northing: | 1,455,244.22 usft | Latitude: | 40° 34' 53.530 N |
| From: | Lat/Long | Easting: | 3,164,511.50 usft | Longitude: | 104° 54' 27.814 W |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13.200 in | Grid Convergence: | 0.38 ° |

| Well | WALT 17W-20-9N | | | | | |
|----------------------|----------------|----------------|---------------------|-------------------|---------------|-------------------|
| Well Position | +N/-S | -2,156.01 usft | Northing: | 1,453,085.80 usft | Latitude: | 40° 34' 32.225 N |
| | +E/-W | -368.07 usft | Easting: | 3,164,157.84 usft | Longitude: | 104° 54' 32.584 W |
| Position Uncertainty | 0.00 usft | | Wellhead Elevation: | | Ground Level: | 5,106.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | ORIGINAL WELLBORE | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 8/15/2018 | 8.18 | 66.94 | 52,333.02469308 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | PROPOSAL 1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 260.17 |

| | | | | |
|---------------------------------|------------------------|--------------------------|---------------------------|----------------|
| Plan Survey Tool Program | Date | 8/16/2018 | | |
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
| 1 | 0.00 | 16,280.97 | PROPOSAL 1 (ORIGINAL WELL | MWD OWSG |
| | | | OWSG MWD - Standard | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|------------------------------|-----------------------------|----------------------------|----------------|-------------------|
| Plan Sections | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 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 | |
| 1,198.72 | 13.97 | 159.68 | 1,191.81 | -79.51 | 29.44 | 2.00 | 2.00 | 0.00 | 159.68 | |
| 6,167.95 | 13.97 | 159.68 | 6,013.97 | -1,204.87 | 446.08 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,112.52 | 90.00 | 268.46 | 6,615.00 | -1,361.80 | -121.12 | 10.00 | 8.05 | 11.52 | 108.26 | WALT 17W-9N - LP |
| 16,280.97 | 90.00 | 268.46 | 6,615.00 | -1,608.51 | -9,286.26 | 0.00 | 0.00 | 0.00 | 0.00 | WALT 17W-9N - PBH |

Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 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 |
| Start Build 2.00 | | | | | | | | | |
| 600.00 | 2.00 | 159.68 | 599.98 | -1.64 | 0.61 | -0.32 | 2.00 | 2.00 | 0.00 |
| 700.00 | 4.00 | 159.68 | 699.84 | -6.54 | 2.42 | -1.27 | 2.00 | 2.00 | 0.00 |
| 800.00 | 6.00 | 159.68 | 799.45 | -14.72 | 5.45 | -2.86 | 2.00 | 2.00 | 0.00 |
| 900.00 | 8.00 | 159.68 | 898.70 | -26.15 | 9.68 | -5.08 | 2.00 | 2.00 | 0.00 |
| 1,000.00 | 10.00 | 159.68 | 997.47 | -40.82 | 15.11 | -7.92 | 2.00 | 2.00 | 0.00 |
| 1,100.00 | 12.00 | 159.68 | 1,095.62 | -58.71 | 21.74 | -11.40 | 2.00 | 2.00 | 0.00 |
| 1,198.72 | 13.97 | 159.68 | 1,191.81 | -79.51 | 29.44 | -15.44 | 2.00 | 2.00 | 0.00 |
| Start 4969.23 hold at 1198.72 MD | | | | | | | | | |
| 1,200.00 | 13.97 | 159.68 | 1,193.06 | -79.80 | 29.55 | -15.49 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 13.97 | 159.68 | 1,290.10 | -102.45 | 37.93 | -19.89 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 13.97 | 159.68 | 1,387.14 | -125.10 | 46.31 | -24.28 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 13.97 | 159.68 | 1,484.18 | -147.74 | 54.70 | -28.68 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 13.97 | 159.68 | 1,581.22 | -170.39 | 63.08 | -33.08 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 13.97 | 159.68 | 1,678.26 | -193.03 | 71.47 | -37.47 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 13.97 | 159.68 | 1,775.30 | -215.68 | 79.85 | -41.87 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 13.97 | 159.68 | 1,872.34 | -238.33 | 88.24 | -46.27 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 13.97 | 159.68 | 1,969.38 | -260.97 | 96.62 | -50.66 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 13.97 | 159.68 | 2,066.42 | -283.62 | 105.01 | -55.06 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 13.97 | 159.68 | 2,163.46 | -306.27 | 113.39 | -59.46 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 13.97 | 159.68 | 2,260.50 | -328.91 | 121.78 | -63.85 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 13.97 | 159.68 | 2,357.54 | -351.56 | 130.16 | -68.25 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 13.97 | 159.68 | 2,454.58 | -374.21 | 138.54 | -72.64 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 13.97 | 159.68 | 2,551.62 | -396.85 | 146.93 | -77.04 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 13.97 | 159.68 | 2,648.66 | -419.50 | 155.31 | -81.44 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 13.97 | 159.68 | 2,745.70 | -442.15 | 163.70 | -85.83 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 13.97 | 159.68 | 2,842.74 | -464.79 | 172.08 | -90.23 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 13.97 | 159.68 | 2,939.78 | -487.44 | 180.47 | -94.63 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 13.97 | 159.68 | 3,036.82 | -510.09 | 188.85 | -99.02 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 13.97 | 159.68 | 3,133.86 | -532.73 | 197.24 | -103.42 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 13.97 | 159.68 | 3,230.90 | -555.38 | 205.62 | -107.82 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 13.97 | 159.68 | 3,327.94 | -578.02 | 214.00 | -112.21 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 13.97 | 159.68 | 3,424.98 | -600.67 | 222.39 | -116.61 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 13.97 | 159.68 | 3,522.02 | -623.32 | 230.77 | -121.00 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 13.97 | 159.68 | 3,619.07 | -645.96 | 239.16 | -125.40 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 13.97 | 159.68 | 3,716.11 | -668.61 | 247.54 | -129.80 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 13.97 | 159.68 | 3,813.15 | -691.26 | 255.93 | -134.19 | 0.00 | 0.00 | 0.00 |
| 3,922.52 | 13.97 | 159.68 | 3,835.00 | -696.36 | 257.82 | -135.18 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | |
| 4,000.00 | 13.97 | 159.68 | 3,910.19 | -713.90 | 264.31 | -138.59 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 13.97 | 159.68 | 4,007.23 | -736.55 | 272.70 | -142.99 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 13.97 | 159.68 | 4,104.27 | -759.20 | 281.08 | -147.38 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 13.97 | 159.68 | 4,201.31 | -781.84 | 289.47 | -151.78 | 0.00 | 0.00 | 0.00 |
| 4,308.96 | 13.97 | 159.68 | 4,210.00 | -783.87 | 290.22 | -152.17 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | |
| 4,400.00 | 13.97 | 159.68 | 4,298.35 | -804.49 | 297.85 | -156.18 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 13.97 | 159.68 | 4,395.39 | -827.14 | 306.23 | -160.57 | 0.00 | 0.00 | 0.00 |

Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,600.00 | 13.97 | 159.68 | 4,492.43 | -849.78 | 314.62 | -164.97 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 13.97 | 159.68 | 4,589.47 | -872.43 | 323.00 | -169.36 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 13.97 | 159.68 | 4,686.51 | -895.07 | 331.39 | -173.76 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 13.97 | 159.68 | 4,783.55 | -917.72 | 339.77 | -178.16 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 13.97 | 159.68 | 4,880.59 | -940.37 | 348.16 | -182.55 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 13.97 | 159.68 | 4,977.63 | -963.01 | 356.54 | -186.95 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 13.97 | 159.68 | 5,074.67 | -985.66 | 364.93 | -191.35 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 13.97 | 159.68 | 5,171.71 | -1,008.31 | 373.31 | -195.74 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 13.97 | 159.68 | 5,268.75 | -1,030.95 | 381.70 | -200.14 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 13.97 | 159.68 | 5,365.79 | -1,053.60 | 390.08 | -204.54 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 13.97 | 159.68 | 5,462.83 | -1,076.25 | 398.46 | -208.93 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 13.97 | 159.68 | 5,559.87 | -1,098.89 | 406.85 | -213.33 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 13.97 | 159.68 | 5,656.91 | -1,121.54 | 415.23 | -217.73 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 13.97 | 159.68 | 5,753.95 | -1,144.19 | 423.62 | -222.12 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 13.97 | 159.68 | 5,850.99 | -1,166.83 | 432.00 | -226.52 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 13.97 | 159.68 | 5,948.03 | -1,189.48 | 440.39 | -230.91 | 0.00 | 0.00 | 0.00 |
| 6,167.95 | 13.97 | 159.68 | 6,013.97 | -1,204.87 | 446.08 | -233.90 | 0.00 | 0.00 | 0.00 |
| Start DLS 10.00 TFO 108.26 | | | | | | | | | |
| 6,200.00 | 13.32 | 173.01 | 6,045.13 | -1,212.16 | 447.88 | -234.42 | 10.00 | -2.05 | 41.59 |
| 6,250.00 | 13.77 | 194.40 | 6,093.77 | -1,223.65 | 447.10 | -231.69 | 10.00 | 0.90 | 42.77 |
| 6,300.00 | 15.84 | 212.32 | 6,142.13 | -1,235.18 | 441.97 | -224.67 | 10.00 | 4.14 | 35.84 |
| 6,350.00 | 19.01 | 225.31 | 6,189.85 | -1,246.69 | 432.52 | -213.40 | 10.00 | 6.34 | 25.98 |
| 6,400.00 | 22.82 | 234.41 | 6,236.56 | -1,258.06 | 418.84 | -197.98 | 10.00 | 7.63 | 18.20 |
| 6,450.00 | 27.01 | 240.93 | 6,281.90 | -1,269.23 | 401.02 | -178.51 | 10.00 | 8.37 | 13.03 |
| 6,500.00 | 31.42 | 245.77 | 6,325.54 | -1,280.10 | 379.20 | -155.16 | 10.00 | 8.82 | 9.69 |
| 6,550.00 | 35.97 | 249.51 | 6,367.13 | -1,290.60 | 353.54 | -128.08 | 10.00 | 9.10 | 7.49 |
| 6,600.00 | 40.61 | 252.51 | 6,406.37 | -1,300.63 | 324.25 | -97.51 | 10.00 | 9.29 | 5.99 |
| 6,650.00 | 45.32 | 254.99 | 6,442.95 | -1,310.13 | 291.53 | -63.65 | 10.00 | 9.42 | 4.95 |
| 6,700.00 | 50.07 | 257.09 | 6,476.59 | -1,319.03 | 255.66 | -26.78 | 10.00 | 9.51 | 4.20 |
| 6,750.00 | 54.86 | 258.91 | 6,507.04 | -1,327.25 | 216.88 | 12.83 | 10.00 | 9.57 | 3.65 |
| 6,800.00 | 59.67 | 260.53 | 6,534.08 | -1,334.74 | 175.51 | 54.87 | 10.00 | 9.62 | 3.25 |
| 6,850.00 | 64.50 | 262.01 | 6,557.48 | -1,341.43 | 131.85 | 99.03 | 10.00 | 9.66 | 2.94 |
| 6,900.00 | 69.34 | 263.36 | 6,577.07 | -1,347.27 | 86.24 | 144.97 | 10.00 | 9.68 | 2.71 |
| 6,950.00 | 74.19 | 264.63 | 6,592.71 | -1,352.23 | 39.03 | 192.33 | 10.00 | 9.70 | 2.54 |
| 7,000.00 | 79.05 | 265.85 | 6,604.28 | -1,356.26 | -9.43 | 240.77 | 10.00 | 9.72 | 2.42 |
| 7,003.85 | 79.43 | 265.94 | 6,605.00 | -1,356.53 | -13.21 | 244.54 | 10.00 | 9.72 | 2.38 |
| NIOBRARA | | | | | | | | | |
| 7,050.00 | 83.92 | 267.02 | 6,611.68 | -1,359.34 | -58.77 | 289.91 | 10.00 | 9.73 | 2.34 |
| 7,100.00 | 88.78 | 268.17 | 6,614.87 | -1,361.43 | -108.61 | 339.37 | 10.00 | 9.73 | 2.30 |
| 7,112.52 | 90.00 | 268.46 | 6,615.00 | -1,361.80 | -121.12 | 351.77 | 10.00 | 9.73 | 2.29 |
| Start 9168.45 hold at 7112.52 MD | | | | | | | | | |
| 7,200.00 | 90.00 | 268.46 | 6,615.00 | -1,364.15 | -208.57 | 438.33 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 90.00 | 268.46 | 6,615.00 | -1,366.84 | -308.53 | 537.29 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 90.00 | 268.46 | 6,615.00 | -1,369.53 | -408.50 | 636.25 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 90.00 | 268.46 | 6,615.00 | -1,372.22 | -508.46 | 735.20 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 90.00 | 268.46 | 6,615.00 | -1,374.91 | -608.43 | 834.16 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 90.00 | 268.46 | 6,615.00 | -1,377.60 | -708.39 | 933.12 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 90.00 | 268.46 | 6,615.00 | -1,380.29 | -808.35 | 1,032.07 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 90.00 | 268.46 | 6,615.00 | -1,382.99 | -908.32 | 1,131.03 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 90.00 | 268.46 | 6,615.00 | -1,385.68 | -1,008.28 | 1,229.98 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 90.00 | 268.46 | 6,615.00 | -1,388.37 | -1,108.25 | 1,328.94 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.00 | 268.46 | 6,615.00 | -1,391.06 | -1,208.21 | 1,427.90 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.00 | 268.46 | 6,615.00 | -1,393.75 | -1,308.17 | 1,526.85 | 0.00 | 0.00 | 0.00 |

Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 8,400.00 | 90.00 | 268.46 | 6,615.00 | -1,396.44 | -1,408.14 | 1,625.81 | 0.00 | 0.00 | 0.00 | |
| 8,500.00 | 90.00 | 268.46 | 6,615.00 | -1,399.13 | -1,508.10 | 1,724.77 | 0.00 | 0.00 | 0.00 | |
| 8,600.00 | 90.00 | 268.46 | 6,615.00 | -1,401.82 | -1,608.06 | 1,823.72 | 0.00 | 0.00 | 0.00 | |
| 8,700.00 | 90.00 | 268.46 | 6,615.00 | -1,404.51 | -1,708.03 | 1,922.68 | 0.00 | 0.00 | 0.00 | |
| 8,800.00 | 90.00 | 268.46 | 6,615.00 | -1,407.20 | -1,807.99 | 2,021.64 | 0.00 | 0.00 | 0.00 | |
| 8,900.00 | 90.00 | 268.46 | 6,615.00 | -1,409.89 | -1,907.96 | 2,120.59 | 0.00 | 0.00 | 0.00 | |
| 9,000.00 | 90.00 | 268.46 | 6,615.00 | -1,412.59 | -2,007.92 | 2,219.55 | 0.00 | 0.00 | 0.00 | |
| 9,100.00 | 90.00 | 268.46 | 6,615.00 | -1,415.28 | -2,107.88 | 2,318.50 | 0.00 | 0.00 | 0.00 | |
| 9,200.00 | 90.00 | 268.46 | 6,615.00 | -1,417.97 | -2,207.85 | 2,417.46 | 0.00 | 0.00 | 0.00 | |
| 9,300.00 | 90.00 | 268.46 | 6,615.00 | -1,420.66 | -2,307.81 | 2,516.42 | 0.00 | 0.00 | 0.00 | |
| 9,400.00 | 90.00 | 268.46 | 6,615.00 | -1,423.35 | -2,407.77 | 2,615.37 | 0.00 | 0.00 | 0.00 | |
| 9,500.00 | 90.00 | 268.46 | 6,615.00 | -1,426.04 | -2,507.74 | 2,714.33 | 0.00 | 0.00 | 0.00 | |
| 9,600.00 | 90.00 | 268.46 | 6,615.00 | -1,428.73 | -2,607.70 | 2,813.29 | 0.00 | 0.00 | 0.00 | |
| 9,700.00 | 90.00 | 268.46 | 6,615.00 | -1,431.42 | -2,707.67 | 2,912.24 | 0.00 | 0.00 | 0.00 | |
| 9,800.00 | 90.00 | 268.46 | 6,615.00 | -1,434.11 | -2,807.63 | 3,011.20 | 0.00 | 0.00 | 0.00 | |
| 9,900.00 | 90.00 | 268.46 | 6,615.00 | -1,436.80 | -2,907.59 | 3,110.16 | 0.00 | 0.00 | 0.00 | |
| 10,000.00 | 90.00 | 268.46 | 6,615.00 | -1,439.49 | -3,007.56 | 3,209.11 | 0.00 | 0.00 | 0.00 | |
| 10,100.00 | 90.00 | 268.46 | 6,615.00 | -1,442.18 | -3,107.52 | 3,308.07 | 0.00 | 0.00 | 0.00 | |
| 10,200.00 | 90.00 | 268.46 | 6,615.00 | -1,444.88 | -3,207.48 | 3,407.02 | 0.00 | 0.00 | 0.00 | |
| 10,300.00 | 90.00 | 268.46 | 6,615.00 | -1,447.57 | -3,307.45 | 3,505.98 | 0.00 | 0.00 | 0.00 | |
| 10,400.00 | 90.00 | 268.46 | 6,615.00 | -1,450.26 | -3,407.41 | 3,604.94 | 0.00 | 0.00 | 0.00 | |
| 10,500.00 | 90.00 | 268.46 | 6,615.00 | -1,452.95 | -3,507.38 | 3,703.89 | 0.00 | 0.00 | 0.00 | |
| 10,600.00 | 90.00 | 268.46 | 6,615.00 | -1,455.64 | -3,607.34 | 3,802.85 | 0.00 | 0.00 | 0.00 | |
| 10,700.00 | 90.00 | 268.46 | 6,615.00 | -1,458.33 | -3,707.30 | 3,901.81 | 0.00 | 0.00 | 0.00 | |
| 10,800.00 | 90.00 | 268.46 | 6,615.00 | -1,461.02 | -3,807.27 | 4,000.76 | 0.00 | 0.00 | 0.00 | |
| 10,900.00 | 90.00 | 268.46 | 6,615.00 | -1,463.71 | -3,907.23 | 4,099.72 | 0.00 | 0.00 | 0.00 | |
| 11,000.00 | 90.00 | 268.46 | 6,615.00 | -1,466.40 | -4,007.20 | 4,198.68 | 0.00 | 0.00 | 0.00 | |
| 11,100.00 | 90.00 | 268.46 | 6,615.00 | -1,469.09 | -4,107.16 | 4,297.63 | 0.00 | 0.00 | 0.00 | |
| 11,200.00 | 90.00 | 268.46 | 6,615.00 | -1,471.78 | -4,207.12 | 4,396.59 | 0.00 | 0.00 | 0.00 | |
| 11,300.00 | 90.00 | 268.46 | 6,615.00 | -1,474.48 | -4,307.09 | 4,495.54 | 0.00 | 0.00 | 0.00 | |
| 11,400.00 | 90.00 | 268.46 | 6,615.00 | -1,477.17 | -4,407.05 | 4,594.50 | 0.00 | 0.00 | 0.00 | |
| 11,500.00 | 90.00 | 268.46 | 6,615.00 | -1,479.86 | -4,507.01 | 4,693.46 | 0.00 | 0.00 | 0.00 | |
| 11,600.00 | 90.00 | 268.46 | 6,615.00 | -1,482.55 | -4,606.98 | 4,792.41 | 0.00 | 0.00 | 0.00 | |
| 11,700.00 | 90.00 | 268.46 | 6,615.00 | -1,485.24 | -4,706.94 | 4,891.37 | 0.00 | 0.00 | 0.00 | |
| 11,800.00 | 90.00 | 268.46 | 6,615.00 | -1,487.93 | -4,806.91 | 4,990.33 | 0.00 | 0.00 | 0.00 | |
| 11,900.00 | 90.00 | 268.46 | 6,615.00 | -1,490.62 | -4,906.87 | 5,089.28 | 0.00 | 0.00 | 0.00 | |
| 12,000.00 | 90.00 | 268.46 | 6,615.00 | -1,493.31 | -5,006.83 | 5,188.24 | 0.00 | 0.00 | 0.00 | |
| 12,100.00 | 90.00 | 268.46 | 6,615.00 | -1,496.00 | -5,106.80 | 5,287.20 | 0.00 | 0.00 | 0.00 | |
| 12,200.00 | 90.00 | 268.46 | 6,615.00 | -1,498.69 | -5,206.76 | 5,386.15 | 0.00 | 0.00 | 0.00 | |
| 12,300.00 | 90.00 | 268.46 | 6,615.00 | -1,501.38 | -5,306.72 | 5,485.11 | 0.00 | 0.00 | 0.00 | |
| 12,400.00 | 90.00 | 268.46 | 6,615.00 | -1,504.07 | -5,406.69 | 5,584.06 | 0.00 | 0.00 | 0.00 | |
| 12,500.00 | 90.00 | 268.46 | 6,615.00 | -1,506.77 | -5,506.65 | 5,683.02 | 0.00 | 0.00 | 0.00 | |
| 12,600.00 | 90.00 | 268.46 | 6,615.00 | -1,509.46 | -5,606.62 | 5,781.98 | 0.00 | 0.00 | 0.00 | |
| 12,700.00 | 90.00 | 268.46 | 6,615.00 | -1,512.15 | -5,706.58 | 5,880.93 | 0.00 | 0.00 | 0.00 | |
| 12,800.00 | 90.00 | 268.46 | 6,615.00 | -1,514.84 | -5,806.54 | 5,979.89 | 0.00 | 0.00 | 0.00 | |
| 12,900.00 | 90.00 | 268.46 | 6,615.00 | -1,517.53 | -5,906.51 | 6,078.85 | 0.00 | 0.00 | 0.00 | |
| 13,000.00 | 90.00 | 268.46 | 6,615.00 | -1,520.22 | -6,006.47 | 6,177.80 | 0.00 | 0.00 | 0.00 | |
| 13,100.00 | 90.00 | 268.46 | 6,615.00 | -1,522.91 | -6,106.43 | 6,276.76 | 0.00 | 0.00 | 0.00 | |
| 13,200.00 | 90.00 | 268.46 | 6,615.00 | -1,525.60 | -6,206.40 | 6,375.72 | 0.00 | 0.00 | 0.00 | |
| 13,300.00 | 90.00 | 268.46 | 6,615.00 | -1,528.29 | -6,306.36 | 6,474.67 | 0.00 | 0.00 | 0.00 | |
| 13,400.00 | 90.00 | 268.46 | 6,615.00 | -1,530.98 | -6,406.33 | 6,573.63 | 0.00 | 0.00 | 0.00 | |
| 13,500.00 | 90.00 | 268.46 | 6,615.00 | -1,533.67 | -6,506.29 | 6,672.58 | 0.00 | 0.00 | 0.00 | |
| 13,600.00 | 90.00 | 268.46 | 6,615.00 | -1,536.37 | -6,606.25 | 6,771.54 | 0.00 | 0.00 | 0.00 | |
| 13,700.00 | 90.00 | 268.46 | 6,615.00 | -1,539.06 | -6,706.22 | 6,870.50 | 0.00 | 0.00 | 0.00 | |

Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 13,800.00 | 90.00 | 268.46 | 6,615.00 | -1,541.75 | -6,806.18 | 6,969.45 | 0.00 | 0.00 | 0.00 | |
| 13,900.00 | 90.00 | 268.46 | 6,615.00 | -1,544.44 | -6,906.14 | 7,068.41 | 0.00 | 0.00 | 0.00 | |
| 14,000.00 | 90.00 | 268.46 | 6,615.00 | -1,547.13 | -7,006.11 | 7,167.37 | 0.00 | 0.00 | 0.00 | |
| 14,100.00 | 90.00 | 268.46 | 6,615.00 | -1,549.82 | -7,106.07 | 7,266.32 | 0.00 | 0.00 | 0.00 | |
| 14,200.00 | 90.00 | 268.46 | 6,615.00 | -1,552.51 | -7,206.04 | 7,365.28 | 0.00 | 0.00 | 0.00 | |
| 14,300.00 | 90.00 | 268.46 | 6,615.00 | -1,555.20 | -7,306.00 | 7,464.24 | 0.00 | 0.00 | 0.00 | |
| 14,400.00 | 90.00 | 268.46 | 6,615.00 | -1,557.89 | -7,405.96 | 7,563.19 | 0.00 | 0.00 | 0.00 | |
| 14,500.00 | 90.00 | 268.46 | 6,615.00 | -1,560.58 | -7,505.93 | 7,662.15 | 0.00 | 0.00 | 0.00 | |
| 14,600.00 | 90.00 | 268.46 | 6,615.00 | -1,563.27 | -7,605.89 | 7,761.10 | 0.00 | 0.00 | 0.00 | |
| 14,700.00 | 90.00 | 268.46 | 6,615.00 | -1,565.96 | -7,705.86 | 7,860.06 | 0.00 | 0.00 | 0.00 | |
| 14,800.00 | 90.00 | 268.46 | 6,615.00 | -1,568.66 | -7,805.82 | 7,959.02 | 0.00 | 0.00 | 0.00 | |
| 14,900.00 | 90.00 | 268.46 | 6,615.00 | -1,571.35 | -7,905.78 | 8,057.97 | 0.00 | 0.00 | 0.00 | |
| 15,000.00 | 90.00 | 268.46 | 6,615.00 | -1,574.04 | -8,005.75 | 8,156.93 | 0.00 | 0.00 | 0.00 | |
| 15,100.00 | 90.00 | 268.46 | 6,615.00 | -1,576.73 | -8,105.71 | 8,255.89 | 0.00 | 0.00 | 0.00 | |
| 15,200.00 | 90.00 | 268.46 | 6,615.00 | -1,579.42 | -8,205.67 | 8,354.84 | 0.00 | 0.00 | 0.00 | |
| 15,300.00 | 90.00 | 268.46 | 6,615.00 | -1,582.11 | -8,305.64 | 8,453.80 | 0.00 | 0.00 | 0.00 | |
| 15,400.00 | 90.00 | 268.46 | 6,615.00 | -1,584.80 | -8,405.60 | 8,552.76 | 0.00 | 0.00 | 0.00 | |
| 15,500.00 | 90.00 | 268.46 | 6,615.00 | -1,587.49 | -8,505.57 | 8,651.71 | 0.00 | 0.00 | 0.00 | |
| 15,600.00 | 90.00 | 268.46 | 6,615.00 | -1,590.18 | -8,605.53 | 8,750.67 | 0.00 | 0.00 | 0.00 | |
| 15,700.00 | 90.00 | 268.46 | 6,615.00 | -1,592.87 | -8,705.49 | 8,849.62 | 0.00 | 0.00 | 0.00 | |
| 15,800.00 | 90.00 | 268.46 | 6,615.00 | -1,595.56 | -8,805.46 | 8,948.58 | 0.00 | 0.00 | 0.00 | |
| 15,900.00 | 90.00 | 268.46 | 6,615.00 | -1,598.26 | -8,905.42 | 9,047.54 | 0.00 | 0.00 | 0.00 | |
| 16,000.00 | 90.00 | 268.46 | 6,615.00 | -1,600.95 | -9,005.38 | 9,146.49 | 0.00 | 0.00 | 0.00 | |
| 16,100.00 | 90.00 | 268.46 | 6,615.00 | -1,603.64 | -9,105.35 | 9,245.45 | 0.00 | 0.00 | 0.00 | |
| 16,200.00 | 90.00 | 268.46 | 6,615.00 | -1,606.33 | -9,205.31 | 9,344.41 | 0.00 | 0.00 | 0.00 | |
| 16,280.97 | 90.00 | 268.46 | 6,615.00 | -1,608.51 | -9,286.26 | 9,424.53 | 0.00 | 0.00 | 0.00 | |
| TD at 16280.97 | | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|------------------|-------------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| WALT 17W-9N - LP | 0.00 | 0.00 | 6,615.00 | -1,361.80 | -121.12 | 1,451,723.23 | 3,164,045.79 | 40° 34' 18.768 N | 104° 54' 34.153 W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| WALT 17W-9N - PBHL | 0.00 | 0.00 | 6,615.00 | -1,608.51 | -9,286.26 | 1,451,415.45 | 3,154,882.51 | 40° 34' 16.313 N | 104° 56' 32.921 W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

| Formations | | | | | | |
|-----------------------|-----------------------|----------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,922.52 | 3,835.00 | SUSSEX | | | | |
| 4,308.96 | 4,210.00 | SHANNON | | | | |
| 7,003.85 | 6,605.00 | NIOBRARA | | | | |

Planning Report

| | | | |
|------------------|----------------------|-------------------------------------|----------------------|
| Database: | EDT_32Bit_ODBC | Local Co-ordinate Reference: | Well WALT 17W-20-9N |
| Company: | EXTRACTION OIL & GAS | TVD Reference: | KB 29' @ 5135.00usft |
| Project: | WELD COUNTY | MD Reference: | KB 29' @ 5135.00usft |
| Site: | Sec 17-T7N-R67W | North Reference: | True |
| Well: | WALT 17W-20-9N | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | ORIGINAL WELLBORE | | |
| Design: | PROPOSAL 1 | | |

| Plan Annotations | | | | |
|-----------------------------|-----------------------------|-------------------|-----------------|----------------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 500.00 | 500.00 | 0.00 | 0.00 | Start Build 2.00 |
| 1,198.72 | 1,191.81 | -79.51 | 29.44 | Start 4969.23 hold at 1198.72 MD |
| 6,167.95 | 6,013.97 | -1,204.87 | 446.08 | Start DLS 10.00 TFO 108.26 |
| 7,112.52 | 6,615.00 | -1,361.80 | -121.12 | Start 9168.45 hold at 7112.52 MD |
| 16,280.97 | 6,615.00 | -1,608.51 | -9,286.26 | TD at 16280.97 |