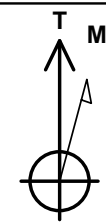


# PDC Energy Inc. DJ Basin



HEN 18N  
 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 1363582.04 3258633.66 40.327720 -104.572340  
 P272 - RKB 28.5' Well @ 4807.5ft (P272 - RKB 28.5')

Hen Pad  
 HEN 18N  
 HEN 18N Final Surveys  
 13:17, November 29 2023



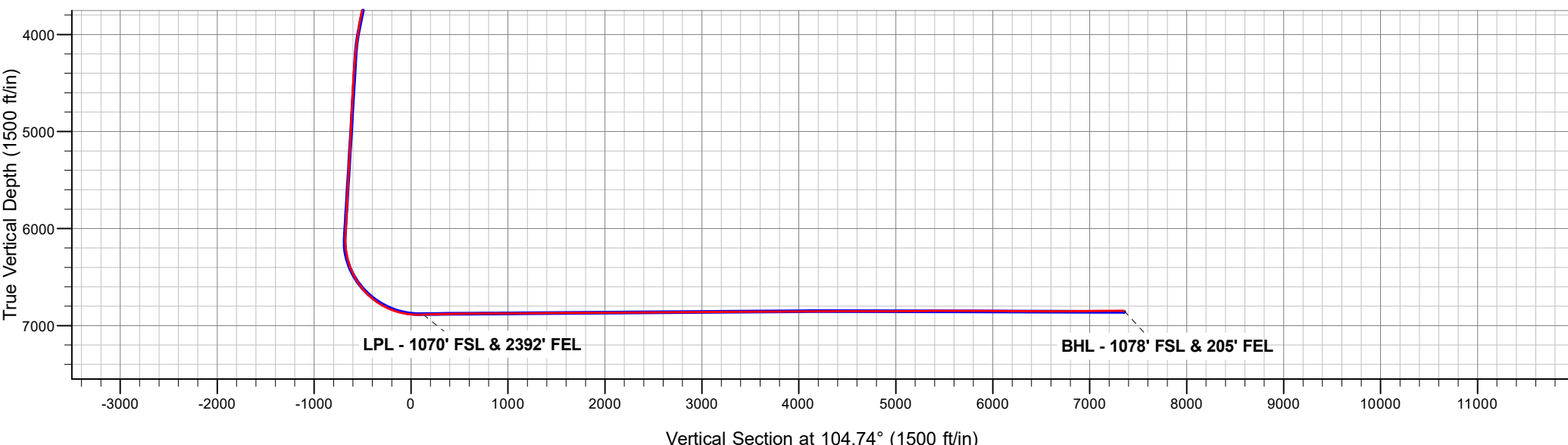
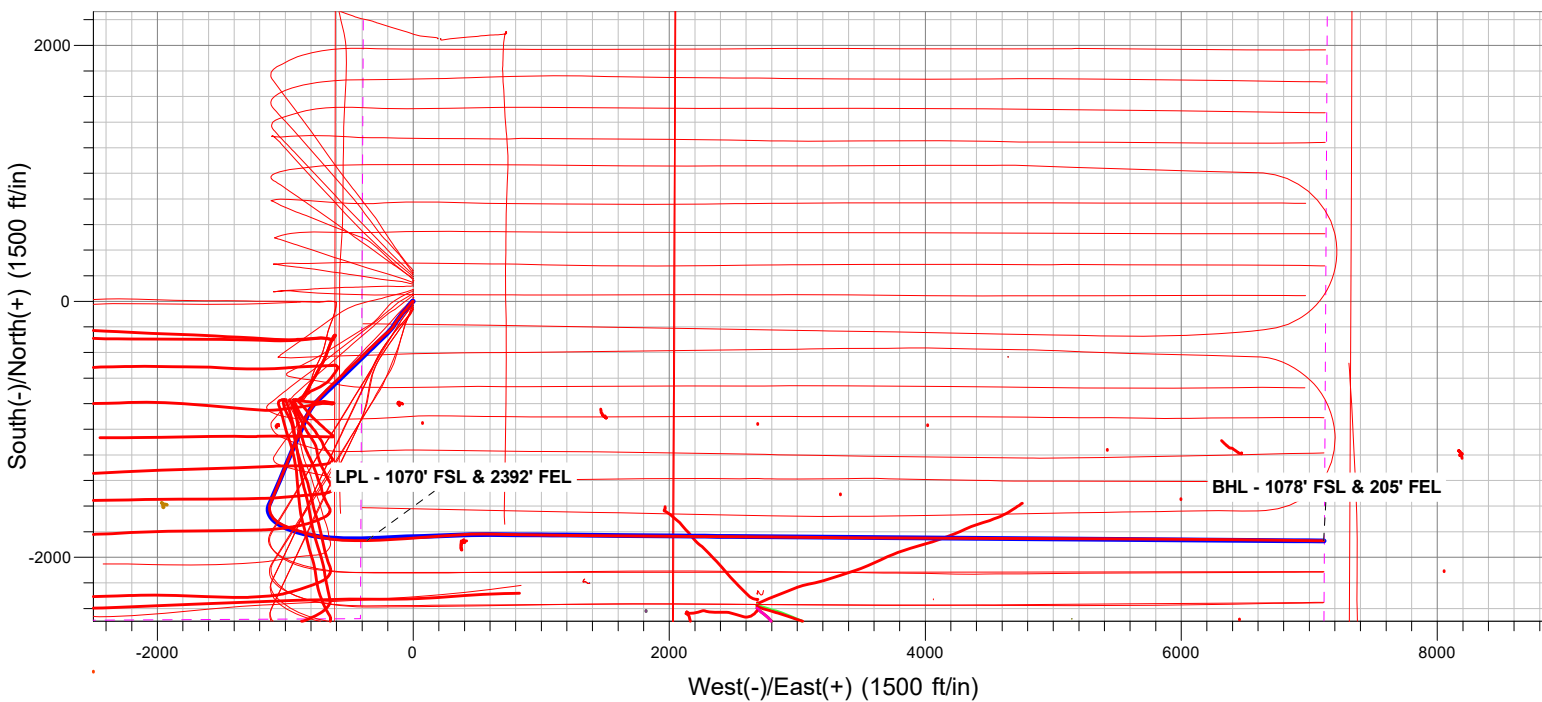
Azimuths to True North  
 Magnetic North: 7.67°

Magnetic Field  
 Strength: 51699.4nT  
 Dip Angle: 66.58°  
 Date: 09/18/2023  
 Model: HRGM

ANNOTATIONS

MD	TVD	Annotation
7761.0	6885.5	LPL - 1070' FSL & 2392' FEL
15237.0	6846.7	BHL - 1078' FSL & 205' FEL

**FINAL SURVEY**  
**Projected Bottom Hole Location**  
 15237' MD / 6846.7' TVD  
 90.56° INC / 90.52° AZM  
 1078' FSL / 205' FEL



# **PDC Energy Inc. DJ Basin**

**SEC.8-T4N-R64W**

**Hen Pad**

**HEN 18N**

**HEN 18N**

**Design: HEN 18N Final Surveys**

## **Survey Report - Geographic**

**29 November, 2023**

# Ensign

## Survey Report - Geographic

<b>Company:</b> PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b> Well HEN 18N
<b>Project:</b> SEC.8-T4N-R64W	<b>TVD Reference:</b> Well @ 4807.5ft (P272 - RKB 28.5')
<b>Site:</b> Hen Pad	<b>MD Reference:</b> Well @ 4807.5ft (P272 - RKB 28.5')
<b>Well:</b> HEN 18N	<b>North Reference:</b> True
<b>Wellbore:</b> HEN 18N	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> HEN 18N Final Surveys	<b>Database:</b> US_EDM

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

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

<b>Well</b> HEN 18N	
<b>Well Position</b> +N/-S 0.0 ft	<b>Northing:</b> 1,363,582.04 usft
+E/-W 0.0 ft	<b>Easting:</b> 3,258,633.66 usft
<b>Position Uncertainty</b> 0.0 ft	<b>Wellhead Elevation:</b> ft
	<b>Latitude:</b> 40.327720
	<b>Longitude:</b> -104.572340
	<b>Ground Level:</b> 4,779.0 ft

<b>Wellbore</b> HEN 18N					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HRGM	09/18/2023	7.67	66.58	51,699.43312150

<b>Design</b> HEN 18N Final Surveys				
<b>Audit Notes:</b>				
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL			
	<b>Tie On Depth:</b> 0.0			
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	104.74

<b>Survey Program</b>		<b>Date</b> 11/29/2023
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>
159.5	15,237.0	Survey #1 (HEN 18N)
		<b>Tool Name</b> MWD
		<b>Description</b> MWD - Standard

<b>Survey</b>									
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	1,363,582.04	3,258,633.66	40.327720	-104.572340
159.5	0.62	325.34	159.5	0.7	-0.5	1,363,582.75	3,258,633.16	40.327722	-104.572342
250.5	0.79	300.20	250.5	1.4	-1.3	1,363,583.46	3,258,632.34	40.327724	-104.572345
456.5	0.88	236.22	456.5	1.3	-3.9	1,363,583.27	3,258,629.79	40.327724	-104.572354
545.5	1.14	244.30	545.5	0.5	-5.2	1,363,582.49	3,258,628.44	40.327721	-104.572359
629.5	2.11	220.14	629.4	-1.0	-7.0	1,363,580.92	3,258,626.70	40.327717	-104.572365
715.5	3.17	226.20	715.3	-3.9	-9.7	1,363,578.04	3,258,624.00	40.327709	-104.572375
801.5	4.13	225.84	801.2	-7.7	-13.6	1,363,574.20	3,258,620.10	40.327699	-104.572389
888.5	5.54	219.16	887.8	-13.1	-18.5	1,363,568.71	3,258,615.26	40.327684	-104.572407
977.5	6.16	218.64	976.4	-20.2	-24.2	1,363,561.59	3,258,609.64	40.327665	-104.572427
1,066.5	7.65	216.53	1,064.7	-28.7	-30.7	1,363,553.03	3,258,603.22	40.327641	-104.572451
1,151.5	9.67	216.53	1,148.8	-39.0	-38.4	1,363,542.67	3,258,595.71	40.327613	-104.572478

# Ensign

## Survey Report - Geographic

<b>Company:</b>	PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b>	Well HEN 18N
<b>Project:</b>	SEC.8-T4N-R64W	<b>TVD Reference:</b>	Well @ 4807.5ft (P272 - RKB 28.5')
<b>Site:</b>	Hen Pad	<b>MD Reference:</b>	Well @ 4807.5ft (P272 - RKB 28.5')
<b>Well:</b>	HEN 18N	<b>North Reference:</b>	True
<b>Wellbore:</b>	HEN 18N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	HEN 18N Final Surveys	<b>Database:</b>	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
1,237.5	11.70	217.93	1,233.3	-51.7	-48.0	1,363,529.88	3,258,586.18	40.327578	-104.572513
1,322.5	14.25	221.80	1,316.1	-66.3	-60.3	1,363,515.16	3,258,574.06	40.327538	-104.572557
1,407.5	15.92	220.37	1,398.2	-82.9	-74.8	1,363,498.33	3,258,559.71	40.327492	-104.572609
1,495.5	17.76	220.40	1,482.4	-102.4	-91.3	1,363,478.74	3,258,543.40	40.327439	-104.572668
1,582.5	17.59	217.41	1,565.3	-122.9	-107.9	1,363,458.02	3,258,527.03	40.327383	-104.572727
1,659.5	17.67	213.54	1,638.7	-141.9	-121.5	1,363,438.90	3,258,513.71	40.327331	-104.572776
1,764.0	17.83	213.31	1,738.2	-168.5	-139.0	1,363,412.13	3,258,496.44	40.327258	-104.572839
1,830.0	17.51	211.54	1,801.1	-185.4	-149.7	1,363,395.11	3,258,485.87	40.327211	-104.572877
1,928.0	18.51	217.86	1,894.3	-210.2	-167.0	1,363,370.08	3,258,468.87	40.327143	-104.572939
2,027.0	20.24	230.35	1,987.7	-233.6	-189.8	1,363,346.50	3,258,446.28	40.327079	-104.573021
2,125.0	22.16	231.50	2,079.1	-255.9	-217.4	1,363,323.89	3,258,418.99	40.327018	-104.573120
2,223.0	22.64	226.15	2,169.7	-280.5	-245.4	1,363,299.02	3,258,391.18	40.326950	-104.573221
2,319.0	22.42	226.69	2,258.4	-305.8	-272.1	1,363,273.39	3,258,364.81	40.326881	-104.573316
2,418.0	22.50	226.23	2,349.9	-331.9	-299.5	1,363,247.05	3,258,337.66	40.326809	-104.573414
2,514.0	22.56	225.17	2,438.5	-357.6	-325.8	1,363,221.09	3,258,311.61	40.326739	-104.573509
2,611.0	22.89	225.72	2,528.0	-383.9	-352.5	1,363,194.52	3,258,285.19	40.326666	-104.573605
2,708.0	22.51	226.01	2,617.5	-409.9	-379.4	1,363,168.18	3,258,258.60	40.326595	-104.573701
2,806.0	22.58	226.16	2,708.0	-436.0	-406.5	1,363,141.83	3,258,231.80	40.326523	-104.573798
2,903.0	22.60	226.27	2,797.6	-461.8	-433.4	1,363,115.77	3,258,205.18	40.326452	-104.573895
3,000.0	22.89	227.26	2,887.0	-487.5	-460.7	1,363,089.80	3,258,178.12	40.326382	-104.573992
3,098.0	22.57	227.80	2,977.4	-513.0	-488.6	1,363,063.94	3,258,150.46	40.326312	-104.574093
3,194.0	22.51	227.89	3,066.1	-537.7	-515.9	1,363,038.96	3,258,123.45	40.326244	-104.574191
3,292.0	22.49	224.75	3,156.6	-563.6	-543.0	1,363,012.79	3,258,096.61	40.326173	-104.574288
3,390.0	22.38	225.71	3,247.2	-590.0	-569.6	1,362,986.18	3,258,070.33	40.326101	-104.574383
3,487.0	22.58	225.28	3,336.8	-616.0	-596.0	1,362,959.90	3,258,044.16	40.326029	-104.574478
3,586.0	22.46	226.49	3,428.3	-642.4	-623.2	1,362,933.23	3,258,017.21	40.325957	-104.574575
3,682.0	22.65	225.48	3,516.9	-667.9	-649.7	1,362,907.37	3,257,991.01	40.325887	-104.574670
3,780.0	21.70	225.97	3,607.7	-693.8	-676.2	1,362,881.27	3,257,964.80	40.325816	-104.574765
3,876.0	22.67	226.62	3,696.6	-718.8	-702.4	1,362,855.95	3,257,938.85	40.325747	-104.574859
3,972.0	22.84	222.12	3,785.1	-745.3	-728.3	1,362,829.16	3,257,913.19	40.325674	-104.574952
4,069.0	22.46	217.33	3,874.6	-774.0	-752.2	1,362,800.21	3,257,889.63	40.325595	-104.575038
4,167.0	22.20	213.93	3,965.3	-804.3	-773.9	1,362,769.74	3,257,868.26	40.325512	-104.575116
4,264.0	22.31	214.67	4,055.1	-834.6	-794.6	1,362,739.18	3,257,847.88	40.325429	-104.575190
4,361.0	22.13	211.13	4,144.9	-865.4	-814.5	1,362,708.19	3,257,828.28	40.325344	-104.575261
4,460.0	22.00	210.63	4,236.6	-897.3	-833.6	1,362,676.08	3,257,809.53	40.325257	-104.575330
4,556.0	21.92	205.16	4,325.7	-929.0	-850.4	1,362,644.21	3,257,793.08	40.325170	-104.575390
4,652.0	21.95	203.59	4,414.7	-961.7	-865.2	1,362,611.39	3,257,778.63	40.325080	-104.575443
4,749.0	22.03	203.37	4,504.6	-995.0	-879.7	1,362,577.93	3,257,764.50	40.324989	-104.575495
4,848.0	22.06	203.19	4,596.4	-1,029.1	-894.3	1,362,543.65	3,257,750.18	40.324895	-104.575548
4,944.0	21.86	201.40	4,685.4	-1,062.3	-908.0	1,362,510.30	3,257,736.91	40.324804	-104.575597
5,039.0	21.55	201.79	4,773.7	-1,095.0	-920.9	1,362,477.50	3,257,724.32	40.324714	-104.575643
5,136.0	21.97	200.50	4,863.8	-1,128.6	-933.9	1,362,443.83	3,257,711.70	40.324622	-104.575689
5,232.0	22.24	200.81	4,952.7	-1,162.4	-946.6	1,362,409.90	3,257,699.32	40.324529	-104.575735
5,331.0	22.13	201.96	5,044.4	-1,197.2	-960.2	1,362,374.95	3,257,686.05	40.324434	-104.575784
5,429.0	21.56	202.42	5,135.4	-1,230.9	-974.0	1,362,341.04	3,257,672.64	40.324341	-104.575833
5,526.0	21.86	202.45	5,225.5	-1,264.1	-987.7	1,362,307.74	3,257,659.29	40.324250	-104.575882
5,623.0	21.45	201.71	5,315.7	-1,297.3	-1,001.2	1,362,274.43	3,257,646.18	40.324159	-104.575931
5,721.0	22.06	202.41	5,406.7	-1,330.9	-1,014.8	1,362,240.63	3,257,632.89	40.324067	-104.575980
5,819.0	22.08	204.26	5,497.5	-1,364.7	-1,029.4	1,362,206.68	3,257,618.66	40.323974	-104.576032
5,917.0	21.43	202.32	5,588.5	-1,398.1	-1,043.7	1,362,173.17	3,257,604.64	40.323882	-104.576083
6,016.0	21.53	199.96	5,680.6	-1,431.9	-1,056.8	1,362,139.24	3,257,591.93	40.323790	-104.576130
6,114.0	22.15	201.51	5,771.6	-1,466.0	-1,069.7	1,362,105.01	3,257,579.37	40.323696	-104.576177
6,209.0	21.53	201.55	5,859.8	-1,498.9	-1,082.7	1,362,072.00	3,257,566.75	40.323606	-104.576223
6,306.0	22.05	204.21	5,949.9	-1,532.0	-1,096.7	1,362,038.70	3,257,553.09	40.323515	-104.576273
6,404.0	21.52	203.43	6,040.9	-1,565.3	-1,111.4	1,362,005.28	3,257,538.75	40.323423	-104.576326

# Ensign

## Survey Report - Geographic

<b>Company:</b>	PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b>	Well HEN 18N
<b>Project:</b>	SEC.8-T4N-R64W	<b>TVD Reference:</b>	Well @ 4807.5ft (P272 - RKB 28.5')
<b>Site:</b>	Hen Pad	<b>MD Reference:</b>	Well @ 4807.5ft (P272 - RKB 28.5')
<b>Well:</b>	HEN 18N	<b>North Reference:</b>	True
<b>Wellbore:</b>	HEN 18N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	HEN 18N Final Surveys	<b>Database:</b>	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
6,501.0	20.09	193.97	6,131.6	-1,597.8	-1,122.5	1,361,972.66	3,257,527.99	40.323334	-104.576366
6,598.0	19.33	169.83	6,223.0	-1,629.8	-1,123.7	1,361,940.63	3,257,527.14	40.323246	-104.576370
6,694.0	22.28	157.91	6,312.8	-1,662.3	-1,114.0	1,361,908.21	3,257,537.13	40.323157	-104.576336
6,791.0	24.95	139.68	6,401.8	-1,695.0	-1,093.8	1,361,875.74	3,257,557.66	40.323067	-104.576263
6,887.0	28.38	125.43	6,487.6	-1,723.7	-1,062.1	1,361,847.37	3,257,589.69	40.322988	-104.576149
6,986.0	34.93	114.37	6,571.9	-1,749.1	-1,017.0	1,361,822.47	3,257,635.03	40.322919	-104.575988
7,081.0	42.75	109.58	6,645.9	-1,771.2	-961.8	1,361,800.98	3,257,690.50	40.322858	-104.575790
7,179.0	50.04	108.87	6,713.4	-1,794.5	-894.8	1,361,778.36	3,257,757.71	40.322794	-104.575549
7,276.0	56.96	106.35	6,771.1	-1,818.0	-820.5	1,361,755.64	3,257,832.23	40.322730	-104.575283
7,372.0	65.20	103.57	6,817.5	-1,839.6	-739.4	1,361,734.90	3,257,913.57	40.322670	-104.574992
7,469.0	71.60	98.88	6,853.2	-1,857.1	-651.0	1,361,718.36	3,258,002.15	40.322623	-104.574675
7,567.0	80.54	93.16	6,876.8	-1,866.9	-556.5	1,361,709.48	3,258,096.70	40.322595	-104.574336
7,665.0	89.11	90.11	6,885.6	-1,869.7	-459.1	1,361,707.74	3,258,194.18	40.322588	-104.573987
7,761.0	91.01	89.84	6,885.5	-1,869.6	-363.1	1,361,708.78	3,258,290.17	40.322588	-104.573642
<b>LPL - 1070' FSL &amp; 2392' FEL</b>									
7,858.0	91.27	86.80	6,883.6	-1,866.8	-266.2	1,361,712.64	3,258,387.06	40.322596	-104.573295
7,990.0	91.21	86.26	6,880.7	-1,858.8	-134.4	1,361,722.00	3,258,518.69	40.322618	-104.572822
8,088.0	91.29	85.66	6,878.6	-1,851.9	-36.7	1,361,729.93	3,258,616.34	40.322637	-104.572472
8,186.0	90.32	85.83	6,877.2	-1,844.6	61.0	1,361,738.22	3,258,713.97	40.322657	-104.572121
8,283.0	90.42	86.71	6,876.6	-1,838.3	157.8	1,361,745.54	3,258,810.69	40.322674	-104.571774
8,381.0	90.47	86.07	6,875.8	-1,832.2	255.6	1,361,752.73	3,258,908.41	40.322691	-104.571424
8,476.0	90.34	86.26	6,875.2	-1,825.8	350.4	1,361,760.08	3,259,003.12	40.322708	-104.571084
8,572.0	90.40	87.17	6,874.6	-1,820.3	446.2	1,361,766.58	3,259,098.90	40.322723	-104.570740
8,669.0	90.24	90.90	6,874.0	-1,818.7	543.2	1,361,769.23	3,259,195.84	40.322728	-104.570392
8,767.0	90.45	90.60	6,873.4	-1,820.0	641.2	1,361,768.97	3,259,293.83	40.322724	-104.570041
8,865.0	90.27	91.09	6,872.8	-1,821.4	739.2	1,361,768.55	3,259,391.82	40.322720	-104.569689
8,962.0	90.44	91.04	6,872.2	-1,823.2	836.2	1,361,767.76	3,259,488.81	40.322715	-104.569342
9,060.0	90.32	91.21	6,871.6	-1,825.1	934.1	1,361,766.86	3,259,586.80	40.322710	-104.568990
9,158.0	90.52	90.59	6,870.8	-1,826.7	1,032.1	1,361,766.35	3,259,684.79	40.322706	-104.568639
9,254.0	90.33	90.50	6,870.1	-1,827.6	1,128.1	1,361,766.44	3,259,780.79	40.322703	-104.568295
9,353.0	90.01	90.84	6,869.8	-1,828.7	1,227.1	1,361,766.32	3,259,879.78	40.322700	-104.567940
9,449.0	90.63	90.40	6,869.3	-1,829.8	1,323.1	1,361,766.29	3,259,975.77	40.322697	-104.567595
9,547.0	90.12	90.64	6,868.6	-1,830.7	1,421.1	1,361,766.42	3,260,073.77	40.322695	-104.567244
9,643.0	90.02	89.96	6,868.5	-1,831.2	1,517.1	1,361,766.92	3,260,169.76	40.322693	-104.566900
9,738.0	90.28	90.79	6,868.3	-1,831.8	1,612.1	1,361,767.29	3,260,264.76	40.322692	-104.566559
9,835.0	90.09	90.82	6,868.0	-1,833.2	1,709.1	1,361,766.95	3,260,361.75	40.322688	-104.566211
9,932.0	90.46	90.78	6,867.5	-1,834.5	1,806.1	1,361,766.61	3,260,458.74	40.322684	-104.565863
10,030.0	90.20	90.80	6,866.9	-1,835.9	1,904.1	1,361,766.28	3,260,556.74	40.322681	-104.565512
10,127.0	90.72	90.21	6,866.2	-1,836.7	2,001.1	1,361,766.44	3,260,653.73	40.322678	-104.565164
10,224.0	90.83	89.83	6,864.8	-1,836.7	2,098.0	1,361,767.42	3,260,750.71	40.322678	-104.564816
10,320.0	90.63	89.67	6,863.6	-1,836.3	2,194.0	1,361,768.84	3,260,846.69	40.322679	-104.564472
10,418.0	90.63	90.80	6,862.5	-1,836.7	2,292.0	1,361,769.47	3,260,944.67	40.322678	-104.564120
10,515.0	90.36	89.88	6,861.7	-1,837.3	2,389.0	1,361,769.91	3,261,041.66	40.322676	-104.563773
10,613.0	90.40	90.65	6,861.1	-1,837.8	2,487.0	1,361,770.48	3,261,139.65	40.322675	-104.563421
10,709.0	90.30	90.60	6,860.5	-1,838.8	2,583.0	1,361,770.44	3,261,235.65	40.322672	-104.563077
10,807.0	90.42	90.85	6,859.9	-1,840.0	2,681.0	1,361,770.22	3,261,333.64	40.322669	-104.562725
10,905.0	90.45	90.66	6,859.1	-1,841.3	2,779.0	1,361,769.95	3,261,431.63	40.322665	-104.562374
11,001.0	90.39	90.34	6,858.4	-1,842.2	2,875.0	1,361,770.12	3,261,527.63	40.322663	-104.562030
11,098.0	90.07	90.97	6,858.0	-1,843.3	2,972.0	1,361,770.03	3,261,624.62	40.322660	-104.561682
11,195.0	89.94	90.17	6,858.0	-1,844.3	3,069.0	1,361,770.08	3,261,721.62	40.322657	-104.561334
11,291.0	90.56	89.78	6,857.6	-1,844.2	3,165.0	1,361,771.12	3,261,817.61	40.322657	-104.560990
11,388.0	90.39	90.94	6,856.8	-1,844.8	3,262.0	1,361,771.53	3,261,914.60	40.322656	-104.560642
11,485.0	90.17	90.29	6,856.3	-1,845.9	3,358.9	1,361,771.50	3,262,011.59	40.322653	-104.560294
11,582.0	90.43	90.26	6,855.8	-1,846.3	3,455.9	1,361,772.05	3,262,108.58	40.322651	-104.559946
11,679.0	90.44	90.46	6,855.1	-1,846.9	3,552.9	1,361,772.46	3,262,205.57	40.322650	-104.559598

# Ensign

## Survey Report - Geographic

<b>Company:</b> PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b> Well HEN 18N
<b>Project:</b> SEC.8-T4N-R64W	<b>TVD Reference:</b> Well @ 4807.5ft (P272 - RKB 28.5')
<b>Site:</b> Hen Pad	<b>MD Reference:</b> Well @ 4807.5ft (P272 - RKB 28.5')
<b>Well:</b> HEN 18N	<b>North Reference:</b> True
<b>Wellbore:</b> HEN 18N	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> HEN 18N Final Surveys	<b>Database:</b> 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
11,776.0	90.38	90.12	6,854.4	-1,847.4	3,649.9	1,361,772.98	3,262,302.57	40.322648	-104.559251
11,875.0	90.50	90.21	6,853.6	-1,847.7	3,748.9	1,361,773.73	3,262,401.56	40.322647	-104.558896
11,972.0	90.60	90.49	6,852.7	-1,848.3	3,845.9	1,361,774.15	3,262,498.55	40.322646	-104.558548
12,069.0	90.06	90.78	6,852.1	-1,849.4	3,942.9	1,361,774.09	3,262,595.54	40.322643	-104.558200
12,168.0	90.24	90.13	6,851.9	-1,850.2	4,041.9	1,361,774.34	3,262,694.53	40.322641	-104.557845
12,266.0	90.04	90.36	6,851.6	-1,850.6	4,139.9	1,361,774.95	3,262,792.53	40.322639	-104.557493
12,363.0	89.87	90.54	6,851.7	-1,851.3	4,236.9	1,361,775.20	3,262,889.52	40.322637	-104.557146
12,460.0	90.07	90.36	6,851.8	-1,852.1	4,333.9	1,361,775.45	3,262,986.52	40.322635	-104.556798
12,558.0	89.93	90.30	6,851.8	-1,852.7	4,431.9	1,361,775.91	3,263,084.51	40.322633	-104.556446
12,656.0	90.04	90.26	6,851.8	-1,853.1	4,529.9	1,361,776.46	3,263,182.51	40.322632	-104.556095
12,755.0	90.41	90.84	6,851.4	-1,854.1	4,628.9	1,361,776.55	3,263,281.50	40.322629	-104.555740
12,851.0	90.21	89.73	6,850.9	-1,854.6	4,724.9	1,361,777.07	3,263,377.49	40.322628	-104.555395
12,948.0	90.36	90.12	6,850.4	-1,854.5	4,821.9	1,361,778.21	3,263,474.48	40.322628	-104.555048
13,045.0	90.25	90.47	6,849.9	-1,854.9	4,918.9	1,361,778.73	3,263,571.47	40.322627	-104.554700
13,142.0	90.82	89.00	6,849.0	-1,854.5	5,015.9	1,361,780.19	3,263,668.45	40.322628	-104.554352
13,239.0	90.23	90.16	6,848.1	-1,853.8	5,112.9	1,361,781.92	3,263,765.42	40.322630	-104.554004
13,338.0	90.36	89.91	6,847.6	-1,853.9	5,211.9	1,361,782.89	3,263,864.41	40.322630	-104.553649
13,433.0	89.52	90.23	6,847.7	-1,854.0	5,306.9	1,361,783.77	3,263,959.40	40.322629	-104.553308
13,531.0	89.93	90.37	6,848.1	-1,854.5	5,404.9	1,361,784.28	3,264,057.40	40.322628	-104.552957
13,628.0	89.88	90.61	6,848.3	-1,855.3	5,501.9	1,361,784.47	3,264,154.39	40.322626	-104.552609
13,725.0	89.64	89.93	6,848.7	-1,855.8	5,598.9	1,361,785.03	3,264,251.38	40.322624	-104.552261
13,823.0	89.72	90.20	6,849.3	-1,855.9	5,696.9	1,361,785.94	3,264,349.37	40.322624	-104.551910
13,921.0	89.74	90.42	6,849.7	-1,856.4	5,794.9	1,361,786.43	3,264,447.37	40.322622	-104.551558
14,018.0	89.81	90.32	6,850.1	-1,857.0	5,891.9	1,361,786.82	3,264,544.36	40.322621	-104.551210
14,213.0	89.78	90.78	6,850.8	-1,858.9	6,086.8	1,361,786.99	3,264,739.35	40.322615	-104.550511
14,310.0	89.81	90.74	6,851.1	-1,860.2	6,183.8	1,361,786.72	3,264,836.35	40.322612	-104.550163
14,408.0	89.99	90.64	6,851.3	-1,861.4	6,281.8	1,361,786.56	3,264,934.34	40.322609	-104.549812
14,503.0	89.72	90.70	6,851.6	-1,862.5	6,376.8	1,361,786.45	3,265,029.34	40.322605	-104.549471
14,602.0	89.87	90.81	6,851.9	-1,863.8	6,475.8	1,361,786.18	3,265,128.33	40.322602	-104.549116
14,700.0	90.41	90.64	6,851.7	-1,865.0	6,573.8	1,361,785.96	3,265,226.33	40.322598	-104.548765
14,798.0	90.52	90.85	6,850.9	-1,866.3	6,671.8	1,361,785.71	3,265,324.32	40.322595	-104.548413
14,895.0	90.50	90.26	6,850.0	-1,867.2	6,768.8	1,361,785.79	3,265,421.31	40.322592	-104.548066
14,992.0	90.60	90.90	6,849.1	-1,868.2	6,865.8	1,361,785.82	3,265,518.30	40.322589	-104.547718
15,089.0	90.54	90.56	6,848.1	-1,869.5	6,962.8	1,361,785.60	3,265,615.29	40.322586	-104.547370
15,187.0	90.52	91.06	6,847.2	-1,870.8	7,060.7	1,361,785.24	3,265,713.28	40.322582	-104.547018
15,202.0	90.56	90.52	6,847.1	-1,871.1	7,075.7	1,361,785.19	3,265,728.28	40.322581	-104.546965
15,237.0	90.56	90.52	6,846.7	-1,871.4	7,110.7	1,361,785.24	3,265,763.28	40.322580	-104.546839

**BHL - 1078' FSL & 205' FEL**

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,761.0	6,885.5	-1,869.6	-363.1	LPL - 1070' FSL & 2392' FEL
15,237.0	6,846.7	-1,871.4	7,110.7	BHL - 1078' FSL & 205' FEL

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_