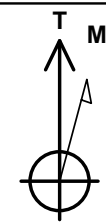


PDC Energy Inc. DJ Basin



HEN 20NA
 Hen Pad
 North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
 Ground Elevation: 4779.0
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.0 0.0 1363549.25 3258634.00 40.327630 -104.572340
 P272 - RKB 28.5' Well @ 4807.5ft (P272 - RKB 28.5')

Hen Pad
 HEN 20NA
 HEN 20NA Final Surveys
 8:45, December 01 2023



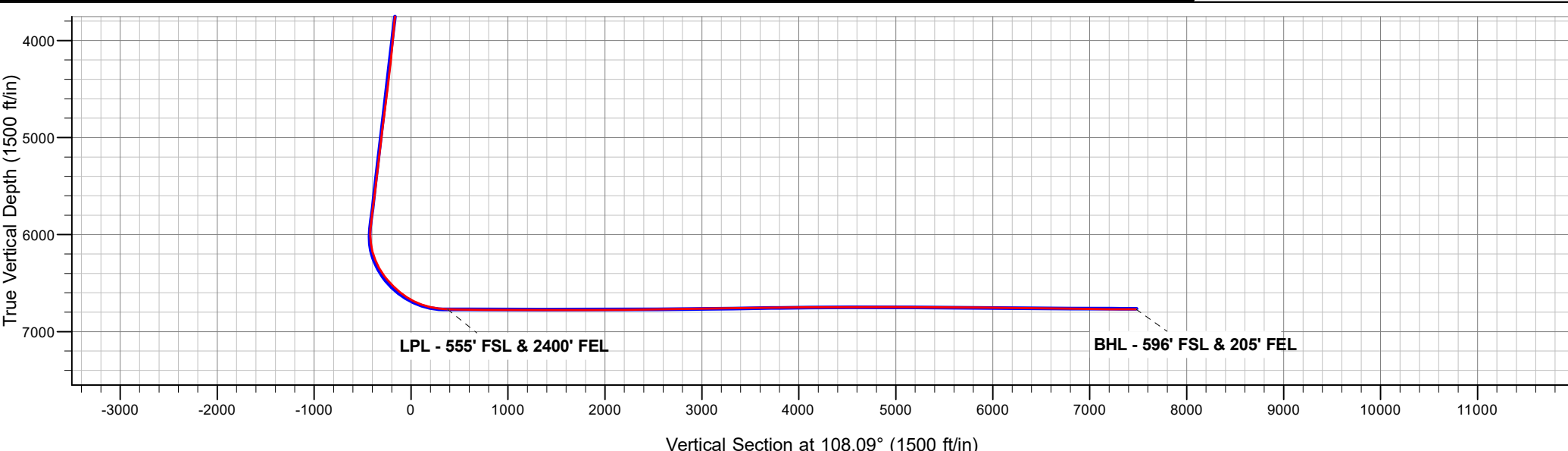
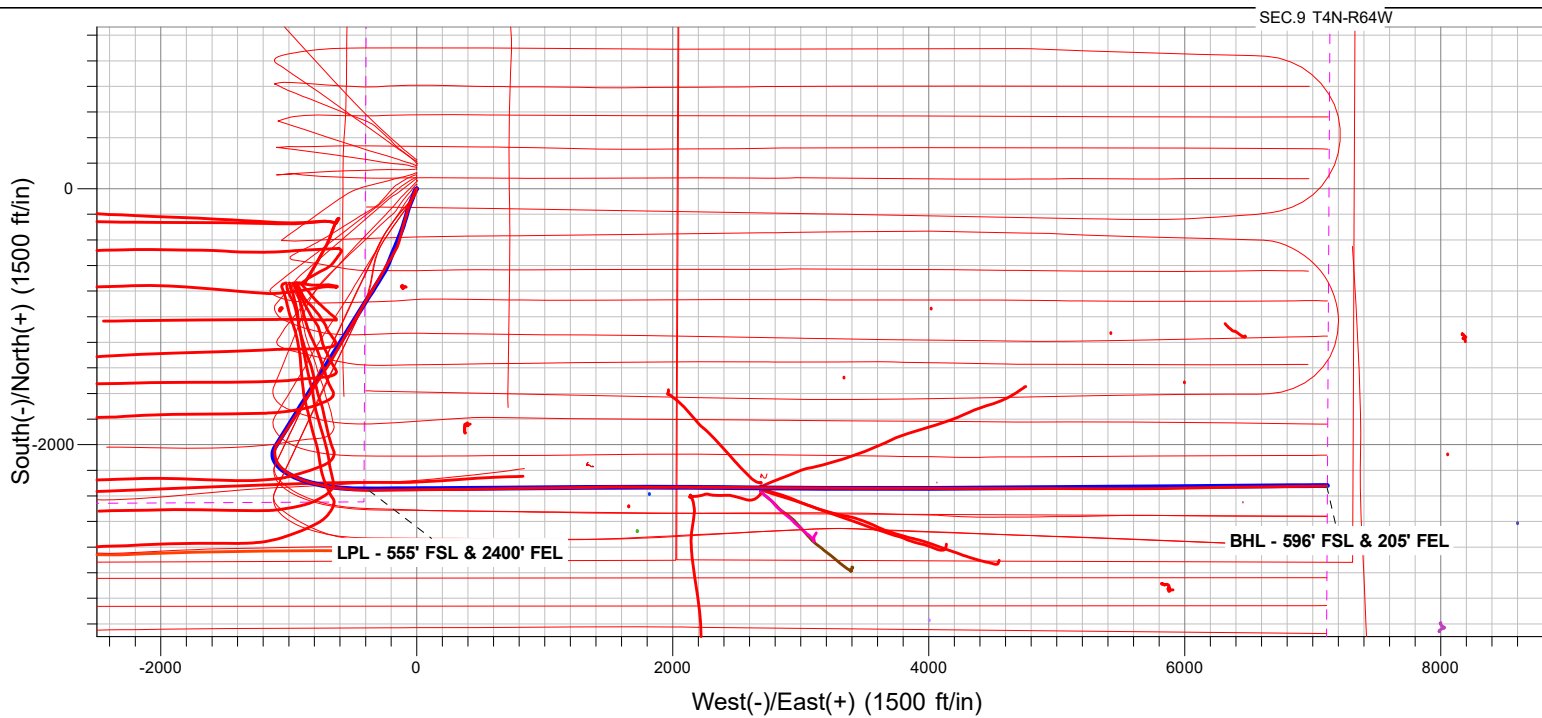
Azimuths to True North
 Magnetic North: 7.67°

Magnetic Field
 Strength: 51698.4nT
 Dip Angle: 66.58°
 Date: 09/21/2023
 Model: HRGM

ANNOTATIONS

| MD | TVD | Annotation |
|---------|--------|----------------------------|
| 7760.0 | 6769.2 | LPL - 555' FSL & 2400' FEL |
| 15244.0 | 6768.6 | BHL - 596' FSL & 205' FEL |

FINAL SURVEY
Projected Bottom Hole Location
 15244' MD / 6768.6' TVD
 90.53° INC / 89.04° AZM
 596' FSL / 205' FEL



PDC Energy Inc. DJ Basin

SEC.8-T4N-R64W

Hen Pad

HEN 20NA

HEN 20NA

Design: HEN 20NA Final Surveys

Survey Report - Geographic

01 December, 2023

Ensign

Survey Report - Geographic

| | |
|--|--|
| Company: PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: Well HEN 20NA |
| Project: SEC.8-T4N-R64W | TVD Reference: Well @ 4807.5ft (P272 - RKB 28.5') |
| Site: Hen Pad | MD Reference: Well @ 4807.5ft (P272 - RKB 28.5') |
| Well: HEN 20NA | North Reference: True |
| Wellbore: HEN 20NA | Survey Calculation Method: Minimum Curvature |
| Design: HEN 20NA Final Surveys | Database: US_EDM |

| | | | |
|--|-------------------------------------|--|--|
| Project SEC.8-T4N-R64W, Weld County, Colorado | | | |
| Map System: US State Plane 1983 | System Datum: Mean Sea Level | | |
| Geo Datum: North American Datum 1983 | | | |
| Map Zone: Colorado Northern Zone | Using geodetic scale factor | | |

| | | | |
|-------------------------------------|------------------------------------|---------------------------------|--|
| Site Hen Pad | | | |
| Site Position: | Northing: 1,363,685.50 usft | Latitude: 40.328004 | |
| From: Lat/Long | Easting: 3,258,631.47 usft | Longitude: -104.572344 | |
| Position Uncertainty: 0.0 ft | Slot Radius: 13-3/16 " | Grid Convergence: 0.60 ° | |

| | | | |
|------------------------------------|---------------------|------------------------------------|---------------------------------|
| Well HEN 20NA | | | |
| Well Position | +N/-S 0.0 ft | Northing: 1,363,549.25 usft | Latitude: 40.327630 |
| | +E/-W 0.0 ft | Easting: 3,258,634.01 usft | Longitude: -104.572340 |
| Position Uncertainty 0.0 ft | | Wellhead Elevation: ft | Ground Level: 4,779.0 ft |

| Wellbore HEN 20NA | | | | | |
|--------------------------|------------|-------------|-----------------|---------------|---------------------|
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | HRGM | 09/21/2023 | 7.67 | 66.58 | 51,698.41618977 |

| Design HEN 20NA Final Surveys | | | | | |
|--------------------------------------|-----------------------|--------------------------|------------|---------------|--|
| Audit Notes: | | | | | |
| Version: 1.0 | Phase: ACTUAL | Tie On Depth: 0.0 | | | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 108.09 | |

| Survey Program Date 12/01/2023 | | | | | |
|---------------------------------------|----------|----------------------|-----------|----------------|--|
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 159.5 | 15,244.0 | Survey #1 (HEN 20NA) | MWD | MWD - Standard | |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 1,363,549.25 | 3,258,634.01 | 40.327630 | -104.572340 |
| 159.5 | 0.62 | 226.37 | 159.5 | -0.6 | -0.6 | 1,363,548.65 | 3,258,633.39 | 40.327628 | -104.572343 |
| 249.5 | 1.23 | 233.40 | 249.5 | -1.5 | -1.8 | 1,363,547.73 | 3,258,632.27 | 40.327626 | -104.572347 |
| 340.5 | 1.76 | 244.48 | 340.5 | -2.7 | -3.8 | 1,363,546.52 | 3,258,630.24 | 40.327623 | -104.572354 |
| 456.5 | 2.64 | 210.90 | 456.4 | -5.8 | -6.8 | 1,363,543.43 | 3,258,627.29 | 40.327614 | -104.572365 |
| 545.5 | 2.81 | 208.44 | 545.3 | -9.4 | -8.9 | 1,363,539.73 | 3,258,625.24 | 40.327604 | -104.572372 |
| 629.5 | 3.25 | 208.79 | 629.2 | -13.3 | -11.0 | 1,363,535.81 | 3,258,623.15 | 40.327593 | -104.572380 |
| 715.5 | 3.69 | 209.50 | 715.0 | -17.9 | -13.5 | 1,363,531.24 | 3,258,620.66 | 40.327581 | -104.572389 |
| 801.5 | 5.28 | 201.94 | 800.7 | -24.0 | -16.4 | 1,363,525.13 | 3,258,617.88 | 40.327564 | -104.572399 |
| 888.5 | 6.95 | 200.71 | 887.2 | -32.6 | -19.7 | 1,363,516.46 | 3,258,614.62 | 40.327541 | -104.572411 |
| 977.5 | 8.79 | 199.30 | 975.4 | -44.0 | -23.9 | 1,363,504.96 | 3,258,610.59 | 40.327509 | -104.572426 |
| 1,066.5 | 11.43 | 198.77 | 1,063.0 | -58.8 | -29.0 | 1,363,490.14 | 3,258,605.65 | 40.327469 | -104.572444 |

Ensign

Survey Report - Geographic

| | | | |
|------------------|--------------------------|-------------------------------------|------------------------------------|
| Company: | PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: | Well HEN 20NA |
| Project: | SEC.8-T4N-R64W | TVD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Site: | Hen Pad | MD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Well: | HEN 20NA | North Reference: | True |
| Wellbore: | HEN 20NA | Survey Calculation Method: | Minimum Curvature |
| Design: | HEN 20NA Final Surveys | Database: | US_EDM |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude | |
| 1,151.5 | 12.75 | 200.71 | 1,146.1 | -75.6 | -35.0 | 1,363,473.33 | 3,258,599.80 | 40.327423 | -104.572466 | |
| 1,237.5 | 13.54 | 202.29 | 1,229.9 | -93.8 | -42.2 | 1,363,455.07 | 3,258,592.82 | 40.327373 | -104.572492 | |
| 1,322.5 | 15.12 | 202.29 | 1,312.2 | -113.2 | -50.2 | 1,363,435.52 | 3,258,585.04 | 40.327319 | -104.572520 | |
| 1,407.5 | 16.36 | 201.94 | 1,394.0 | -134.6 | -58.8 | 1,363,414.07 | 3,258,576.59 | 40.327261 | -104.572551 | |
| 1,495.5 | 18.11 | 197.72 | 1,478.1 | -159.1 | -67.6 | 1,363,389.45 | 3,258,568.05 | 40.327193 | -104.572583 | |
| 1,582.5 | 20.14 | 194.91 | 1,560.3 | -186.5 | -75.6 | 1,363,362.01 | 3,258,560.37 | 40.327118 | -104.572611 | |
| 1,676.5 | 20.93 | 196.31 | 1,648.3 | -218.2 | -84.5 | 1,363,330.17 | 3,258,551.82 | 40.327031 | -104.572643 | |
| 1,829.0 | 20.72 | 197.46 | 1,790.8 | -270.1 | -100.2 | 1,363,278.13 | 3,258,536.62 | 40.326889 | -104.572700 | |
| 1,928.0 | 25.62 | 194.95 | 1,881.8 | -307.5 | -111.0 | 1,363,240.62 | 3,258,526.23 | 40.326786 | -104.572738 | |
| 2,026.0 | 27.03 | 193.34 | 1,969.7 | -349.6 | -121.6 | 1,363,198.37 | 3,258,516.07 | 40.326670 | -104.572776 | |
| 2,124.0 | 26.78 | 194.96 | 2,057.1 | -392.6 | -132.4 | 1,363,155.26 | 3,258,505.68 | 40.326552 | -104.572815 | |
| 2,223.0 | 27.28 | 199.66 | 2,145.2 | -435.6 | -145.8 | 1,363,112.21 | 3,258,492.74 | 40.326434 | -104.572863 | |
| 2,319.0 | 27.06 | 208.60 | 2,230.7 | -475.5 | -163.7 | 1,363,072.12 | 3,258,475.30 | 40.326325 | -104.572927 | |
| 2,417.0 | 26.62 | 208.80 | 2,318.1 | -514.3 | -184.9 | 1,363,033.09 | 3,258,454.46 | 40.326218 | -104.573004 | |
| 2,514.0 | 26.86 | 211.75 | 2,404.8 | -552.0 | -206.9 | 1,362,995.18 | 3,258,432.85 | 40.326115 | -104.573082 | |
| 2,610.0 | 26.69 | 209.91 | 2,490.5 | -589.1 | -229.1 | 1,362,957.83 | 3,258,411.08 | 40.326013 | -104.573162 | |
| 2,707.0 | 26.29 | 210.71 | 2,577.3 | -626.4 | -250.9 | 1,362,920.25 | 3,258,389.64 | 40.325910 | -104.573240 | |
| 2,805.0 | 25.92 | 210.52 | 2,665.3 | -663.6 | -272.9 | 1,362,882.91 | 3,258,368.07 | 40.325809 | -104.573319 | |
| 2,902.0 | 25.99 | 208.25 | 2,752.5 | -700.5 | -293.7 | 1,362,845.71 | 3,258,347.63 | 40.325707 | -104.573394 | |
| 3,097.0 | 25.78 | 210.82 | 2,928.0 | -774.6 | -335.7 | 1,362,771.23 | 3,258,306.46 | 40.325504 | -104.573544 | |
| 3,194.0 | 25.88 | 211.26 | 3,015.3 | -810.8 | -357.5 | 1,362,734.79 | 3,258,285.05 | 40.325404 | -104.573622 | |
| 3,291.0 | 25.60 | 210.76 | 3,102.6 | -846.9 | -379.2 | 1,362,698.46 | 3,258,263.73 | 40.325305 | -104.573700 | |
| 3,389.0 | 25.77 | 211.15 | 3,191.0 | -883.3 | -401.0 | 1,362,661.81 | 3,258,242.26 | 40.325205 | -104.573778 | |
| 3,487.0 | 25.47 | 210.48 | 3,279.3 | -919.7 | -422.7 | 1,362,625.20 | 3,258,220.94 | 40.325105 | -104.573856 | |
| 3,585.0 | 25.58 | 211.68 | 3,367.8 | -955.9 | -444.5 | 1,362,588.81 | 3,258,199.52 | 40.325006 | -104.573935 | |
| 3,681.0 | 25.53 | 210.31 | 3,454.4 | -991.4 | -465.9 | 1,362,553.09 | 3,258,178.57 | 40.324909 | -104.574011 | |
| 3,779.0 | 25.73 | 211.21 | 3,542.7 | -1,027.8 | -487.5 | 1,362,516.44 | 3,258,157.27 | 40.324809 | -104.574089 | |
| 3,875.0 | 25.86 | 209.88 | 3,629.2 | -1,063.8 | -508.8 | 1,362,480.25 | 3,258,136.42 | 40.324710 | -104.574165 | |
| 3,971.0 | 25.90 | 210.15 | 3,715.5 | -1,100.1 | -529.7 | 1,362,443.75 | 3,258,115.84 | 40.324610 | -104.574240 | |
| 4,068.0 | 25.54 | 209.23 | 3,802.9 | -1,136.6 | -550.6 | 1,362,406.97 | 3,258,095.37 | 40.324510 | -104.574315 | |
| 4,167.0 | 25.76 | 208.86 | 3,892.2 | -1,174.1 | -571.4 | 1,362,369.29 | 3,258,074.96 | 40.324407 | -104.574389 | |
| 4,264.0 | 25.84 | 209.75 | 3,979.5 | -1,210.9 | -592.0 | 1,362,332.26 | 3,258,054.69 | 40.324306 | -104.574464 | |
| 4,361.0 | 25.47 | 209.67 | 4,066.9 | -1,247.4 | -612.9 | 1,362,295.57 | 3,258,034.26 | 40.324206 | -104.574538 | |
| 4,459.0 | 25.85 | 210.88 | 4,155.3 | -1,284.0 | -634.3 | 1,362,258.71 | 3,258,013.25 | 40.324105 | -104.574615 | |
| 4,555.0 | 25.92 | 208.99 | 4,241.6 | -1,320.4 | -655.2 | 1,362,222.18 | 3,257,992.72 | 40.324006 | -104.574690 | |
| 4,652.0 | 25.83 | 213.67 | 4,328.9 | -1,356.5 | -677.2 | 1,362,185.82 | 3,257,971.10 | 40.323907 | -104.574769 | |
| 4,749.0 | 26.22 | 212.83 | 4,416.1 | -1,392.1 | -700.5 | 1,362,149.98 | 3,257,948.15 | 40.323809 | -104.574852 | |
| 4,847.0 | 26.00 | 212.48 | 4,504.1 | -1,428.4 | -723.8 | 1,362,113.43 | 3,257,925.26 | 40.323709 | -104.574936 | |
| 4,943.0 | 25.85 | 213.55 | 4,590.4 | -1,463.6 | -746.6 | 1,362,078.00 | 3,257,902.76 | 40.323613 | -104.575018 | |
| 5,038.0 | 25.65 | 212.70 | 4,676.0 | -1,498.1 | -769.2 | 1,362,043.21 | 3,257,880.57 | 40.323518 | -104.575099 | |
| 5,135.0 | 25.63 | 212.96 | 4,763.4 | -1,533.4 | -791.9 | 1,362,007.70 | 3,257,858.18 | 40.323421 | -104.575180 | |
| 5,232.0 | 25.49 | 213.04 | 4,850.9 | -1,568.5 | -814.7 | 1,361,972.37 | 3,257,835.76 | 40.323325 | -104.575262 | |
| 5,330.0 | 25.52 | 212.08 | 4,939.4 | -1,604.1 | -837.4 | 1,361,936.57 | 3,257,813.43 | 40.323227 | -104.575344 | |
| 5,428.0 | 25.47 | 213.28 | 5,027.9 | -1,639.6 | -860.2 | 1,361,900.83 | 3,257,791.02 | 40.323129 | -104.575425 | |
| 5,525.0 | 25.71 | 212.59 | 5,115.3 | -1,674.7 | -883.0 | 1,361,865.43 | 3,257,768.62 | 40.323033 | -104.575507 | |
| 5,622.0 | 25.47 | 211.80 | 5,202.8 | -1,710.2 | -905.3 | 1,361,829.75 | 3,257,746.67 | 40.322936 | -104.575587 | |
| 5,720.0 | 25.48 | 212.90 | 5,291.3 | -1,745.8 | -927.9 | 1,361,793.91 | 3,257,724.49 | 40.322838 | -104.575668 | |
| 5,818.0 | 25.84 | 212.64 | 5,379.6 | -1,781.5 | -950.8 | 1,361,757.99 | 3,257,701.89 | 40.322740 | -104.575750 | |
| 5,917.0 | 25.74 | 212.05 | 5,468.8 | -1,817.9 | -973.9 | 1,361,721.36 | 3,257,679.23 | 40.322640 | -104.575833 | |
| 6,015.0 | 25.95 | 213.72 | 5,557.0 | -1,853.8 | -997.1 | 1,361,685.25 | 3,257,656.41 | 40.322542 | -104.575916 | |
| 6,113.0 | 25.78 | 213.22 | 5,645.2 | -1,889.4 | -1,020.7 | 1,361,649.35 | 3,257,633.21 | 40.322444 | -104.576001 | |
| 6,209.0 | 25.63 | 213.02 | 5,731.7 | -1,924.3 | -1,043.4 | 1,361,614.24 | 3,257,610.83 | 40.322348 | -104.576082 | |
| 6,305.0 | 25.47 | 211.80 | 5,818.3 | -1,959.2 | -1,065.6 | 1,361,579.06 | 3,257,589.00 | 40.322252 | -104.576162 | |
| 6,404.0 | 25.48 | 212.28 | 5,907.6 | -1,995.3 | -1,088.2 | 1,361,542.73 | 3,257,566.79 | 40.322153 | -104.576243 | |
| 6,501.0 | 23.88 | 199.96 | 5,995.8 | -2,031.5 | -1,106.1 | 1,361,506.43 | 3,257,549.31 | 40.322054 | -104.576307 | |

Ensign

Survey Report - Geographic

| | | | |
|------------------|--------------------------|-------------------------------------|------------------------------------|
| Company: | PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: | Well HEN 20NA |
| Project: | SEC.8-T4N-R64W | TVD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Site: | Hen Pad | MD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Well: | HEN 20NA | North Reference: | True |
| Wellbore: | HEN 20NA | Survey Calculation Method: | Minimum Curvature |
| Design: | HEN 20NA Final Surveys | Database: | US_EDM |

| Survey | | | | | | | | | |
|---------------------------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 6,598.0 | 20.60 | 177.94 | 6,085.8 | -2,067.0 | -1,112.2 | 1,361,470.79 | 3,257,543.59 | 40.321956 | -104.576329 |
| 6,694.0 | 23.39 | 161.81 | 6,174.8 | -2,102.1 | -1,105.6 | 1,361,435.84 | 3,257,550.51 | 40.321860 | -104.576305 |
| 6,791.0 | 28.00 | 147.80 | 6,262.3 | -2,139.7 | -1,087.4 | 1,361,398.42 | 3,257,569.08 | 40.321757 | -104.576240 |
| 6,886.0 | 32.13 | 135.62 | 6,344.6 | -2,176.6 | -1,057.8 | 1,361,361.76 | 3,257,599.05 | 40.321655 | -104.576134 |
| 6,985.0 | 38.40 | 126.12 | 6,425.4 | -2,213.7 | -1,014.5 | 1,361,325.21 | 3,257,642.76 | 40.321554 | -104.575978 |
| 7,081.0 | 43.61 | 118.11 | 6,497.9 | -2,246.9 | -961.1 | 1,361,292.55 | 3,257,696.46 | 40.321462 | -104.575787 |
| 7,178.0 | 48.22 | 110.61 | 6,565.4 | -2,275.4 | -897.7 | 1,361,264.68 | 3,257,760.20 | 40.321384 | -104.575560 |
| 7,275.0 | 54.01 | 104.90 | 6,626.3 | -2,298.3 | -825.8 | 1,361,242.59 | 3,257,832.30 | 40.321321 | -104.575302 |
| 7,371.0 | 61.97 | 101.79 | 6,677.2 | -2,316.9 | -746.7 | 1,361,224.74 | 3,257,911.64 | 40.321270 | -104.575018 |
| 7,468.0 | 69.69 | 98.27 | 6,716.9 | -2,332.2 | -659.6 | 1,361,210.33 | 3,257,998.86 | 40.321228 | -104.574706 |
| 7,566.0 | 77.01 | 95.77 | 6,744.9 | -2,343.7 | -566.5 | 1,361,199.88 | 3,258,092.09 | 40.321197 | -104.574372 |
| 7,664.0 | 83.75 | 94.55 | 6,761.3 | -2,352.4 | -470.3 | 1,361,192.22 | 3,258,188.35 | 40.321173 | -104.574027 |
| 7,760.0 | 86.89 | 89.71 | 6,769.2 | -2,355.9 | -374.7 | 1,361,189.67 | 3,258,283.95 | 40.321163 | -104.573684 |
| LPL - 555' FSL & 2400' FEL | | | | | | | | | |
| 7,857.0 | 88.82 | 89.22 | 6,772.8 | -2,355.0 | -277.8 | 1,361,191.59 | 3,258,380.85 | 40.321166 | -104.573337 |
| 7,955.0 | 89.86 | 89.17 | 6,773.9 | -2,353.6 | -179.8 | 1,361,193.99 | 3,258,478.81 | 40.321170 | -104.572985 |
| 8,151.0 | 89.27 | 89.81 | 6,775.4 | -2,351.9 | 16.2 | 1,361,197.79 | 3,258,674.76 | 40.321174 | -104.572282 |
| 8,249.0 | 90.15 | 89.73 | 6,775.9 | -2,351.5 | 114.1 | 1,361,199.20 | 3,258,772.74 | 40.321175 | -104.571931 |
| 8,347.0 | 90.58 | 89.21 | 6,775.3 | -2,350.6 | 212.1 | 1,361,201.14 | 3,258,870.71 | 40.321178 | -104.571579 |
| 8,441.0 | 89.96 | 88.81 | 6,774.8 | -2,348.9 | 306.1 | 1,361,203.74 | 3,258,964.67 | 40.321182 | -104.571242 |
| 8,538.0 | 89.22 | 89.34 | 6,775.5 | -2,347.4 | 403.1 | 1,361,206.32 | 3,259,061.63 | 40.321187 | -104.570895 |
| 8,634.0 | 90.06 | 88.53 | 6,776.1 | -2,345.6 | 499.1 | 1,361,209.11 | 3,259,157.58 | 40.321192 | -104.570550 |
| 8,732.0 | 89.82 | 89.30 | 6,776.2 | -2,343.7 | 597.1 | 1,361,211.99 | 3,259,255.54 | 40.321197 | -104.570199 |
| 8,830.0 | 89.92 | 89.85 | 6,776.4 | -2,343.0 | 695.1 | 1,361,213.74 | 3,259,353.51 | 40.321199 | -104.569848 |
| 8,927.0 | 90.32 | 88.86 | 6,776.2 | -2,341.9 | 792.1 | 1,361,215.85 | 3,259,450.49 | 40.321202 | -104.569500 |
| 9,025.0 | 89.73 | 88.36 | 6,776.2 | -2,339.5 | 890.0 | 1,361,219.25 | 3,259,548.42 | 40.321208 | -104.569148 |
| 9,124.0 | 89.98 | 89.41 | 6,776.5 | -2,337.6 | 989.0 | 1,361,222.21 | 3,259,647.37 | 40.321213 | -104.568793 |
| 9,220.0 | 89.95 | 89.87 | 6,776.5 | -2,337.0 | 1,085.0 | 1,361,223.82 | 3,259,743.35 | 40.321215 | -104.568449 |
| 9,318.0 | 90.26 | 88.58 | 6,776.3 | -2,335.7 | 1,183.0 | 1,361,226.17 | 3,259,841.32 | 40.321219 | -104.568098 |
| 9,414.0 | 89.76 | 89.57 | 6,776.3 | -2,334.1 | 1,279.0 | 1,361,228.72 | 3,259,937.28 | 40.321223 | -104.567754 |
| 9,512.0 | 89.93 | 89.18 | 6,776.6 | -2,333.1 | 1,377.0 | 1,361,230.82 | 3,260,035.25 | 40.321226 | -104.567402 |
| 9,609.0 | 90.39 | 88.70 | 6,776.3 | -2,331.3 | 1,474.0 | 1,361,233.63 | 3,260,132.21 | 40.321231 | -104.567054 |
| 9,800.0 | 90.95 | 90.35 | 6,774.1 | -2,329.7 | 1,664.9 | 1,361,237.21 | 3,260,233.14 | 40.321235 | -104.566369 |
| 9,897.0 | 90.77 | 90.81 | 6,772.6 | -2,330.7 | 1,761.9 | 1,361,237.24 | 3,260,420.13 | 40.321232 | -104.566022 |
| 10,092.0 | 91.04 | 89.75 | 6,769.5 | -2,331.6 | 1,956.9 | 1,361,238.33 | 3,260,615.09 | 40.321230 | -104.565322 |
| 10,189.0 | 90.49 | 90.09 | 6,768.2 | -2,331.5 | 2,053.9 | 1,361,239.48 | 3,260,712.07 | 40.321230 | -104.564975 |
| 10,285.0 | 90.81 | 90.52 | 6,767.2 | -2,332.0 | 2,149.9 | 1,361,239.97 | 3,260,808.06 | 40.321229 | -104.564630 |
| 10,383.0 | 91.17 | 89.94 | 6,765.5 | -2,332.4 | 2,247.9 | 1,361,240.60 | 3,260,906.03 | 40.321227 | -104.564279 |
| 10,480.0 | 90.69 | 90.54 | 6,763.9 | -2,332.8 | 2,344.8 | 1,361,241.21 | 3,261,003.01 | 40.321226 | -104.563931 |
| 10,578.0 | 90.66 | 90.50 | 6,762.7 | -2,333.7 | 2,442.8 | 1,361,241.35 | 3,261,101.00 | 40.321224 | -104.563580 |
| 10,674.0 | 90.92 | 90.35 | 6,761.4 | -2,334.4 | 2,538.8 | 1,361,241.64 | 3,261,196.99 | 40.321222 | -104.563236 |
| 10,772.0 | 90.86 | 90.02 | 6,759.9 | -2,334.7 | 2,636.8 | 1,361,242.35 | 3,261,294.97 | 40.321221 | -104.562884 |
| 10,870.0 | 90.29 | 91.26 | 6,758.9 | -2,335.8 | 2,734.8 | 1,361,242.28 | 3,261,392.96 | 40.321218 | -104.562533 |
| 10,966.0 | 90.85 | 90.17 | 6,757.9 | -2,337.0 | 2,830.8 | 1,361,242.08 | 3,261,488.95 | 40.321215 | -104.562189 |
| 11,063.0 | 90.94 | 89.88 | 6,756.4 | -2,337.1 | 2,927.8 | 1,361,243.06 | 3,261,585.93 | 40.321214 | -104.561841 |
| 11,160.0 | 90.84 | 90.66 | 6,754.9 | -2,337.5 | 3,024.7 | 1,361,243.61 | 3,261,682.91 | 40.321213 | -104.561493 |
| 11,256.0 | 90.66 | 90.46 | 6,753.7 | -2,338.4 | 3,120.7 | 1,361,243.68 | 3,261,778.90 | 40.321211 | -104.561149 |
| 11,353.0 | 90.76 | 90.13 | 6,752.5 | -2,338.9 | 3,217.7 | 1,361,244.20 | 3,261,875.88 | 40.321209 | -104.560801 |
| 11,450.0 | 90.80 | 90.00 | 6,751.1 | -2,339.1 | 3,314.7 | 1,361,245.10 | 3,261,972.87 | 40.321209 | -104.560453 |
| 11,547.0 | 90.90 | 90.00 | 6,749.7 | -2,339.1 | 3,411.7 | 1,361,246.11 | 3,262,069.84 | 40.321209 | -104.560105 |
| 11,644.0 | 90.97 | 90.09 | 6,748.1 | -2,339.1 | 3,508.7 | 1,361,247.05 | 3,262,166.82 | 40.321209 | -104.559757 |
| 11,742.0 | 90.79 | 90.13 | 6,746.6 | -2,339.3 | 3,606.7 | 1,361,247.89 | 3,262,264.80 | 40.321208 | -104.559406 |
| 11,840.0 | 89.59 | 90.36 | 6,746.3 | -2,339.7 | 3,704.7 | 1,361,248.50 | 3,262,362.80 | 40.321207 | -104.559055 |
| 11,937.0 | 89.82 | 90.17 | 6,746.8 | -2,340.2 | 3,801.7 | 1,361,249.06 | 3,262,459.79 | 40.321206 | -104.558707 |
| 12,035.0 | 90.04 | 89.92 | 6,746.9 | -2,340.3 | 3,899.7 | 1,361,250.01 | 3,262,557.78 | 40.321205 | -104.558355 |

Ensign

Survey Report - Geographic

| | | | |
|------------------|--------------------------|-------------------------------------|------------------------------------|
| Company: | PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: | Well HEN 20NA |
| Project: | SEC.8-T4N-R64W | TVD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Site: | Hen Pad | MD Reference: | Well @ 4807.5ft (P272 - RKB 28.5') |
| Well: | HEN 20NA | North Reference: | True |
| Wellbore: | HEN 20NA | Survey Calculation Method: | Minimum Curvature |
| Design: | HEN 20NA Final Surveys | Database: | US_EDM |

| Survey | | | | | | | | | |
|--------------------------------------|-----------------|-------------|---------------------|------------|------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 12,133.0 | 89.96 | 90.11 | 6,746.9 | -2,340.3 | 3,997.7 | 1,361,251.01 | 3,262,655.77 | 40.321205 | -104.558004 |
| 12,231.0 | 89.60 | 90.37 | 6,747.3 | -2,340.7 | 4,095.7 | 1,361,251.62 | 3,262,753.76 | 40.321204 | -104.557652 |
| 12,328.0 | 90.09 | 89.88 | 6,747.6 | -2,340.9 | 4,192.7 | 1,361,252.43 | 3,262,850.75 | 40.321203 | -104.557304 |
| 12,425.0 | 89.70 | 90.37 | 6,747.7 | -2,341.1 | 4,289.7 | 1,361,253.23 | 3,262,947.75 | 40.321203 | -104.556957 |
| 12,524.0 | 89.87 | 90.13 | 6,748.1 | -2,341.6 | 4,388.7 | 1,361,253.83 | 3,263,046.74 | 40.321202 | -104.556602 |
| 12,622.0 | 90.15 | 89.81 | 6,748.1 | -2,341.5 | 4,486.7 | 1,361,254.91 | 3,263,144.73 | 40.321202 | -104.556250 |
| 12,817.0 | 89.47 | 90.32 | 6,748.7 | -2,341.7 | 4,681.7 | 1,361,256.73 | 3,263,339.71 | 40.321201 | -104.555551 |
| 13,011.0 | 89.42 | 90.35 | 6,750.6 | -2,342.9 | 4,875.7 | 1,361,257.62 | 3,263,533.69 | 40.321198 | -104.554855 |
| 13,108.0 | 90.03 | 90.01 | 6,751.1 | -2,343.2 | 4,972.7 | 1,361,258.33 | 3,263,630.68 | 40.321197 | -104.554507 |
| 13,303.0 | 89.87 | 89.83 | 6,751.2 | -2,342.9 | 5,167.7 | 1,361,260.65 | 3,263,825.66 | 40.321197 | -104.553808 |
| 13,496.0 | 89.42 | 90.60 | 6,752.4 | -2,343.6 | 5,360.6 | 1,361,261.94 | 3,264,018.64 | 40.321195 | -104.553116 |
| 13,593.0 | 89.50 | 90.52 | 6,753.4 | -2,344.6 | 5,457.6 | 1,361,262.01 | 3,264,115.63 | 40.321193 | -104.552768 |
| 13,690.0 | 90.22 | 89.90 | 6,753.6 | -2,344.9 | 5,554.6 | 1,361,262.67 | 3,264,212.62 | 40.321192 | -104.552420 |
| 13,887.0 | 89.36 | 89.11 | 6,754.3 | -2,343.2 | 5,751.6 | 1,361,266.43 | 3,264,409.57 | 40.321196 | -104.551714 |
| 13,984.0 | 89.81 | 88.89 | 6,755.0 | -2,341.5 | 5,848.6 | 1,361,269.14 | 3,264,506.53 | 40.321201 | -104.551366 |
| 14,082.0 | 89.46 | 88.83 | 6,755.6 | -2,339.6 | 5,946.6 | 1,361,272.11 | 3,264,604.48 | 40.321206 | -104.551015 |
| 14,178.0 | 89.13 | 89.04 | 6,756.8 | -2,337.8 | 6,042.6 | 1,361,274.90 | 3,264,700.42 | 40.321211 | -104.550670 |
| 14,373.0 | 89.03 | 88.95 | 6,760.0 | -2,334.4 | 6,237.5 | 1,361,280.36 | 3,264,895.31 | 40.321220 | -104.549971 |
| 14,567.0 | 89.13 | 89.07 | 6,763.1 | -2,331.0 | 6,431.5 | 1,361,285.74 | 3,265,089.20 | 40.321229 | -104.549276 |
| 14,665.0 | 88.75 | 89.56 | 6,764.9 | -2,329.9 | 6,529.4 | 1,361,287.93 | 3,265,187.16 | 40.321232 | -104.548924 |
| 14,763.0 | 89.44 | 88.88 | 6,766.4 | -2,328.5 | 6,627.4 | 1,361,290.29 | 3,265,285.11 | 40.321236 | -104.548573 |
| 14,860.0 | 88.79 | 89.82 | 6,767.9 | -2,327.4 | 6,724.4 | 1,361,292.41 | 3,265,382.07 | 40.321239 | -104.548225 |
| 14,957.0 | 89.66 | 89.09 | 6,769.2 | -2,326.5 | 6,821.4 | 1,361,294.34 | 3,265,479.04 | 40.321241 | -104.547877 |
| 15,054.0 | 89.96 | 89.27 | 6,769.6 | -2,325.1 | 6,918.4 | 1,361,296.75 | 3,265,576.00 | 40.321245 | -104.547530 |
| 15,209.0 | 90.53 | 89.04 | 6,768.9 | -2,322.8 | 7,073.3 | 1,361,300.65 | 3,265,730.94 | 40.321251 | -104.546974 |
| 15,244.0 | 90.53 | 89.04 | 6,768.6 | -2,322.2 | 7,108.3 | 1,361,301.61 | 3,265,765.93 | 40.321253 | -104.546848 |
| BHL - 596' FSL & 205' FEL | | | | | | | | | |

| Design Annotations | | | | |
|---------------------|---------------------|-------------------|------------|----------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 7,760.0 | 6,769.2 | -2,355.9 | -374.7 | LPL - 555' FSL & 2400' FEL |
| 15,244.0 | 6,768.6 | -2,322.2 | 7,108.3 | BHL - 596' FSL & 205' FEL |

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