

PDC Energy Inc. DJ Basin



HEN 01N
 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 1363837.00 3258628.20 40.328420 -104.572350
 P272 - RKB 28.5' Well @ 4807.5ft (P272 - RKB 28.5')

Hen Pad
 HEN 01N
 HEN 01N
 7:38, August 17 2023



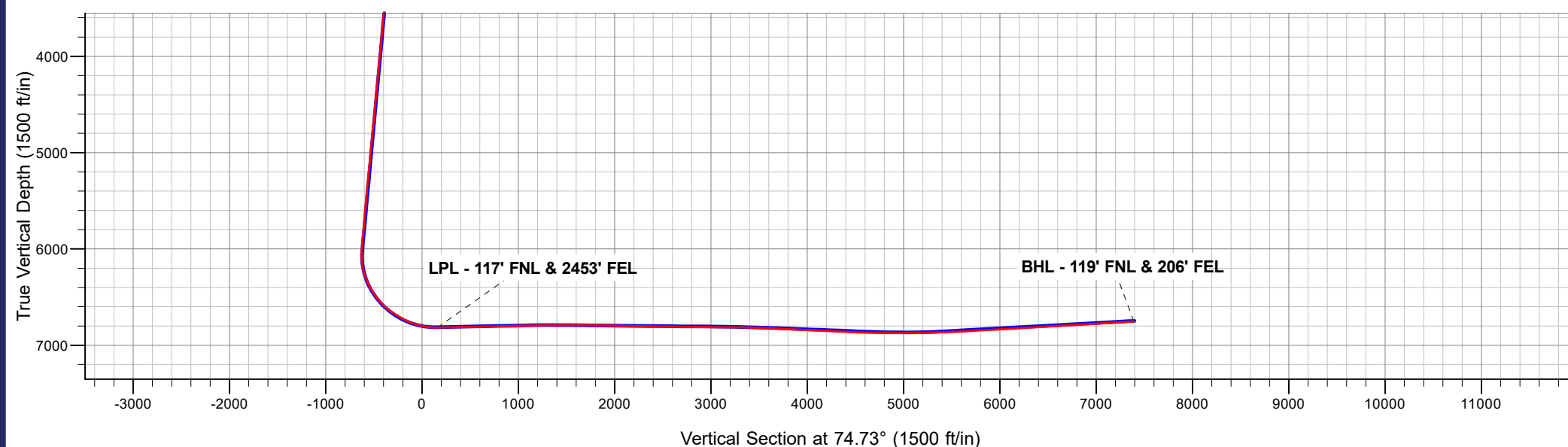
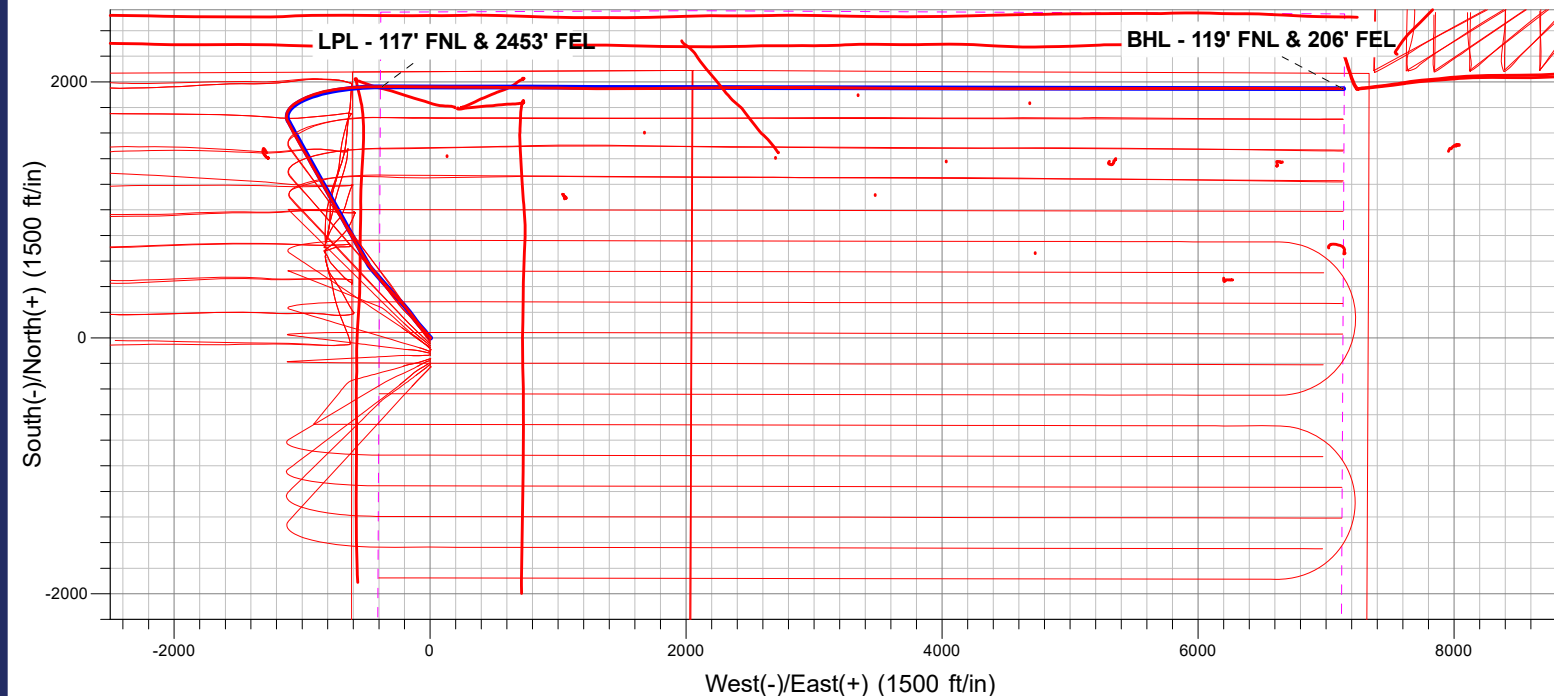
Azimuths to True North
 Magnetic North: 7.68°

Magnetic Field
 Strength: 51715.0nT
 Dip Angle: 66.58°
 Date: 07/27/2023
 Model: HRGM

ANNOTATIONS

MD	TVD	Annotation
7662.0	6816.3	LPL - 117' FNL & 2453' FEL
15170.0	6752.8	BHL - 119' FNL & 206' FEL

FINAL SURVEY
Projected Bottom Hole Location
15170' MD / 6752.8' TVD
93.05° INC / 89.77° AZM
119' FNL / 206' FEL



PDC Energy Inc. DJ Basin

SEC.8-T4N-R64W

Hen Pad

HEN 01N

HEN 01N

Design: HEN 01N

Standard Survey Report

17 August, 2023

Ensign

Survey Report

Company: PDC Energy Inc. DJ Basin	Local Co-ordinate Reference: Well HEN 01N
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 01N	North Reference: True
Wellbore: HEN 01N	Survey Calculation Method: Minimum Curvature
Design: HEN 01N	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 01N			
Well Position +N/-S 0.0 ft	Northing: 1,363,837.00 usft	Latitude: 40.328420	
+E/-W 0.0 ft	Easting: 3,258,628.21 usft	Longitude: -104.572350	
Position Uncertainty 0.0 ft	Wellhead Elevation: ft	Ground Level: 4,779.0 ft	

Wellbore HEN 01N					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	07/27/2023	7.68	66.58	51,715.00260924

Design HEN 01N					
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	74.73	

Survey Program		Date 08/17/2023			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
159.5	15,170.0	Survey #1 (HEN 01N)	MWD	MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL - HEN 01N - 2084' FNL & 2045' FEL									
159.5	1.49	123.00	159.5	-1.1	1.7	1.4	0.93	0.93	0.00
249.5	0.79	93.47	249.5	-1.8	3.3	2.7	0.99	-0.78	-32.81
340.5	1.32	334.64	340.5	-0.9	3.5	3.2	2.02	0.58	-130.58
456.5	4.66	316.71	456.3	3.7	-0.3	0.7	2.96	2.88	-15.46
545.5	6.95	317.59	544.8	10.4	-6.4	-3.4	2.57	2.57	0.99
629.5	9.23	317.59	628.0	19.1	-14.4	-8.8	2.71	2.71	0.00
715.5	11.61	320.40	712.6	30.8	-24.5	-15.5	2.83	2.77	3.27
801.5	14.16	320.23	796.4	45.6	-36.8	-23.5	2.97	2.97	-0.20
888.5	15.56	319.35	880.5	62.6	-51.2	-32.9	1.63	1.61	-1.01

Ensign

Survey Report

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well HEN 01N
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 01N	North Reference:	True
Wellbore:	HEN 01N	Survey Calculation Method:	Minimum Curvature
Design:	HEN 01N	Database:	US_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
977.5	16.97	319.00	965.9	81.5	-67.5	-43.6	1.59	1.58	-0.39
1,066.5	18.29	319.35	1,050.7	101.9	-85.1	-55.3	1.49	1.48	0.39
1,151.5	19.17	321.46	1,131.2	122.9	-102.5	-66.5	1.31	1.04	2.48
1,237.5	20.49	323.39	1,212.1	146.1	-120.3	-77.6	1.71	1.53	2.24
1,322.5	21.10	324.45	1,291.6	170.4	-138.0	-88.3	0.84	0.72	1.25
1,407.5	22.16	323.74	1,370.6	195.8	-156.4	-99.3	1.28	1.25	-0.84
1,495.5	21.90	319.88	1,452.2	221.8	-176.8	-112.2	1.67	-0.30	-4.39
1,582.5	20.93	319.00	1,533.2	245.9	-197.5	-125.7	1.17	-1.11	-1.01
1,671.5	18.64	318.47	1,616.9	268.5	-217.3	-138.9	2.58	-2.57	-0.60
1,694.5	18.29	317.24	1,638.7	273.9	-222.2	-142.2	2.28	-1.52	-5.35
1,829.0	18.33	316.88	1,766.4	304.9	-251.0	-161.8	0.09	0.03	-0.27
1,926.0	18.23	316.90	1,858.5	327.1	-271.8	-176.0	0.10	-0.10	0.02
2,023.0	20.49	315.60	1,950.0	350.3	-294.0	-191.4	2.37	2.33	-1.34
2,120.0	20.71	318.62	2,040.8	375.3	-317.3	-207.2	1.12	0.23	3.11
2,217.0	20.50	317.98	2,131.6	400.8	-340.0	-222.4	0.32	-0.22	-0.66
2,315.0	20.53	319.23	2,223.4	426.5	-362.7	-237.5	0.45	0.03	1.28
2,409.0	20.44	318.97	2,311.5	451.4	-384.2	-251.7	0.14	-0.10	-0.28
2,506.0	20.61	319.67	2,402.3	477.2	-406.4	-266.3	0.31	0.18	0.72
2,603.0	21.30	320.73	2,492.9	503.9	-428.6	-280.7	0.81	0.71	1.09
2,700.0	21.97	326.90	2,583.1	532.7	-449.6	-293.4	2.44	0.69	6.36
2,797.0	21.57	325.65	2,673.2	562.6	-469.6	-304.8	0.63	-0.41	-1.29
2,894.0	21.49	326.54	2,763.4	592.2	-489.5	-316.2	0.35	-0.08	0.92
2,991.0	21.13	325.95	2,853.8	621.5	-509.1	-327.4	0.43	-0.37	-0.61
3,088.0	20.92	327.47	2,944.3	650.6	-528.2	-338.1	0.60	-0.22	1.57
3,185.0	21.43	329.41	3,034.8	680.4	-546.5	-348.0	0.89	0.53	2.00
3,283.0	21.44	330.84	3,126.0	711.5	-564.3	-357.0	0.53	0.01	1.46
3,379.0	21.57	330.33	3,215.3	742.1	-581.6	-365.6	0.24	0.14	-0.53
3,477.0	20.41	330.29	3,306.8	772.6	-599.0	-374.3	1.18	-1.18	-0.04
3,575.0	21.04	330.22	3,398.4	802.7	-616.2	-383.0	0.64	0.64	-0.07
3,672.0	21.02	330.24	3,489.0	832.9	-633.5	-391.7	0.02	-0.02	0.02
3,768.0	21.47	330.46	3,578.5	863.2	-650.7	-400.3	0.48	0.47	0.23
3,865.0	21.61	330.50	3,668.7	894.2	-668.2	-409.1	0.15	0.14	0.04
3,962.0	21.34	330.88	3,758.9	925.1	-685.6	-417.7	0.31	-0.28	0.39
4,058.0	21.31	330.70	3,848.4	955.6	-702.7	-426.1	0.08	-0.03	-0.19
4,155.0	21.23	331.23	3,938.8	986.4	-719.7	-434.5	0.21	-0.08	0.55
4,252.0	21.08	331.80	4,029.2	1,017.1	-736.4	-442.5	0.26	-0.15	0.59
4,350.0	21.41	330.55	4,120.6	1,048.2	-753.6	-450.8	0.57	0.34	-1.28
4,448.0	21.43	331.02	4,211.8	1,079.5	-771.0	-459.5	0.18	0.02	0.48
4,545.0	21.51	330.94	4,302.1	1,110.5	-788.2	-467.9	0.09	0.08	-0.08
4,642.0	21.76	331.09	4,392.2	1,141.8	-805.6	-476.4	0.26	0.26	0.15
4,739.0	21.38	331.29	4,482.4	1,173.1	-822.8	-484.7	0.40	-0.39	0.21
4,838.0	20.92	330.23	4,574.8	1,204.2	-840.2	-493.3	0.60	-0.46	-1.07
4,936.0	21.43	329.89	4,666.2	1,234.9	-857.9	-502.3	0.54	0.52	-0.35

Ensign

Survey Report

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well HEN 01N
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 01N	North Reference:	True
Wellbore:	HEN 01N	Survey Calculation Method:	Minimum Curvature
Design:	HEN 01N	Database:	US_EDM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,033.0	21.66	330.39	4,756.4	1,265.8	-875.6	-511.3	0.30	0.24	0.52	
5,131.0	21.28	329.37	4,847.6	1,296.8	-893.6	-520.5	0.54	-0.39	-1.04	
5,229.0	20.61	330.34	4,939.1	1,327.1	-911.2	-529.5	0.77	-0.68	0.99	
5,327.0	21.48	330.64	5,030.6	1,357.7	-928.5	-538.1	0.89	0.89	0.31	
5,425.0	20.55	331.37	5,122.1	1,388.5	-945.6	-546.5	0.99	-0.95	0.74	
5,522.0	20.84	329.72	5,212.8	1,418.3	-962.4	-554.9	0.67	0.30	-1.70	
5,618.0	21.17	329.59	5,302.4	1,448.0	-979.8	-563.8	0.35	0.34	-0.14	
5,716.0	21.35	330.26	5,393.7	1,478.8	-997.6	-572.9	0.31	0.18	0.68	
5,813.0	20.70	330.83	5,484.3	1,509.1	-1,014.7	-581.4	0.70	-0.67	0.59	
5,911.0	21.40	331.94	5,575.7	1,540.0	-1,031.6	-589.5	0.82	0.71	1.13	
6,008.0	20.84	329.95	5,666.2	1,570.5	-1,048.6	-597.8	0.94	-0.58	-2.05	
6,105.0	21.17	332.34	5,756.8	1,601.0	-1,065.3	-606.0	0.95	0.34	2.46	
6,201.0	21.38	331.94	5,846.2	1,631.8	-1,081.6	-613.6	0.27	0.22	-0.42	
6,298.0	20.80	331.52	5,936.7	1,662.5	-1,098.1	-621.4	0.62	-0.60	-0.43	
6,395.0	20.87	334.00	6,027.4	1,693.2	-1,113.9	-628.6	0.91	0.07	2.56	
6,493.0	20.41	356.32	6,119.3	1,726.0	-1,122.7	-628.4	8.00	-0.47	22.78	
6,591.0	22.82	21.54	6,210.6	1,760.8	-1,116.8	-613.6	9.72	2.46	25.73	
6,689.0	24.81	40.63	6,300.3	1,794.1	-1,096.4	-585.1	8.09	2.03	19.48	
6,787.0	27.94	53.29	6,388.2	1,823.5	-1,064.6	-546.7	6.55	3.19	12.92	
6,884.0	34.96	60.91	6,470.9	1,850.6	-1,022.0	-498.4	8.30	7.24	7.86	
6,981.0	42.26	66.39	6,546.7	1,877.2	-967.7	-439.1	8.30	7.53	5.65	
7,078.0	49.59	69.96	6,614.1	1,903.0	-903.1	-369.9	8.00	7.56	3.68	
7,175.0	57.35	77.29	6,671.9	1,924.7	-828.3	-292.1	10.04	8.00	7.56	
7,272.0	63.49	82.05	6,719.8	1,939.7	-745.4	-208.2	7.63	6.33	4.91	
7,370.0	67.12	84.65	6,760.7	1,950.0	-657.0	-120.2	4.42	3.70	2.65	
7,468.0	74.66	85.42	6,792.8	1,958.0	-564.8	-29.1	7.73	7.69	0.79	
7,565.0	83.22	88.41	6,811.4	1,963.0	-469.8	63.8	9.33	8.82	3.08	
7,648.3	89.87	90.54	6,816.4	1,963.8	-386.7	144.2	8.38	7.98	2.56	
EP - HEN 01N - 120' FNL & 2440' FEL										
7,662.0	90.96	90.89	6,816.3	1,963.6	-373.1	157.3	8.38	7.98	2.55	
LPL - 117' FNL & 2453' FEL										
7,760.0	91.53	90.84	6,814.2	1,962.1	-275.1	251.5	0.58	0.58	-0.05	
7,857.0	91.23	90.43	6,811.8	1,961.1	-178.1	344.7	0.52	-0.31	-0.42	
7,954.0	91.11	90.20	6,809.8	1,960.5	-81.1	438.1	0.27	-0.12	-0.24	
8,053.0	90.92	90.37	6,808.1	1,960.0	17.8	533.5	0.26	-0.19	0.17	
8,151.0	91.06	90.43	6,806.4	1,959.4	115.8	627.8	0.16	0.14	0.06	
8,247.0	91.19	90.14	6,804.5	1,958.9	211.8	720.3	0.33	0.14	-0.30	
8,345.0	91.25	90.50	6,802.4	1,958.3	309.8	814.7	0.37	0.06	0.37	
8,443.0	91.40	90.52	6,800.2	1,957.5	407.7	909.0	0.15	0.15	0.02	
8,540.0	91.04	90.40	6,798.1	1,956.7	504.7	1,002.3	0.39	-0.37	-0.12	
8,638.0	91.52	91.20	6,795.9	1,955.3	602.7	1,096.4	0.95	0.49	0.82	
8,736.0	91.06	90.68	6,793.7	1,953.7	700.6	1,190.5	0.71	-0.47	-0.53	
8,826.2	91.09	90.44	6,792.0	1,952.8	790.8	1,277.3	0.27	0.03	-0.27	
HEN 01N WP#1										

Ensign

Survey Report

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well HEN 01N
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 01N	North Reference:	True
Wellbore:	HEN 01N	Survey Calculation Method:	Minimum Curvature
Design:	HEN 01N	Database:	US_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,833.0	91.09	90.42	6,791.9	1,952.8	797.6	1,283.8	0.27	0.03	-0.27
8,930.0	90.16	90.90	6,790.8	1,951.7	894.6	1,377.1	1.08	-0.96	0.49
9,028.0	89.94	90.34	6,790.7	1,950.6	992.6	1,471.3	0.61	-0.22	-0.57
9,127.0	89.63	90.54	6,791.1	1,949.8	1,091.6	1,566.6	0.37	-0.31	0.20
9,225.0	90.04	90.68	6,791.4	1,948.8	1,189.6	1,660.9	0.44	0.42	0.14
9,323.0	89.63	90.64	6,791.7	1,947.7	1,287.6	1,755.1	0.42	-0.42	-0.04
9,422.0	89.37	91.05	6,792.5	1,946.2	1,386.6	1,850.2	0.49	-0.26	0.41
9,520.0	88.42	89.66	6,794.4	1,945.6	1,484.5	1,944.6	1.72	-0.97	-1.42
9,616.0	88.77	89.31	6,796.8	1,946.5	1,580.5	2,037.4	0.52	0.36	-0.36
9,714.0	88.83	89.61	6,798.8	1,947.4	1,678.5	2,132.2	0.31	0.06	0.31
9,811.0	88.51	89.27	6,801.1	1,948.3	1,775.5	2,226.0	0.48	-0.33	-0.35
9,907.0	88.73	89.46	6,803.4	1,949.4	1,871.4	2,318.8	0.30	0.23	0.20
10,005.0	89.35	89.29	6,805.0	1,950.5	1,969.4	2,413.6	0.66	0.63	-0.17
10,103.0	89.48	89.17	6,806.0	1,951.8	2,067.4	2,508.5	0.18	0.13	-0.12
10,200.0	89.48	88.98	6,806.9	1,953.3	2,164.4	2,602.5	0.20	0.00	-0.20
10,296.0	89.36	89.64	6,807.9	1,954.5	2,260.4	2,695.4	0.70	-0.13	0.69
10,395.0	89.58	89.02	6,808.8	1,955.7	2,359.3	2,791.2	0.66	0.22	-0.63
10,491.0	89.45	90.30	6,809.6	1,956.2	2,455.3	2,883.9	1.34	-0.14	1.33
10,589.0	89.52	89.94	6,810.5	1,956.0	2,553.3	2,978.4	0.37	0.07	-0.37
10,687.0	89.26	89.98	6,811.5	1,956.1	2,651.3	3,072.9	0.27	-0.27	0.04
10,784.0	89.17	90.20	6,812.9	1,955.9	2,748.3	3,166.5	0.25	-0.09	0.23
10,883.0	89.42	90.12	6,814.1	1,955.7	2,847.3	3,261.9	0.27	0.25	-0.08
10,957.6	89.52	89.92	6,814.8	1,955.6	2,921.9	3,333.9	0.30	0.14	-0.26
HEN 01N WP#2									
10,978.0	89.55	89.87	6,814.9	1,955.7	2,942.3	3,353.5	0.30	0.14	-0.26
11,077.0	88.12	90.28	6,816.9	1,955.5	3,041.3	3,449.0	1.50	-1.44	0.41
11,173.0	88.24	90.76	6,820.0	1,954.7	3,137.2	3,541.3	0.52	0.13	0.50
11,268.0	86.85	90.48	6,824.1	1,953.6	3,232.1	3,632.6	1.49	-1.46	-0.29
11,366.0	87.41	90.60	6,829.0	1,952.7	3,330.0	3,726.8	0.58	0.57	0.12
11,464.0	87.39	90.36	6,833.4	1,951.9	3,427.9	3,821.0	0.25	-0.02	-0.24
11,561.0	87.46	90.70	6,837.8	1,951.0	3,524.8	3,914.2	0.36	0.07	0.35
11,658.0	87.84	90.42	6,841.8	1,950.1	3,621.7	4,007.5	0.49	0.39	-0.29
11,757.0	87.47	90.40	6,845.8	1,949.4	3,720.6	4,102.7	0.37	-0.37	-0.02
11,853.0	87.33	90.65	6,850.2	1,948.5	3,816.5	4,195.0	0.30	-0.15	0.26
11,949.0	87.28	90.71	6,854.7	1,947.3	3,912.4	4,287.2	0.08	-0.05	0.06
12,046.0	87.35	90.48	6,859.2	1,946.3	4,009.3	4,380.4	0.25	0.07	-0.24
12,145.0	87.29	90.33	6,863.8	1,945.6	4,108.2	4,475.6	0.16	-0.06	-0.15
12,240.0	87.96	90.14	6,867.8	1,945.2	4,203.1	4,567.1	0.73	0.71	-0.20
12,336.0	89.83	90.34	6,869.6	1,944.8	4,299.1	4,659.5	1.96	1.95	0.21
12,433.0	89.40	89.97	6,870.3	1,944.6	4,396.1	4,753.1	0.58	-0.44	-0.38
12,442.0	89.45	89.95	6,870.4	1,944.6	4,405.1	4,761.7	0.57	0.53	-0.22
HEN 01N WP#3									
12,529.0	89.91	89.76	6,870.9	1,944.8	4,492.1	4,845.7	0.57	0.53	-0.22

Ensign

Survey Report

Company: PDC Energy Inc. DJ Basin	Local Co-ordinate Reference: Well HEN 01N
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 01N	North Reference: True
Wellbore: HEN 01N	Survey Calculation Method: Minimum Curvature
Design: HEN 01N	Database: US_EDM

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,627.0	90.67	90.16	6,870.4	1,944.9	4,590.1	4,940.3	0.88	0.78	0.41
12,726.0	90.45	89.81	6,869.4	1,944.9	4,689.1	5,035.8	0.42	-0.22	-0.35
12,823.0	90.17	90.11	6,868.9	1,945.0	4,786.1	5,129.4	0.42	-0.29	0.31
12,869.0	90.21	89.88	6,868.7	1,945.0	4,832.1	5,173.8	0.50	0.09	-0.49
HEN 01N WP#4									
12,920.0	90.26	89.63	6,868.5	1,945.2	4,883.1	5,223.0	0.50	0.09	-0.49
13,018.0	89.86	89.86	6,868.4	1,945.6	4,981.1	5,317.7	0.47	-0.41	0.23
13,116.0	92.82	89.50	6,866.1	1,946.2	5,079.0	5,412.3	3.04	3.02	-0.37
13,214.0	92.95	89.51	6,861.2	1,947.0	5,176.9	5,506.9	0.13	0.13	0.01
13,312.0	92.99	89.50	6,856.1	1,947.9	5,274.8	5,601.6	0.04	0.04	-0.01
13,410.0	93.13	89.68	6,850.9	1,948.6	5,372.6	5,696.2	0.23	0.14	0.18
13,506.0	93.07	89.63	6,845.7	1,949.1	5,468.5	5,788.8	0.08	-0.06	-0.05
13,603.0	93.17	89.69	6,840.4	1,949.7	5,565.3	5,882.4	0.12	0.10	0.06
13,701.0	93.30	90.30	6,834.9	1,949.7	5,663.2	5,976.8	0.64	0.13	0.62
13,798.0	93.04	90.30	6,829.5	1,949.2	5,760.0	6,070.1	0.27	-0.27	0.00
13,895.0	93.19	90.07	6,824.2	1,948.9	5,856.9	6,163.4	0.28	0.15	-0.24
13,991.0	93.12	90.26	6,819.0	1,948.6	5,952.7	6,255.8	0.21	-0.07	0.20
14,088.0	92.81	90.05	6,813.9	1,948.4	6,049.6	6,349.2	0.39	-0.32	-0.22
14,184.0	93.17	90.09	6,808.9	1,948.2	6,145.5	6,441.6	0.38	0.38	0.04
14,282.0	93.34	90.21	6,803.4	1,948.0	6,243.3	6,536.0	0.21	0.17	0.12
14,378.0	93.19	90.05	6,797.9	1,947.8	6,339.2	6,628.4	0.23	-0.16	-0.17
14,476.0	93.07	90.38	6,792.5	1,947.4	6,437.0	6,722.7	0.36	-0.12	0.34
14,573.0	93.57	90.08	6,786.9	1,947.0	6,533.9	6,816.0	0.60	0.52	-0.31
14,669.0	93.34	90.11	6,781.1	1,946.9	6,629.7	6,908.4	0.24	-0.24	0.03
14,767.0	93.50	90.14	6,775.3	1,946.6	6,727.5	7,002.7	0.17	0.16	0.03
14,864.0	93.30	90.03	6,769.5	1,946.5	6,824.3	7,096.1	0.24	-0.21	-0.11
14,960.0	93.26	90.04	6,764.1	1,946.4	6,920.2	7,188.5	0.04	-0.04	0.01
15,057.0	93.01	89.93	6,758.7	1,946.5	7,017.0	7,281.9	0.28	-0.26	-0.11
15,137.0	93.05	89.77	6,754.5	1,946.7	7,096.9	7,359.1	0.21	0.05	-0.20
15,170.0	93.05	89.77	6,752.8	1,946.8	7,129.9	7,390.9	0.00	0.00	0.00
BHL - 119' FNL & 206' FEL - BHL - HEN 01N - 120' FNL & 200' FEL									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,662.0	6,816.3	1,963.6	-373.1	LPL - 117' FNL & 2453' FEL
15,170.0	6,752.8	1,946.8	7,129.9	BHL - 119' FNL & 206' FEL

Checked By: _____	Approved By: _____	Date: _____
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