

EXTRACTION OIL & GAS

WELD COUNTY

Sec 17-T7N-R67W

WALT WEST 17W-20-03

OWB

Design: FINAL SURVEY

Standard Survey Report

10 February, 2022



Project: WELD COUNTY
Site: Sec 17-T7N-R67W
Well: WALT WEST 17W-20-03
Wellbore: OWB
Design: FINAL SURVEY

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



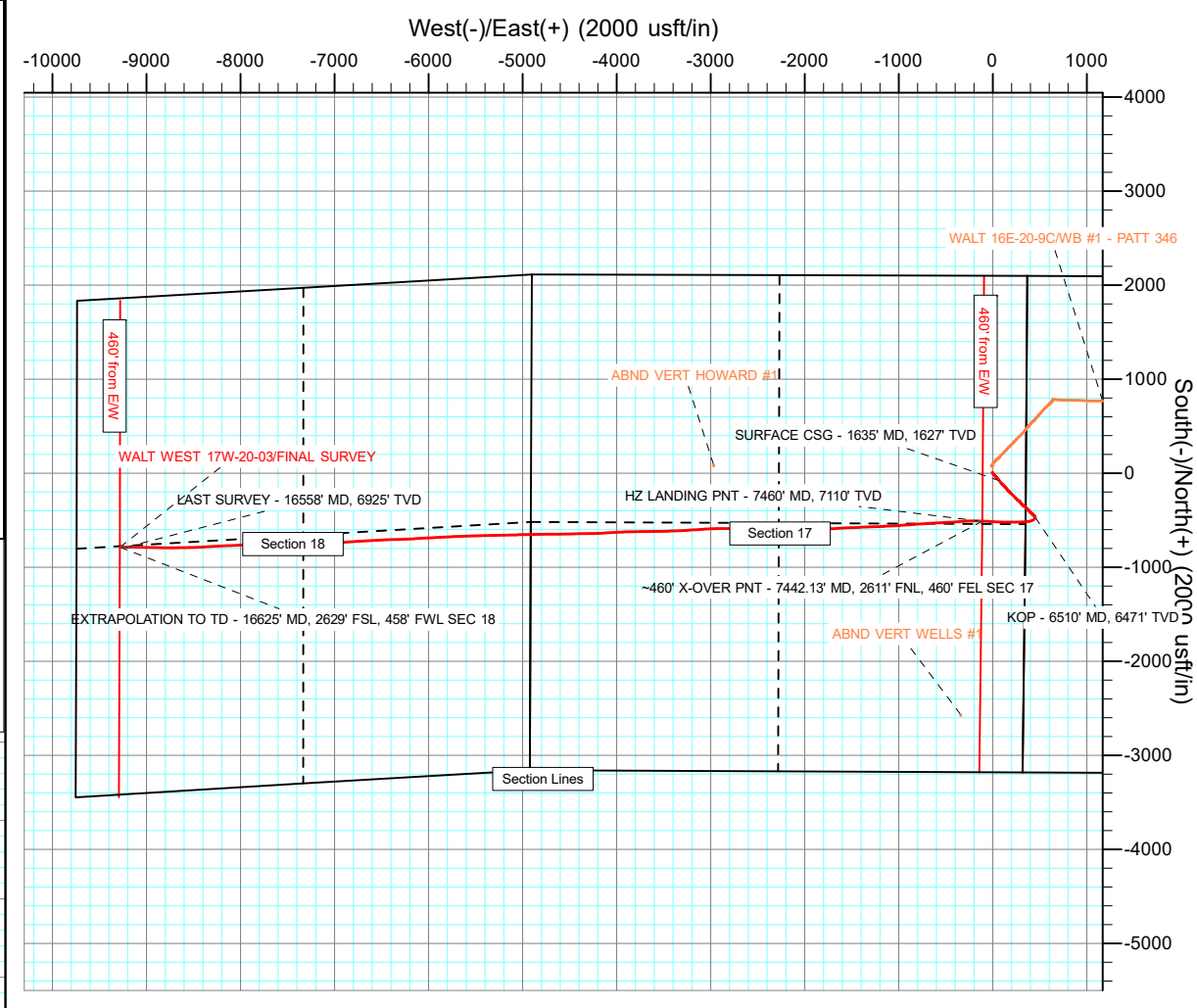
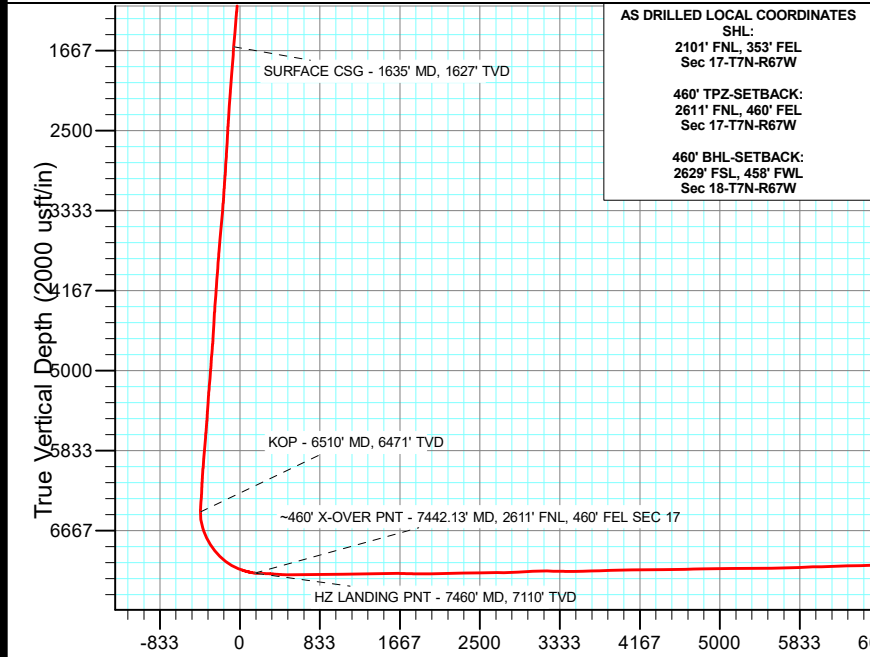
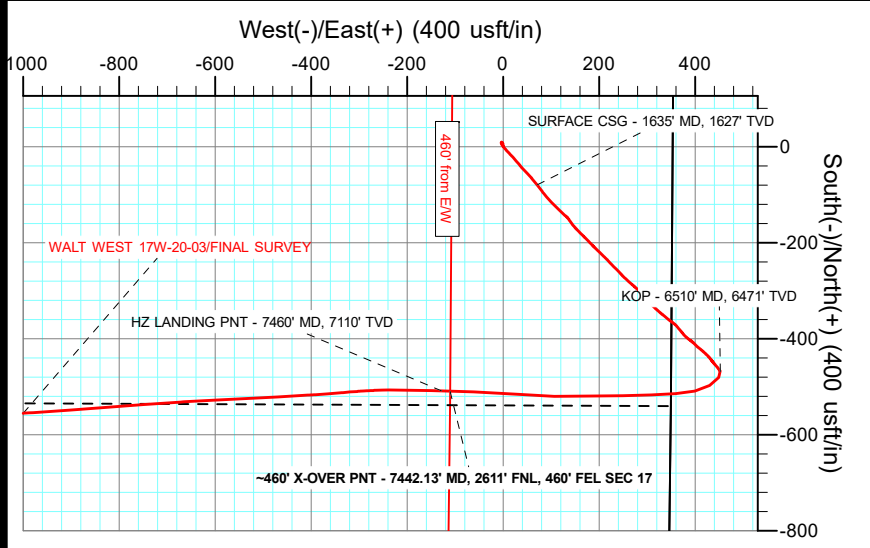
Azimuths to True North
Magnetic North: 7.97°
Magnetic Field
Strength: 52058.7nT
Dip Angle: 66.78°
Date: 3/1/2021
Model: IGRF2020

WELL DETAILS: WALT WEST 17W-20-03

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|-------|-------|------------|------------|-------------|--------------|------|
| 0.00 | 0.00 | 1453141.90 | 3164157.74 | 40.575772°N | 104.909050°W | |

ANNOTATIONS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | VSec | Departure | Annotation |
|----------|-------|--------|---------|---------|----------|---------|-----------|---|
| 1635.00 | 8.05 | 141.84 | 1627.28 | -79.41 | 70.84 | -63.90 | 128.56 | SURFACE CSG - 1635' MD, 1627' TVD |
| 6510.00 | 5.91 | 157.61 | 6471.05 | -468.18 | 452.59 | -411.54 | 675.83 | KOP - 6510' MD, 6471' TVD |
| 7442.13 | 83.11 | 272.05 | 7108.37 | -509.34 | -110.57 | 153.08 | 1260.10 | ~460° X-OVER PNT - 7442.13' MD, 2611' FNL, 460' FEL SEC 17 |
| 7460.00 | 85.25 | 272.31 | 7110.19 | -508.66 | -128.34 | 170.73 | 1277.79 | HZ LANDING PNT - 7460' MD, 7110' TVD |
| 16558.00 | 93.11 | 269.83 | 6924.84 | -784.38 | -9214.81 | 9248.13 | 10371.24 | LAST SURVEY - 16558' MD, 6925' TVD |
| 16625.00 | 93.11 | 269.83 | 6921.20 | -784.58 | -9281.71 | 9314.81 | 10438.14 | EXTRAPOLATION TO TD - 16625' MD, 2629' FSL, 458' FWL SEC 18 |



Survey Report

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|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| 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: | 40.581536°N | |
| From: | Lat/Long | Easting: | 3,164,511.50 | usft | Longitude: | 104.907726°W | |
| Position Uncertainty: | 0.00 | usft | Slot Radius: | 13.200 | in | Grid Convergence: | 0.38 ° |

| Well | | WALT WEST 17W-20-03 | | | | |
|----------------------|-------|---------------------|---------------------|-------------------|---------------|---------------|
| Well Position | +N/-S | 0.00 usft | Northing: | 1,453,141.91 usft | Latitude: | 40.575772°N |
| | +E/-W | 0.00 usft | Easting: | 3,164,157.74 usft | Longitude: | 104.909050°W |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | usft | Ground Level: | 5,107.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OWB | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2020 | 3/1/2021 | 7.97 | 66.78 | 52,058.67185610 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| Design | FINAL SURVEY | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 265.17 | |

| | | | | | |
|-----------------------|------------------|--------------------------|------------------|---------------------|--|
| Survey Program | Date | 2/10/2022 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 231.00 | 1,539.00 | SURFACE SURVEY (OWB) | MWD OWSG | OWSG MWD - Standard | |
| 1,671.00 | 16,625.00 | FINAL SURVEY (OWB) | MWD OWSG | OWSG MWD - Standard | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|------------------------------|-----------------------------|----------------------------|--|
| 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) | |
| 144.00 | 1.23 | 5.95 | 143.99 | 1.43 | 0.15 | -0.27 | 0.00 | 0.00 | 0.00 | |
| 231.00 | 1.40 | 343.89 | 230.97 | 3.38 | -0.05 | -0.24 | 0.61 | 0.20 | -25.36 | |
| 318.00 | 1.84 | 354.09 | 317.93 | 5.79 | -0.49 | 0.00 | 0.60 | 0.51 | 11.72 | |
| 405.00 | 1.14 | 320.25 | 404.90 | 7.84 | -1.18 | 0.52 | 1.26 | -0.80 | -38.90 | |
| 492.00 | 0.87 | 306.10 | 491.89 | 8.90 | -2.27 | 1.51 | 0.42 | -0.31 | -16.26 | |
| 579.00 | 1.23 | 302.06 | 578.88 | 9.78 | -3.60 | 2.76 | 0.42 | 0.41 | -4.64 | |
| 666.00 | 1.80 | 176.99 | 665.86 | 8.92 | -4.32 | 3.55 | 3.10 | 0.66 | -143.76 | |
| 754.00 | 2.76 | 151.85 | 753.79 | 5.67 | -3.24 | 2.75 | 1.55 | 1.09 | -28.57 | |
| 841.00 | 5.36 | 142.45 | 840.57 | 0.60 | 0.22 | -0.27 | 3.07 | 2.99 | -10.80 | |
| 928.00 | 6.85 | 139.19 | 927.07 | -6.55 | 6.09 | -5.52 | 1.76 | 1.71 | -3.75 | |

Survey Report

| | | | |
|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| 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) |
| 972.00 | 7.16 | 134.89 | 970.74 | -10.47 | 9.75 | -8.83 | 1.38 | 0.70 | -9.77 |
| 1,059.00 | 8.04 | 138.75 | 1,056.98 | -18.87 | 17.60 | -15.95 | 1.17 | 1.01 | 4.44 |
| 1,146.00 | 8.34 | 138.05 | 1,143.09 | -28.14 | 25.83 | -23.37 | 0.36 | 0.34 | -0.80 |
| 1,233.00 | 9.27 | 140.51 | 1,229.07 | -38.24 | 34.50 | -31.16 | 1.15 | 1.07 | 2.83 |
| 1,321.00 | 7.33 | 135.41 | 1,316.14 | -47.71 | 42.95 | -38.78 | 2.36 | -2.20 | -5.80 |
| 1,408.00 | 7.42 | 135.68 | 1,402.42 | -55.68 | 50.77 | -45.90 | 0.11 | 0.10 | 0.31 |
| 1,495.00 | 7.73 | 140.07 | 1,488.66 | -64.19 | 58.45 | -52.84 | 0.75 | 0.36 | 5.05 |
| 1,539.00 | 8.17 | 140.42 | 1,532.24 | -68.87 | 62.35 | -56.32 | 1.01 | 1.00 | 0.80 |
| 1,635.00 | 8.05 | 141.84 | 1,627.28 | -79.41 | 70.84 | -63.90 | 0.25 | -0.13 | 1.48 |
| SURFACE CSG - 1635' MD, 1627' TVD | | | | | | | | | |
| 1,671.00 | 8.00 | 142.39 | 1,662.93 | -83.37 | 73.93 | -66.64 | 0.25 | -0.13 | 1.52 |
| 1,760.00 | 7.69 | 142.91 | 1,751.09 | -93.03 | 81.30 | -73.17 | 0.36 | -0.35 | 0.58 |
| 1,849.00 | 7.42 | 139.79 | 1,839.32 | -102.17 | 88.60 | -79.68 | 0.55 | -0.30 | -3.51 |
| 1,939.00 | 7.42 | 137.54 | 1,928.57 | -110.89 | 96.27 | -86.59 | 0.32 | 0.00 | -2.50 |
| 2,028.00 | 6.94 | 136.39 | 2,016.87 | -119.03 | 103.86 | -93.47 | 0.56 | -0.54 | -1.29 |
| 2,117.00 | 6.41 | 133.00 | 2,105.27 | -126.31 | 111.20 | -100.17 | 0.74 | -0.60 | -3.81 |
| 2,206.00 | 6.05 | 134.23 | 2,193.74 | -132.97 | 118.20 | -106.58 | 0.43 | -0.40 | 1.38 |
| 2,295.00 | 5.79 | 133.04 | 2,282.27 | -139.30 | 124.84 | -112.66 | 0.32 | -0.29 | -1.34 |
| 2,384.00 | 5.35 | 130.71 | 2,370.85 | -145.07 | 131.27 | -118.58 | 0.56 | -0.49 | -2.62 |
| 2,473.00 | 6.54 | 145.38 | 2,459.37 | -151.95 | 137.29 | -124.01 | 2.16 | 1.34 | 16.48 |
| 2,562.00 | 5.74 | 143.44 | 2,547.86 | -159.70 | 142.82 | -128.86 | 0.93 | -0.90 | -2.18 |
| 2,651.00 | 5.26 | 139.43 | 2,636.45 | -166.37 | 148.13 | -133.59 | 0.69 | -0.54 | -4.51 |
| 2,740.00 | 6.19 | 135.86 | 2,725.01 | -172.91 | 154.12 | -139.01 | 1.12 | 1.04 | -4.01 |
| 2,829.00 | 5.61 | 135.69 | 2,813.53 | -179.47 | 160.50 | -144.82 | 0.65 | -0.65 | -0.19 |
| 2,918.00 | 4.82 | 133.62 | 2,902.17 | -185.16 | 166.25 | -150.06 | 0.91 | -0.89 | -2.33 |
| 3,007.00 | 6.63 | 134.32 | 2,990.72 | -191.33 | 172.63 | -155.90 | 2.04 | 2.03 | 0.79 |
| 3,096.00 | 6.23 | 137.19 | 3,079.16 | -198.46 | 179.59 | -162.23 | 0.58 | -0.45 | 3.22 |
| 3,185.00 | 5.39 | 136.30 | 3,167.70 | -205.03 | 185.76 | -167.83 | 0.95 | -0.94 | -1.00 |
| 3,274.00 | 7.56 | 134.54 | 3,256.13 | -212.16 | 192.82 | -174.27 | 2.45 | 2.44 | -1.98 |
| 3,363.00 | 7.60 | 133.66 | 3,344.35 | -220.33 | 201.25 | -181.98 | 0.14 | 0.04 | -0.99 |
| 3,452.00 | 7.69 | 133.48 | 3,432.56 | -228.49 | 209.83 | -189.84 | 0.10 | 0.10 | -0.20 |
| 3,542.00 | 7.60 | 137.27 | 3,521.76 | -237.00 | 218.24 | -197.50 | 0.57 | -0.10 | 4.21 |
| 3,630.00 | 7.69 | 134.98 | 3,608.98 | -245.44 | 226.35 | -204.87 | 0.36 | 0.10 | -2.60 |
| 3,720.00 | 7.87 | 135.38 | 3,698.15 | -254.08 | 234.94 | -212.70 | 0.21 | 0.20 | 0.44 |
| 3,809.00 | 7.34 | 137.27 | 3,786.37 | -262.59 | 243.08 | -220.09 | 0.66 | -0.60 | 2.12 |
| 3,898.00 | 6.10 | 136.22 | 3,874.75 | -270.19 | 250.21 | -226.56 | 1.40 | -1.39 | -1.18 |
| 3,987.00 | 6.63 | 130.62 | 3,963.20 | -276.94 | 257.38 | -233.14 | 0.92 | 0.60 | -6.29 |
| 4,076.00 | 6.01 | 131.90 | 4,051.66 | -283.40 | 264.75 | -239.93 | 0.71 | -0.70 | 1.44 |
| 4,165.00 | 5.04 | 132.78 | 4,140.25 | -289.17 | 271.08 | -245.76 | 1.09 | -1.09 | 0.99 |
| 4,254.00 | 7.11 | 129.74 | 4,228.74 | -295.35 | 278.19 | -252.32 | 2.35 | 2.33 | -3.42 |
| 4,343.00 | 6.32 | 135.07 | 4,317.13 | -302.33 | 285.88 | -259.40 | 1.13 | -0.89 | 5.99 |
| 4,432.00 | 5.04 | 137.85 | 4,405.70 | -308.70 | 291.97 | -264.93 | 1.47 | -1.44 | 3.12 |
| 4,521.00 | 5.97 | 140.27 | 4,494.28 | -315.16 | 297.55 | -269.95 | 1.08 | 1.04 | 2.72 |

Survey Report

| | | | |
|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| 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) |
| 4,610.00 | 6.05 | 137.85 | 4,582.79 | -322.20 | 303.65 | -275.44 | 0.30 | 0.09 | -2.72 |
| 4,699.00 | 5.35 | 139.52 | 4,671.35 | -328.83 | 309.50 | -280.70 | 0.81 | -0.79 | 1.88 |
| 4,788.00 | 7.69 | 133.09 | 4,759.77 | -336.05 | 316.54 | -287.11 | 2.75 | 2.63 | -7.22 |
| 4,877.00 | 6.41 | 131.63 | 4,848.10 | -343.42 | 324.60 | -294.52 | 1.45 | -1.44 | -1.64 |
| 4,966.00 | 5.04 | 127.89 | 4,936.65 | -349.12 | 331.40 | -300.82 | 1.59 | -1.54 | -4.20 |
| 5,055.00 | 6.32 | 129.87 | 5,025.21 | -354.67 | 338.25 | -307.17 | 1.45 | 1.44 | 2.22 |
| 5,144.00 | 7.25 | 127.53 | 5,113.59 | -361.23 | 346.46 | -314.80 | 1.09 | 1.04 | -2.63 |
| 5,233.00 | 5.39 | 126.34 | 5,202.05 | -367.13 | 354.28 | -322.10 | 2.09 | -2.09 | -1.34 |
| 5,323.00 | 6.72 | 137.80 | 5,291.54 | -373.53 | 361.22 | -328.48 | 1.99 | 1.48 | 12.73 |
| 5,433.00 | 7.20 | 139.92 | 5,400.73 | -383.57 | 369.98 | -336.36 | 0.49 | 0.44 | 1.93 |
| 5,522.00 | 5.30 | 141.59 | 5,489.20 | -391.06 | 376.13 | -341.85 | 2.14 | -2.13 | 1.88 |
| 5,611.00 | 7.25 | 129.78 | 5,577.67 | -397.88 | 383.00 | -348.13 | 2.62 | 2.19 | -13.27 |
| 5,700.00 | 5.57 | 124.36 | 5,666.11 | -403.91 | 390.88 | -355.47 | 2.00 | -1.89 | -6.09 |
| 5,789.00 | 7.69 | 136.00 | 5,754.51 | -410.63 | 398.59 | -362.58 | 2.81 | 2.38 | 13.08 |
| 5,878.00 | 7.07 | 129.52 | 5,842.78 | -418.40 | 406.95 | -370.26 | 1.17 | -0.70 | -7.28 |
| 5,967.00 | 5.79 | 129.65 | 5,931.21 | -424.75 | 414.63 | -377.38 | 1.44 | -1.44 | 0.15 |
| 6,056.00 | 7.47 | 133.92 | 6,019.62 | -431.63 | 422.25 | -384.40 | 1.97 | 1.89 | 4.80 |
| 6,145.00 | 5.74 | 137.80 | 6,108.02 | -438.94 | 429.41 | -390.91 | 2.01 | -1.94 | 4.36 |
| 6,235.00 | 4.07 | 144.90 | 6,197.69 | -444.89 | 434.27 | -395.26 | 1.97 | -1.86 | 7.89 |
| 6,324.00 | 6.27 | 139.74 | 6,286.32 | -451.18 | 439.23 | -399.67 | 2.52 | 2.47 | -5.80 |
| 6,413.00 | 7.42 | 140.23 | 6,374.69 | -459.31 | 446.05 | -405.77 | 1.29 | 1.29 | 0.55 |
| 6,502.00 | 5.79 | 146.40 | 6,463.10 | -467.47 | 452.21 | -411.23 | 1.99 | -1.83 | 6.93 |
| 6,510.00 | 5.91 | 157.61 | 6,471.05 | -468.18 | 452.59 | -411.54 | 14.34 | 1.54 | 140.09 |
| KOP - 6510' MD, 6471' TVD | | | | | | | | | |
| 6,591.00 | 14.05 | 211.92 | 6,550.90 | -480.43 | 448.97 | -406.90 | 14.34 | 10.05 | 67.05 |
| 6,680.00 | 19.80 | 239.77 | 6,636.15 | -497.23 | 430.18 | -386.77 | 11.00 | 6.46 | 31.29 |
| 6,769.00 | 24.04 | 257.14 | 6,718.78 | -508.87 | 399.44 | -355.16 | 8.66 | 4.76 | 19.52 |
| 6,858.00 | 30.09 | 266.92 | 6,798.04 | -514.11 | 359.43 | -314.85 | 8.42 | 6.80 | 10.99 |
| 6,947.00 | 39.06 | 266.26 | 6,871.24 | -517.14 | 309.07 | -264.41 | 10.09 | 10.08 | -0.74 |
| 7,036.00 | 46.13 | 270.62 | 6,936.73 | -518.63 | 248.92 | -204.35 | 8.60 | 7.94 | 4.90 |
| 7,125.00 | 51.70 | 267.98 | 6,995.21 | -519.51 | 181.88 | -137.48 | 6.64 | 6.26 | -2.97 |
| 7,214.00 | 64.30 | 271.46 | 7,042.28 | -519.72 | 106.57 | -62.42 | 14.54 | 14.16 | 3.91 |
| 7,303.00 | 71.54 | 274.68 | 7,075.72 | -515.25 | 24.29 | 19.19 | 8.80 | 8.13 | 3.62 |
| 7,392.00 | 77.11 | 271.33 | 7,099.77 | -510.79 | -61.23 | 104.04 | 7.23 | 6.26 | -3.76 |
| 7,442.13 | 83.11 | 272.05 | 7,108.37 | -509.34 | -110.57 | 153.08 | 12.05 | 11.97 | 1.44 |
| -460' X-OVER PNT - 7442.13' MD, 2611' FNL, 460' FEL SEC 17 | | | | | | | | | |
| 7,460.00 | 85.25 | 272.31 | 7,110.19 | -508.66 | -128.34 | 170.73 | 12.05 | 11.97 | 1.41 |
| HZ LANDING PNT - 7460' MD, 7110' TVD | | | | | | | | | |
| 7,481.00 | 87.76 | 272.60 | 7,111.47 | -507.76 | -149.28 | 191.52 | 12.05 | 11.97 | 1.40 |
| 7,570.00 | 88.11 | 268.90 | 7,114.68 | -506.60 | -238.20 | 280.02 | 4.17 | 0.39 | -4.16 |
| 7,659.00 | 85.42 | 264.76 | 7,119.70 | -511.51 | -326.89 | 368.81 | 5.54 | -3.02 | -4.65 |
| 7,749.00 | 87.10 | 266.88 | 7,125.57 | -518.05 | -416.45 | 458.61 | 3.00 | 1.87 | 2.36 |
| 7,838.00 | 89.84 | 266.79 | 7,127.95 | -522.96 | -505.28 | 547.53 | 3.08 | 3.08 | -0.10 |
| 7,927.00 | 91.56 | 267.36 | 7,126.86 | -527.50 | -594.15 | 636.47 | 2.04 | 1.93 | 0.64 |

Survey Report

| | | | |
|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| 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) | |
| 8,016.00 | 90.63 | 266.08 | 7,125.16 | -532.59 | -682.99 | 725.42 | 1.78 | -1.04 | -1.44 | |
| 8,105.00 | 91.07 | 265.95 | 7,123.84 | -538.78 | -771.76 | 814.40 | 0.52 | 0.49 | -0.15 | |
| 8,194.00 | 91.43 | 265.51 | 7,121.90 | -545.40 | -860.49 | 903.37 | 0.64 | 0.40 | -0.49 | |
| 8,283.00 | 89.75 | 266.21 | 7,120.98 | -551.83 | -949.25 | 992.36 | 2.04 | -1.89 | 0.79 | |
| 8,372.00 | 90.50 | 266.61 | 7,120.79 | -557.40 | -1,038.08 | 1,081.34 | 0.96 | 0.84 | 0.45 | |
| 8,461.00 | 92.00 | 266.79 | 7,118.84 | -562.52 | -1,126.91 | 1,170.28 | 1.70 | 1.69 | 0.20 | |
| 8,550.00 | 90.32 | 268.15 | 7,117.04 | -566.45 | -1,215.79 | 1,259.19 | 2.43 | -1.89 | 1.53 | |
| 8,640.00 | 90.77 | 267.71 | 7,116.19 | -569.70 | -1,305.73 | 1,349.08 | 0.70 | 0.50 | -0.49 | |
| 8,729.00 | 91.43 | 267.36 | 7,114.48 | -573.53 | -1,394.63 | 1,437.98 | 0.84 | 0.74 | -0.39 | |
| 8,817.00 | 92.44 | 267.49 | 7,111.51 | -577.48 | -1,482.49 | 1,525.86 | 1.16 | 1.15 | 0.15 | |
| 8,907.00 | 88.47 | 267.40 | 7,110.79 | -581.49 | -1,572.38 | 1,615.77 | 4.41 | -4.41 | -0.10 | |
| 8,996.00 | 88.20 | 266.39 | 7,113.38 | -586.31 | -1,661.21 | 1,704.69 | 1.17 | -0.30 | -1.13 | |
| 9,085.00 | 88.64 | 268.95 | 7,115.83 | -589.93 | -1,750.10 | 1,793.57 | 2.92 | 0.49 | 2.88 | |
| 9,174.00 | 90.41 | 270.36 | 7,116.57 | -590.46 | -1,839.09 | 1,882.29 | 2.54 | 1.99 | 1.58 | |
| 9,263.00 | 89.93 | 270.00 | 7,116.31 | -590.18 | -1,928.09 | 1,970.94 | 0.67 | -0.54 | -0.40 | |
| 9,352.00 | 91.43 | 269.87 | 7,115.25 | -590.28 | -2,017.08 | 2,059.63 | 1.69 | 1.69 | -0.15 | |
| 9,441.00 | 91.74 | 269.87 | 7,112.79 | -590.48 | -2,106.04 | 2,148.29 | 0.35 | 0.35 | 0.00 | |
| 9,530.00 | 91.96 | 269.61 | 7,109.92 | -590.89 | -2,195.00 | 2,236.97 | 0.38 | 0.25 | -0.29 | |
| 9,619.00 | 90.28 | 269.92 | 7,108.18 | -591.25 | -2,283.97 | 2,325.66 | 1.92 | -1.89 | 0.35 | |
| 9,708.00 | 90.23 | 271.02 | 7,107.78 | -590.52 | -2,372.97 | 2,414.28 | 1.24 | -0.06 | 1.24 | |
| 9,797.00 | 91.30 | 270.05 | 7,106.59 | -589.69 | -2,461.95 | 2,502.88 | 1.62 | 1.20 | -1.09 | |
| 9,886.00 | 91.47 | 270.80 | 7,104.44 | -589.03 | -2,550.93 | 2,591.47 | 0.86 | 0.19 | 0.84 | |
| 9,975.00 | 90.41 | 270.14 | 7,102.98 | -588.30 | -2,639.91 | 2,680.08 | 1.40 | -1.19 | -0.74 | |
| 10,064.00 | 90.01 | 270.09 | 7,102.65 | -588.12 | -2,728.91 | 2,768.75 | 0.45 | -0.45 | -0.06 | |
| 10,153.00 | 93.20 | 270.40 | 7,100.16 | -587.74 | -2,817.86 | 2,857.35 | 3.60 | 3.58 | 0.35 | |
| 10,242.00 | 93.28 | 269.78 | 7,095.13 | -587.60 | -2,906.72 | 2,945.88 | 0.70 | 0.09 | -0.70 | |
| 10,332.00 | 92.00 | 267.18 | 7,090.99 | -589.99 | -2,996.58 | 3,035.63 | 3.22 | -1.42 | -2.89 | |
| 10,421.00 | 91.69 | 265.99 | 7,088.12 | -595.29 | -3,085.38 | 3,124.55 | 1.38 | -0.35 | -1.34 | |
| 10,510.00 | 89.26 | 266.61 | 7,087.38 | -601.03 | -3,174.18 | 3,213.52 | 2.82 | -2.73 | 0.70 | |
| 10,599.00 | 88.91 | 265.55 | 7,088.80 | -607.11 | -3,262.96 | 3,302.50 | 1.25 | -0.39 | -1.19 | |
| 10,688.00 | 89.31 | 268.33 | 7,090.19 | -611.86 | -3,351.81 | 3,391.44 | 3.16 | 0.45 | 3.12 | |
| 10,777.00 | 90.54 | 268.68 | 7,090.30 | -614.19 | -3,440.78 | 3,480.29 | 1.44 | 1.38 | 0.39 | |
| 10,866.00 | 90.81 | 268.64 | 7,089.25 | -616.27 | -3,529.75 | 3,569.11 | 0.31 | 0.30 | -0.04 | |
| 10,955.00 | 91.43 | 268.95 | 7,087.51 | -618.14 | -3,618.71 | 3,657.92 | 0.78 | 0.70 | 0.35 | |
| 11,044.00 | 91.87 | 269.43 | 7,084.95 | -619.40 | -3,707.67 | 3,746.66 | 0.73 | 0.49 | 0.54 | |
| 11,133.00 | 91.96 | 268.77 | 7,081.98 | -620.79 | -3,796.60 | 3,835.40 | 0.75 | 0.10 | -0.74 | |
| 11,222.00 | 92.40 | 268.55 | 7,078.59 | -622.87 | -3,885.52 | 3,924.17 | 0.55 | 0.49 | -0.25 | |
| 11,311.00 | 90.81 | 267.58 | 7,076.10 | -625.88 | -3,974.43 | 4,013.02 | 2.09 | -1.79 | -1.09 | |
| 11,401.00 | 90.77 | 266.52 | 7,074.86 | -630.51 | -4,064.30 | 4,102.96 | 1.18 | -0.04 | -1.18 | |
| 11,489.00 | 91.21 | 266.17 | 7,073.34 | -636.12 | -4,152.10 | 4,190.93 | 0.64 | 0.50 | -0.40 | |
| 11,578.00 | 89.62 | 268.95 | 7,072.69 | -639.91 | -4,241.01 | 4,279.84 | 3.60 | -1.79 | 3.12 | |
| 11,668.00 | 90.10 | 269.17 | 7,072.91 | -641.38 | -4,331.00 | 4,369.63 | 0.59 | 0.53 | 0.24 | |
| 11,757.00 | 90.50 | 268.81 | 7,072.45 | -642.95 | -4,419.98 | 4,458.43 | 0.60 | 0.45 | -0.40 | |

Survey Report

| | | | |
|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| 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) | |
| 11,846.00 | 90.68 | 268.73 | 7,071.53 | -644.86 | -4,508.96 | 4,547.25 | 0.22 | 0.20 | -0.09 | |
| 11,935.00 | 91.69 | 269.56 | 7,069.69 | -646.19 | -4,597.93 | 4,636.01 | 1.47 | 1.13 | 0.93 | |
| 12,024.00 | 92.22 | 269.70 | 7,066.65 | -646.76 | -4,686.87 | 4,724.69 | 0.62 | 0.60 | 0.16 | |
| 12,113.00 | 90.41 | 269.08 | 7,064.61 | -647.71 | -4,775.84 | 4,813.42 | 2.15 | -2.03 | -0.70 | |
| 12,202.00 | 90.41 | 268.73 | 7,063.97 | -649.41 | -4,864.82 | 4,902.23 | 0.39 | 0.00 | -0.39 | |
| 12,291.00 | 90.85 | 268.46 | 7,063.00 | -651.59 | -4,953.79 | 4,991.07 | 0.58 | 0.49 | -0.30 | |
| 12,380.00 | 91.38 | 268.77 | 7,061.26 | -653.74 | -5,042.74 | 5,079.89 | 0.69 | 0.60 | 0.35 | |
| 12,469.00 | 90.37 | 269.21 | 7,059.91 | -655.31 | -5,131.72 | 5,168.68 | 1.24 | -1.13 | 0.49 | |
| 12,558.00 | 89.84 | 268.64 | 7,059.74 | -656.98 | -5,220.70 | 5,257.49 | 0.87 | -0.60 | -0.64 | |
| 12,647.00 | 90.06 | 268.33 | 7,059.82 | -659.34 | -5,309.67 | 5,346.34 | 0.43 | 0.25 | -0.35 | |
| 12,737.00 | 90.15 | 268.24 | 7,059.65 | -662.03 | -5,399.63 | 5,436.20 | 0.14 | 0.10 | -0.10 | |
| 12,826.00 | 90.23 | 268.24 | 7,059.36 | -664.76 | -5,488.59 | 5,525.08 | 0.09 | 0.09 | 0.00 | |
| 12,915.00 | 91.91 | 267.85 | 7,057.70 | -667.80 | -5,577.52 | 5,613.95 | 1.94 | 1.89 | -0.44 | |
| 13,004.00 | 92.44 | 268.46 | 7,054.32 | -670.66 | -5,666.41 | 5,702.76 | 0.91 | 0.60 | 0.69 | |
| 13,093.00 | 92.36 | 267.01 | 7,050.59 | -674.18 | -5,755.26 | 5,791.59 | 1.63 | -0.09 | -1.63 | |
| 13,182.00 | 92.58 | 266.88 | 7,046.76 | -678.91 | -5,844.05 | 5,880.46 | 0.29 | 0.25 | -0.15 | |
| 13,271.00 | 91.03 | 267.27 | 7,043.95 | -683.45 | -5,932.88 | 5,969.37 | 1.80 | -1.74 | 0.44 | |
| 13,360.00 | 91.43 | 266.96 | 7,042.04 | -687.93 | -6,021.75 | 6,058.30 | 0.57 | 0.45 | -0.35 | |
| 13,449.00 | 91.91 | 266.74 | 7,039.45 | -692.82 | -6,110.58 | 6,147.22 | 0.59 | 0.54 | -0.25 | |
| 13,538.00 | 92.09 | 266.39 | 7,036.34 | -698.15 | -6,199.36 | 6,236.14 | 0.44 | 0.20 | -0.39 | |
| 13,627.00 | 90.99 | 268.64 | 7,033.95 | -702.01 | -6,288.24 | 6,325.03 | 2.81 | -1.24 | 2.53 | |
| 13,716.00 | 91.34 | 268.29 | 7,032.14 | -704.39 | -6,377.19 | 6,413.86 | 0.56 | 0.39 | -0.39 | |
| 13,805.00 | 91.07 | 267.45 | 7,030.27 | -707.70 | -6,466.11 | 6,502.74 | 0.99 | -0.30 | -0.94 | |
| 13,894.00 | 92.71 | 266.88 | 7,027.34 | -712.10 | -6,554.95 | 6,591.63 | 1.95 | 1.84 | -0.64 | |
| 13,983.00 | 92.40 | 266.88 | 7,023.37 | -716.94 | -6,643.73 | 6,680.51 | 0.35 | -0.35 | 0.00 | |
| 14,072.00 | 92.53 | 266.08 | 7,019.54 | -722.39 | -6,732.48 | 6,769.40 | 0.91 | 0.15 | -0.90 | |
| 14,161.00 | 93.06 | 266.70 | 7,015.20 | -727.99 | -6,821.19 | 6,858.27 | 0.92 | 0.60 | 0.70 | |
| 14,251.00 | 93.50 | 266.04 | 7,010.05 | -733.68 | -6,910.87 | 6,948.10 | 0.88 | 0.49 | -0.73 | |
| 14,340.00 | 92.62 | 269.30 | 7,005.30 | -737.29 | -6,999.65 | 7,036.88 | 3.79 | -0.99 | 3.66 | |
| 14,429.00 | 93.20 | 269.65 | 7,000.78 | -738.11 | -7,088.53 | 7,125.51 | 0.76 | 0.65 | 0.39 | |
| 14,518.00 | 92.93 | 269.43 | 6,996.02 | -738.82 | -7,177.40 | 7,214.13 | 0.39 | -0.30 | -0.25 | |
| 14,607.00 | 93.11 | 268.64 | 6,991.33 | -740.32 | -7,266.27 | 7,302.80 | 0.91 | 0.20 | -0.89 | |
| 14,696.00 | 92.89 | 268.15 | 6,986.67 | -742.81 | -7,355.11 | 7,391.54 | 0.60 | -0.25 | -0.55 | |
| 14,785.00 | 92.49 | 267.36 | 6,982.50 | -746.29 | -7,443.94 | 7,480.35 | 0.99 | -0.45 | -0.89 | |
| 14,874.00 | 92.05 | 269.26 | 6,978.97 | -748.91 | -7,532.83 | 7,569.14 | 2.19 | -0.49 | 2.13 | |
| 14,963.00 | 91.60 | 268.95 | 6,976.14 | -750.30 | -7,621.77 | 7,657.89 | 0.61 | -0.51 | -0.35 | |
| 15,052.00 | 91.34 | 268.99 | 6,973.85 | -751.90 | -7,710.73 | 7,746.66 | 0.30 | -0.29 | 0.04 | |
| 15,141.00 | 90.94 | 267.58 | 6,972.08 | -754.56 | -7,799.67 | 7,835.51 | 1.65 | -0.45 | -1.58 | |
| 15,231.00 | 91.30 | 267.63 | 6,970.32 | -758.32 | -7,889.57 | 7,925.41 | 0.40 | 0.40 | 0.06 | |
| 15,320.00 | 91.16 | 267.23 | 6,968.41 | -762.31 | -7,978.46 | 8,014.32 | 0.48 | -0.16 | -0.45 | |
| 15,409.00 | 91.56 | 267.14 | 6,966.30 | -766.68 | -8,067.33 | 8,103.24 | 0.46 | 0.45 | -0.10 | |
| 15,498.00 | 92.05 | 267.27 | 6,963.50 | -771.02 | -8,156.18 | 8,192.14 | 0.57 | 0.55 | 0.15 | |
| 15,587.00 | 92.40 | 267.85 | 6,960.04 | -774.81 | -8,245.03 | 8,280.99 | 0.76 | 0.39 | 0.65 | |
| 15,676.00 | 91.60 | 266.39 | 6,956.94 | -779.28 | -8,333.86 | 8,369.88 | 1.87 | -0.90 | -1.64 | |

Survey Report

| | | | |
|------------------|----------------------|-------------------------------------|--------------------------|
| Company: | EXTRACTION OIL & GAS | Local Co-ordinate Reference: | Well WALT WEST 17W-20-03 |
| Project: | WELD COUNTY | TVD Reference: | KB 24' @ 5131.00usft |
| Site: | Sec 17-T7N-R67W | MD Reference: | KB 24' @ 5131.00usft |
| Well: | WALT WEST 17W-20-03 | North Reference: | True |
| Wellbore: | OWB | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL SURVEY | Database: | EDT_32Bit_ODBC |

| 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) |
| 15,765.00 | 91.65 | 266.52 | 6,954.41 | -784.78 | -8,422.66 | 8,458.83 | 0.16 | 0.06 | 0.15 |
| 15,854.00 | 91.47 | 268.51 | 6,951.99 | -788.63 | -8,511.53 | 8,547.71 | 2.24 | -0.20 | 2.24 |
| 15,943.00 | 91.60 | 268.81 | 6,949.61 | -790.71 | -8,600.48 | 8,636.52 | 0.37 | 0.15 | 0.34 |
| 16,032.00 | 91.56 | 268.64 | 6,947.15 | -792.69 | -8,689.42 | 8,725.31 | 0.20 | -0.04 | -0.19 |
| 16,121.00 | 91.96 | 271.19 | 6,944.42 | -792.83 | -8,778.37 | 8,813.96 | 2.90 | 0.45 | 2.87 |
| 16,210.00 | 92.05 | 271.72 | 6,941.30 | -790.57 | -8,867.29 | 8,902.37 | 0.60 | 0.10 | 0.60 |
| 16,299.00 | 91.87 | 271.55 | 6,938.26 | -788.03 | -8,956.20 | 8,990.75 | 0.28 | -0.20 | -0.19 |
| 16,388.00 | 93.24 | 271.06 | 6,934.29 | -786.00 | -9,045.09 | 9,079.15 | 1.63 | 1.54 | -0.55 |
| 16,477.00 | 93.20 | 270.62 | 6,929.29 | -784.70 | -9,133.94 | 9,167.57 | 0.50 | -0.04 | -0.49 |
| 16,558.00 | 93.11 | 269.83 | 6,924.84 | -784.38 | -9,214.81 | 9,248.13 | 0.98 | -0.11 | -0.98 |
| LAST SURVEY - 16558' MD, 6925' TVD | | | | | | | | | |
| 16,625.00 | 93.11 | 269.83 | 6,921.20 | -784.58 | -9,281.71 | 9,314.81 | 0.00 | 0.00 | 0.00 |
| EXTRAPOLATION TO TD - 16625' MD, 2629' FSL, 458' FWL SEC 18 | | | | | | | | | |

| 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 W 17W-20-03 -PE | 0.00 | 0.00 | 6,967.00 | -783.34 | -9,283.70 | 1,452,296.72 | 3,154,879.47 | 40.573617°N | 104.942469°W |
| - actual wellpath misses target center by 45.86usft at 16624.50usft MD (6921.23 TVD, -784.58 N, -9281.21 E) | | | | | | | | | |
| - Point | | | | | | | | | |
| WALT W 17W-20-03 -LF | 0.00 | 0.00 | 7,127.00 | -538.08 | -110.56 | 1,452,603.10 | 3,164,050.77 | 40.574295°N | 104.909448°W |
| - actual wellpath misses target center by 34.24usft at 7442.92usft MD (7108.47 TVD, -509.31 N, -111.36 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| Design Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|---|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 1,635.00 | 1,627.28 | -79.41 | 70.84 | SURFACE CSG - 1635' MD, 1627' TVD | |
| 6,510.00 | 6,471.05 | -468.18 | 452.59 | KOP - 6510' MD, 6471' TVD | |
| 7,442.13 | 7,108.37 | -509.34 | -110.57 | ~460' X-OVER PNT - 7442.13' MD, 2611' FNL, 460' FEL SEC 17 | |
| 7,460.00 | 7,110.19 | -508.66 | -128.34 | HZ LANDING PNT - 7460' MD, 7110' TVD | |
| 16,558.00 | 6,924.84 | -784.38 | -9,214.81 | LAST SURVEY - 16558' MD, 6925' TVD | |
| 16,625.00 | 6,921.20 | -784.58 | -9,281.71 | EXTRAPOLATION TO TD - 16625' MD, 2629' FSL, 458' FWL SEC 18 | |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|