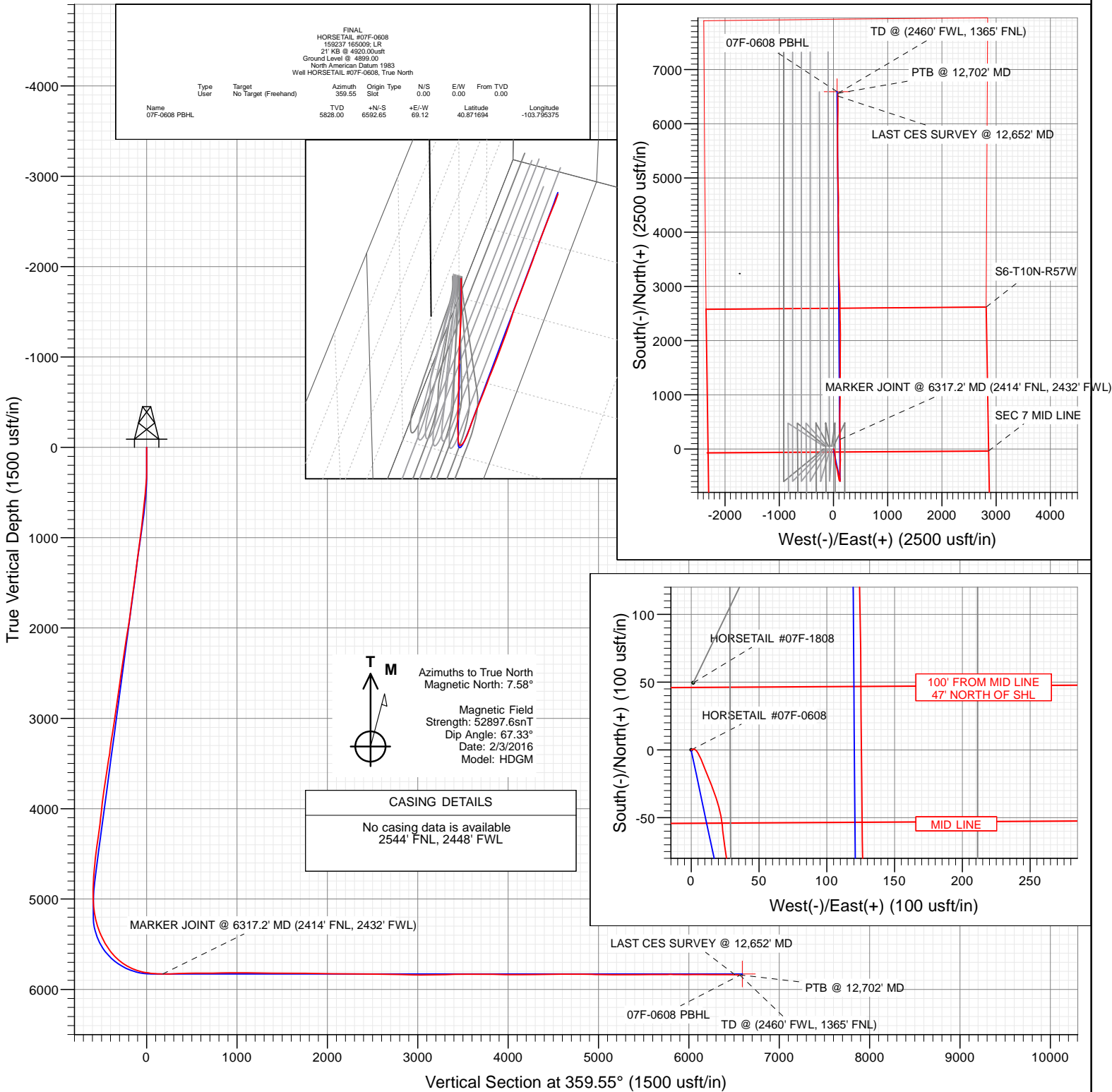




Project: Weld County, CO
Site: S7-T10N-R57W
Well: HORSETAIL #07F-0608
Wellbore: OH
Design: FINAL



WELL DETAILS: HORSETAIL #07F-0608

| | | | | | | |
|-------|-------|------------|---------------|------------|-----------|-------------|
| +N/-S | +E/-W | Northing | Ground Level: | 4899.00 | Latitude | Longitude |
| 0.00 | 0.00 | 1558346.57 | Easting | 3471480.80 | 40.853600 | -103.795625 |



Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Whiting Petroleum Corporation | Local Co-ordinate Reference: | Well HORSETAIL #07F-0608 |
| Project: | Weld County, CO | TVD Reference: | 21' KB @ 4920.0usft |
| Site: | S7-T10N-R57W | MD Reference: | 21' KB @ 4920.0usft |
| Well: | HORSETAIL #07F-0608 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL | Database: | USA EDM 5000 Multi Users DB |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Weld County, CO | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|-----------------------|----------|--------------|-------------------|-------------------|-------------|
| Site | | S7-T10N-R57W | | | |
| Site Position: | | Northing: | 1,558,398.55 usft | Latitude: | 40.853828 |
| From: | Lat/Long | Easting: | 3,469,859.44 usft | Longitude: | -103.801481 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 1.10 ° |

| | | | | | | |
|----------------------|---------------------|----------|---------------------|-------------------|---------------|--------------|
| Well | HORSETAIL #07F-0608 | | | | | |
| Well Position | +N/-S | 0.0 usft | Northing: | 1,558,346.57 usft | Latitude: | 40.853600 |
| | +E/-W | 0.0 usft | Easting: | 3,471,480.80 usft | Longitude: | -103.795625 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | 0.0 usft | Ground Level: | 4,899.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | HDGM | 2/3/2016 | 7.58 | 67.33 | 52,898 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----|
| Design | FINAL | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 359.55 | |

| | | | | | |
|-----------------------|------------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 2/25/2016 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 149.0 | 12,702.0 | Survey #1 (OH) | MWD+HDGM | OWSG MWD + HDGM | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|----------------------------|------------------------------|--|
| Survey | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments | |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | | |
| 149.0 | 0.55 | 70.50 | 149.0 | 0.2 | 0.7 | 0.2 | 0.37 | 0.37 | | |
| 244.0 | 0.94 | 74.31 | 244.0 | 0.6 | 1.9 | 0.6 | 0.41 | 0.41 | | |
| 339.0 | 2.39 | 139.06 | 339.0 | -0.7 | 3.9 | -0.7 | 2.28 | 1.53 | | |
| 433.0 | 6.29 | 155.62 | 432.7 | -6.9 | 7.3 | -6.9 | 4.32 | 4.15 | | |
| 526.0 | 6.55 | 160.09 | 525.1 | -16.5 | 11.2 | -16.6 | 0.61 | 0.28 | | |
| 620.0 | 6.30 | 158.36 | 618.5 | -26.3 | 15.0 | -26.4 | 0.34 | -0.27 | | |
| 715.0 | 6.61 | 159.99 | 712.9 | -36.3 | 18.7 | -36.4 | 0.38 | 0.33 | | |
| 809.0 | 7.28 | 171.07 | 806.2 | -47.3 | 21.5 | -47.4 | 1.59 | 0.71 | | |
| 905.0 | 7.17 | 172.56 | 901.4 | -59.2 | 23.2 | -59.4 | 0.23 | -0.11 | | |
| 999.0 | 7.25 | 172.52 | 994.7 | -70.9 | 24.8 | -71.1 | 0.09 | 0.09 | | |
| 1,094.0 | 6.97 | 171.72 | 1,089.0 | -82.6 | 26.4 | -82.8 | 0.31 | -0.29 | | |
| 1,189.0 | 7.19 | 174.36 | 1,183.2 | -94.2 | 27.8 | -94.4 | 0.41 | 0.23 | | |

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Whiting Petroleum Corporation | Local Co-ordinate Reference: | Well HORSETAIL #07F-0608 |
| Project: | Weld County, CO | TVD Reference: | 21' KB @ 4920.0usft |
| Site: | S7-T10N-R57W | MD Reference: | 21' KB @ 4920.0usft |
| Well: | HORSETAIL #07F-0608 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL | Database: | USA EDM 5000 Multi Users DB |

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|-----------------------|
| 1,282.0 | 7.21 | 173.94 | 1,275.5 | -105.8 | 29.0 | -106.0 | 0.06 | 0.02 | |
| 1,376.0 | 7.38 | 174.46 | 1,368.7 | -117.7 | 30.2 | -117.9 | 0.19 | 0.18 | |
| 1,470.0 | 7.94 | 176.66 | 1,461.9 | -130.1 | 31.2 | -130.4 | 0.67 | 0.60 | |
| 1,565.0 | 7.74 | 177.04 | 1,556.0 | -143.1 | 31.9 | -143.3 | 0.22 | -0.21 | |
| 1,660.0 | 8.28 | 179.52 | 1,650.1 | -156.3 | 32.3 | -156.6 | 0.67 | 0.57 | |
| 1,753.0 | 7.47 | 180.51 | 1,742.2 | -169.1 | 32.3 | -169.3 | 0.88 | -0.87 | |
| 1,794.0 | 7.26 | 181.94 | 1,782.9 | -174.3 | 32.1 | -174.6 | 0.68 | -0.51 | |
| 1,974.0 | 8.30 | 181.05 | 1,961.2 | -198.7 | 31.5 | -198.9 | 0.58 | 0.58 | |
| 2,069.0 | 10.07 | 171.32 | 2,055.0 | -213.7 | 32.6 | -214.0 | 2.47 | 1.86 | |
| 2,165.0 | 9.40 | 170.16 | 2,149.6 | -229.8 | 35.3 | -230.0 | 0.73 | -0.70 | |
| 2,259.0 | 8.86 | 169.88 | 2,242.4 | -244.4 | 37.8 | -244.7 | 0.58 | -0.57 | |
| 2,354.0 | 8.79 | 168.18 | 2,336.3 | -258.8 | 40.6 | -259.1 | 0.28 | -0.07 | |
| 2,448.0 | 8.30 | 165.28 | 2,429.3 | -272.3 | 43.8 | -272.7 | 0.69 | -0.52 | |
| 2,542.0 | 7.83 | 164.53 | 2,522.3 | -285.1 | 47.2 | -285.4 | 0.51 | -0.50 | |
| 2,629.0 | 7.35 | 162.20 | 2,608.6 | -296.1 | 50.5 | -296.5 | 0.66 | -0.55 | |
| 2,723.0 | 9.08 | 166.18 | 2,701.6 | -309.0 | 54.1 | -309.4 | 1.94 | 1.84 | |
| 2,817.0 | 8.77 | 166.83 | 2,794.5 | -323.2 | 57.5 | -323.6 | 0.35 | -0.33 | |
| 2,912.0 | 8.26 | 166.14 | 2,888.4 | -336.9 | 60.8 | -337.3 | 0.55 | -0.54 | |
| 3,007.0 | 7.73 | 166.52 | 2,982.5 | -349.7 | 63.9 | -350.2 | 0.56 | -0.56 | |
| 3,101.0 | 10.21 | 167.18 | 3,075.3 | -364.0 | 67.3 | -364.5 | 2.64 | 2.64 | |
| 3,196.0 | 9.14 | 168.29 | 3,169.0 | -379.6 | 70.7 | -380.1 | 1.14 | -1.13 | |
| 3,290.0 | 7.99 | 167.00 | 3,261.9 | -393.3 | 73.6 | -393.8 | 1.24 | -1.22 | |
| 3,383.0 | 7.10 | 166.94 | 3,354.1 | -405.2 | 76.4 | -405.7 | 0.96 | -0.96 | |
| 3,478.0 | 9.48 | 169.73 | 3,448.1 | -418.6 | 79.1 | -419.2 | 2.54 | 2.51 | |
| 3,573.0 | 9.09 | 170.48 | 3,541.9 | -433.7 | 81.8 | -434.3 | 0.43 | -0.41 | |
| 3,667.0 | 8.77 | 170.38 | 3,634.7 | -448.1 | 84.2 | -448.7 | 0.34 | -0.34 | |
| 3,763.0 | 8.65 | 172.36 | 3,729.6 | -462.4 | 86.4 | -463.1 | 0.34 | -0.12 | |
| 3,858.0 | 8.29 | 171.23 | 3,823.6 | -476.3 | 88.4 | -477.0 | 0.42 | -0.38 | |
| 3,952.0 | 6.98 | 168.29 | 3,916.8 | -488.6 | 90.6 | -489.3 | 1.45 | -1.39 | |
| 4,046.0 | 5.29 | 167.21 | 4,010.2 | -498.4 | 92.7 | -499.1 | 1.80 | -1.80 | |
| 4,140.0 | 7.21 | 164.07 | 4,103.7 | -508.3 | 95.3 | -509.0 | 2.07 | 2.04 | |
| 4,235.0 | 6.75 | 167.40 | 4,198.0 | -519.5 | 98.1 | -520.2 | 0.64 | -0.48 | |
| 4,330.0 | 8.80 | 173.85 | 4,292.1 | -532.2 | 100.1 | -532.9 | 2.34 | 2.16 | |
| 4,424.0 | 8.00 | 173.81 | 4,385.1 | -545.8 | 101.6 | -546.6 | 0.85 | -0.85 | |
| 4,518.0 | 7.19 | 174.47 | 4,478.3 | -558.2 | 102.9 | -559.0 | 0.87 | -0.86 | |
| 4,612.0 | 7.03 | 149.88 | 4,571.5 | -569.0 | 106.3 | -569.8 | 3.22 | -0.17 | |
| 4,705.0 | 5.82 | 145.56 | 4,664.0 | -577.8 | 111.8 | -578.7 | 1.40 | -1.30 | |
| 4,798.0 | 5.05 | 141.08 | 4,756.5 | -584.9 | 117.1 | -585.8 | 0.94 | -0.83 | |
| 4,893.0 | 2.65 | 139.64 | 4,851.3 | -589.8 | 121.1 | -590.7 | 2.53 | -2.53 | |
| 4,988.0 | 1.36 | 54.71 | 4,946.3 | -590.8 | 123.5 | -591.8 | 3.02 | -1.36 | |
| 5,082.0 | 2.30 | 2.38 | 5,040.2 | -588.3 | 124.4 | -589.3 | 1.94 | 1.00 | |
| 5,176.0 | 7.23 | 358.24 | 5,133.9 | -580.5 | 124.3 | -581.5 | 5.25 | 5.24 | |
| 5,271.0 | 14.34 | 358.24 | 5,227.1 | -562.7 | 123.8 | -563.7 | 7.48 | 7.48 | |
| 5,366.0 | 19.00 | 355.43 | 5,318.1 | -535.6 | 122.2 | -536.5 | 4.98 | 4.91 | |
| 5,460.0 | 23.58 | 357.73 | 5,405.7 | -501.5 | 120.2 | -502.4 | 4.95 | 4.87 | |
| 5,554.0 | 30.00 | 358.60 | 5,489.6 | -459.2 | 118.9 | -460.1 | 6.84 | 6.83 | |
| 5,648.0 | 36.63 | 1.84 | 5,568.1 | -407.6 | 119.2 | -408.5 | 7.30 | 7.05 | |
| 5,742.0 | 44.36 | 2.82 | 5,639.5 | -346.6 | 121.8 | -347.6 | 8.25 | 8.22 | |
| 5,789.0 | 48.93 | 3.14 | 5,671.8 | -312.5 | 123.5 | -313.5 | 9.74 | 9.72 | |
| 5,835.0 | 52.76 | 2.66 | 5,700.8 | -276.9 | 125.3 | -277.9 | 8.37 | 8.33 | |
| 5,882.0 | 58.03 | 1.72 | 5,727.5 | -238.3 | 126.8 | -239.3 | 11.33 | 11.21 | |
| 5,928.0 | 62.79 | 0.73 | 5,750.2 | -198.3 | 127.7 | -199.3 | 10.52 | 10.35 | |
| 5,975.0 | 66.64 | 358.82 | 5,770.3 | -155.8 | 127.5 | -156.8 | 8.98 | 8.19 | |

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Whiting Petroleum Corporation | Local Co-ordinate Reference: | Well HORSETAIL #07F-0608 |
| Project: | Weld County, CO | TVD Reference: | 21' KB @ 4920.0usft |
| Site: | S7-T10N-R57W | MD Reference: | 21' KB @ 4920.0usft |
| Well: | HORSETAIL #07F-0608 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL | Database: | USA EDM 5000 Multi Users DB |

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|-----------------------|
| 6,023.0 | 70.65 | 359.25 | 5,787.7 | -111.1 | 126.7 | -112.1 | 8.40 | 8.35 | |
| 6,070.0 | 75.33 | 359.45 | 5,801.5 | -66.2 | 126.2 | -67.2 | 9.97 | 9.96 | |
| 6,117.0 | 79.61 | 359.55 | 5,811.7 | -20.3 | 125.8 | -21.3 | 9.11 | 9.11 | |
| 6,164.0 | 82.78 | 359.37 | 5,818.9 | 26.1 | 125.4 | 25.1 | 6.76 | 6.74 | |
| 6,212.0 | 85.39 | 359.71 | 5,823.8 | 73.9 | 125.0 | 72.9 | 5.48 | 5.44 | |
| 6,306.0 | 89.00 | 358.34 | 5,828.4 | 167.7 | 123.4 | 166.7 | 4.11 | 3.84 | |
| 6,401.0 | 91.44 | 359.39 | 5,828.1 | 262.7 | 121.5 | 261.7 | 2.80 | 2.57 | |
| 6,494.0 | 92.39 | 358.93 | 5,824.9 | 355.6 | 120.2 | 354.7 | 1.13 | 1.02 | |
| 6,587.0 | 91.58 | 359.43 | 5,821.7 | 448.6 | 118.8 | 447.6 | 1.02 | -0.87 | |
| 6,681.0 | 90.94 | 0.79 | 5,819.7 | 542.5 | 119.0 | 541.6 | 1.60 | -0.68 | |
| 6,776.0 | 89.39 | 0.36 | 5,819.4 | 637.5 | 120.0 | 636.6 | 1.69 | -1.63 | |
| 6,870.0 | 90.86 | 0.27 | 5,819.2 | 731.5 | 120.5 | 730.6 | 1.57 | 1.56 | |
| 6,964.0 | 90.13 | 1.16 | 5,818.4 | 825.5 | 121.7 | 824.5 | 1.22 | -0.78 | |
| 7,057.0 | 91.44 | 1.03 | 5,817.1 | 918.5 | 123.4 | 917.5 | 1.42 | 1.41 | |
| 7,150.0 | 89.71 | 0.87 | 5,816.2 | 1,011.5 | 125.0 | 1,010.4 | 1.87 | -1.86 | |
| 7,245.0 | 90.47 | 0.93 | 5,816.0 | 1,106.5 | 126.5 | 1,105.4 | 0.80 | 0.80 | |
| 7,339.0 | 88.41 | 359.84 | 5,816.9 | 1,200.4 | 127.1 | 1,199.4 | 2.48 | -2.19 | |
| 7,431.0 | 88.80 | 359.60 | 5,819.2 | 1,292.4 | 126.6 | 1,291.4 | 0.50 | 0.42 | |
| 7,526.0 | 89.51 | 359.28 | 5,820.6 | 1,387.4 | 125.7 | 1,386.4 | 0.82 | 0.75 | |
| 7,620.0 | 90.77 | 358.77 | 5,820.3 | 1,481.4 | 124.1 | 1,480.4 | 1.45 | 1.34 | |
| 7,712.0 | 89.31 | 0.54 | 5,820.3 | 1,573.4 | 123.6 | 1,572.3 | 2.49 | -1.59 | |
| 7,803.0 | 90.29 | 2.33 | 5,820.6 | 1,664.3 | 125.8 | 1,663.3 | 2.24 | 1.08 | |
| 7,895.0 | 88.43 | 0.90 | 5,821.6 | 1,756.3 | 128.4 | 1,755.2 | 2.55 | -2.02 | |
| 7,986.0 | 89.64 | 0.88 | 5,823.2 | 1,847.3 | 129.8 | 1,846.2 | 1.33 | 1.33 | |
| 8,078.0 | 88.55 | 359.04 | 5,824.6 | 1,939.2 | 129.8 | 1,938.2 | 2.32 | -1.18 | |
| 8,170.0 | 89.45 | 359.16 | 5,826.2 | 2,031.2 | 128.3 | 2,030.1 | 0.99 | 0.98 | |
| 8,261.0 | 89.95 | 359.81 | 5,826.7 | 2,122.2 | 127.5 | 2,121.1 | 0.90 | 0.55 | |
| 8,353.0 | 88.08 | 359.25 | 5,828.3 | 2,214.2 | 126.8 | 2,213.1 | 2.12 | -2.03 | |
| 8,444.0 | 89.28 | 359.45 | 5,830.4 | 2,305.2 | 125.7 | 2,304.1 | 1.34 | 1.32 | |
| 8,536.0 | 90.89 | 359.21 | 5,830.2 | 2,397.1 | 124.7 | 2,396.1 | 1.77 | 1.75 | |
| 8,628.0 | 89.71 | 358.28 | 5,829.7 | 2,489.1 | 122.6 | 2,488.1 | 1.63 | -1.28 | |
| 8,720.0 | 90.39 | 359.10 | 5,829.7 | 2,581.1 | 120.5 | 2,580.1 | 1.16 | 0.74 | |
| 8,811.0 | 87.89 | 0.22 | 5,831.0 | 2,672.1 | 120.0 | 2,671.1 | 3.01 | -2.75 | |
| 8,903.0 | 88.01 | 0.41 | 5,834.3 | 2,764.0 | 120.5 | 2,763.0 | 0.24 | 0.13 | |
| 8,995.0 | 87.74 | 357.83 | 5,837.7 | 2,855.9 | 119.1 | 2,854.9 | 2.82 | -0.29 | |
| 9,086.0 | 89.70 | 357.51 | 5,839.8 | 2,946.8 | 115.4 | 2,945.8 | 2.18 | 2.15 | |
| 9,178.0 | 89.91 | 357.61 | 5,840.1 | 3,038.7 | 111.5 | 3,037.8 | 0.25 | 0.23 | |
| 9,270.0 | 90.65 | 356.76 | 5,839.6 | 3,130.6 | 107.0 | 3,129.7 | 1.22 | 0.80 | |
| 9,361.0 | 91.29 | 356.09 | 5,838.1 | 3,221.4 | 101.3 | 3,220.5 | 1.02 | 0.70 | |
| 9,453.0 | 90.97 | 359.25 | 5,836.3 | 3,313.3 | 97.6 | 3,312.5 | 3.45 | -0.35 | |
| 9,547.0 | 92.05 | 359.06 | 5,833.8 | 3,407.3 | 96.2 | 3,406.4 | 1.17 | 1.15 | |
| 9,641.0 | 89.57 | 359.73 | 5,832.5 | 3,501.3 | 95.2 | 3,500.4 | 2.73 | -2.64 | |
| 9,736.0 | 90.56 | 359.94 | 5,832.4 | 3,596.3 | 94.9 | 3,595.4 | 1.07 | 1.04 | |
| 9,831.0 | 89.13 | 0.51 | 5,832.6 | 3,691.3 | 95.3 | 3,690.4 | 1.62 | -1.51 | |
| 9,926.0 | 90.34 | 0.34 | 5,833.1 | 3,786.3 | 96.0 | 3,785.4 | 1.29 | 1.27 | |
| 10,021.0 | 88.55 | 359.63 | 5,834.0 | 3,881.3 | 96.0 | 3,880.4 | 2.03 | -1.88 | |
| 10,115.0 | 89.28 | 359.33 | 5,835.8 | 3,975.2 | 95.1 | 3,974.4 | 0.84 | 0.78 | |
| 10,210.0 | 90.47 | 358.04 | 5,836.0 | 4,070.2 | 92.9 | 4,069.3 | 1.85 | 1.25 | |
| 10,304.0 | 89.62 | 359.49 | 5,835.9 | 4,164.2 | 90.9 | 4,163.3 | 1.79 | -0.90 | |
| 10,399.0 | 90.96 | 359.55 | 5,835.4 | 4,259.2 | 90.1 | 4,258.3 | 1.41 | 1.41 | |
| 10,494.0 | 90.25 | 0.86 | 5,834.4 | 4,354.2 | 90.4 | 4,353.3 | 1.57 | -0.75 | |
| 10,588.0 | 91.58 | 0.97 | 5,832.9 | 4,448.1 | 91.9 | 4,447.3 | 1.42 | 1.41 | |
| 10,683.0 | 90.46 | 0.66 | 5,831.2 | 4,543.1 | 93.3 | 4,542.2 | 1.22 | -1.18 | |

Survey Report

| | | | |
|------------------|-------------------------------|-------------------------------------|-----------------------------|
| Company: | Whiting Petroleum Corporation | Local Co-ordinate Reference: | Well HORSETAIL #07F-0608 |
| Project: | Weld County, CO | TVD Reference: | 21' KB @ 4920.0usft |
| Site: | S7-T10N-R57W | MD Reference: | 21' KB @ 4920.0usft |
| Well: | HORSETAIL #07F-0608 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | FINAL | Database: | USA EDM 5000 Multi Users DB |

| Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|---------------------|---|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usf) | Build Rate (°/100u) | Formations / Comments |
| 10,779.0 | 89.27 | 358.55 | 5,831.4 | 4,639.1 | 92.6 | 4,638.2 | 2.52 | -1.24 | |
| 10,874.0 | 90.60 | 358.14 | 5,831.6 | 4,734.1 | 89.9 | 4,733.2 | 1.47 | 1.40 | |
| 10,968.0 | 89.40 | 358.95 | 5,831.6 | 4,828.0 | 87.5 | 4,827.2 | 1.54 | -1.28 | |
| 11,062.0 | 88.56 | 358.64 | 5,833.2 | 4,922.0 | 85.5 | 4,921.2 | 0.95 | -0.89 | |
| 11,156.0 | 90.06 | 358.89 | 5,834.4 | 5,016.0 | 83.5 | 5,015.1 | 1.62 | 1.60 | |
| 11,251.0 | 88.18 | 358.73 | 5,835.8 | 5,110.9 | 81.5 | 5,110.1 | 1.99 | -1.98 | |
| 11,345.0 | 89.45 | 358.94 | 5,837.8 | 5,204.9 | 79.6 | 5,204.1 | 1.37 | 1.35 | |
| 11,439.0 | 90.94 | 358.95 | 5,837.4 | 5,298.9 | 77.9 | 5,298.1 | 1.59 | 1.59 | |
| 11,533.0 | 90.23 | 358.55 | 5,836.5 | 5,392.8 | 75.8 | 5,392.1 | 0.87 | -0.76 | |
| 11,627.0 | 89.93 | 0.47 | 5,836.4 | 5,486.8 | 75.0 | 5,486.1 | 2.07 | -0.32 | |
| 11,719.0 | 91.20 | 0.15 | 5,835.4 | 5,578.8 | 75.5 | 5,578.1 | 1.42 | 1.38 | |
| 11,813.0 | 89.78 | 0.50 | 5,834.6 | 5,672.8 | 76.1 | 5,672.0 | 1.56 | -1.51 | |
| 11,906.0 | 90.77 | 0.47 | 5,834.2 | 5,765.8 | 76.8 | 5,765.0 | 1.07 | 1.06 | |
| 12,000.0 | 88.79 | 1.28 | 5,834.6 | 5,859.8 | 78.3 | 5,859.0 | 2.28 | -2.11 | |
| 12,095.0 | 90.00 | 0.79 | 5,835.6 | 5,954.8 | 80.0 | 5,954.0 | 1.37 | 1.27 | |
| 12,190.0 | 91.34 | 0.64 | 5,834.4 | 6,049.7 | 81.2 | 6,048.9 | 1.42 | 1.41 | |
| 12,284.0 | 88.61 | 0.43 | 5,834.5 | 6,143.7 | 82.1 | 6,142.9 | 2.91 | -2.90 | |
| 12,379.0 | 89.21 | 1.13 | 5,836.3 | 6,238.7 | 83.4 | 6,237.9 | 0.97 | 0.63 | |
| 12,473.0 | 90.76 | 0.53 | 5,836.3 | 6,332.7 | 84.7 | 6,331.8 | 1.77 | 1.65 | |
| 12,567.0 | 88.57 | 359.44 | 5,836.9 | 6,426.7 | 84.7 | 6,425.8 | 2.60 | -2.33 | |
| 12,652.0 | 89.49 | 358.88 | 5,838.3 | 6,511.7 | 83.4 | 6,510.8 | 1.27 | 1.08 | LAST CES SURVEY @ 12,652' MD |
| 12,702.0 | 89.49 | 358.88 | 5,838.8 | 6,561.7 | 82.5 | 6,560.8 | 0.00 | 0.00 | TD @ (2460' FWL, 1365' FNL) - PTB @ 12,702' M |

| Targets | | | | | | | | | |
|---|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| 07F-0608 PBHL | 0.00 | 0.00 | 5,828.0 | 6,592.6 | 69.1 | 1,564,939.33 | 3,471,423.20 | 40.871694 | -103.795375 |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| - actual wellpath misses target center by 35.4usft at 12702.0usft MD (5838.8 TVD, 6561.7 N, 82.5 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| Design Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 12,652.0 | 5,838.3 | 6,511.7 | 83.4 | LAST CES SURVEY @ 12,652' MD | |
| 12,702.0 | 5,838.8 | 6,561.7 | 82.5 | TD @ (2460' FWL, 1365' FNL) | |
| 12,702.0 | 5,838.8 | 6,561.7 | 82.5 | PTB @ 12,702' MD | |

Checked By: _____ Approved By: _____ Date: _____