

PDC Energy Inc. DJ Basin

Well Name: **Ottenhoff 29U-343**

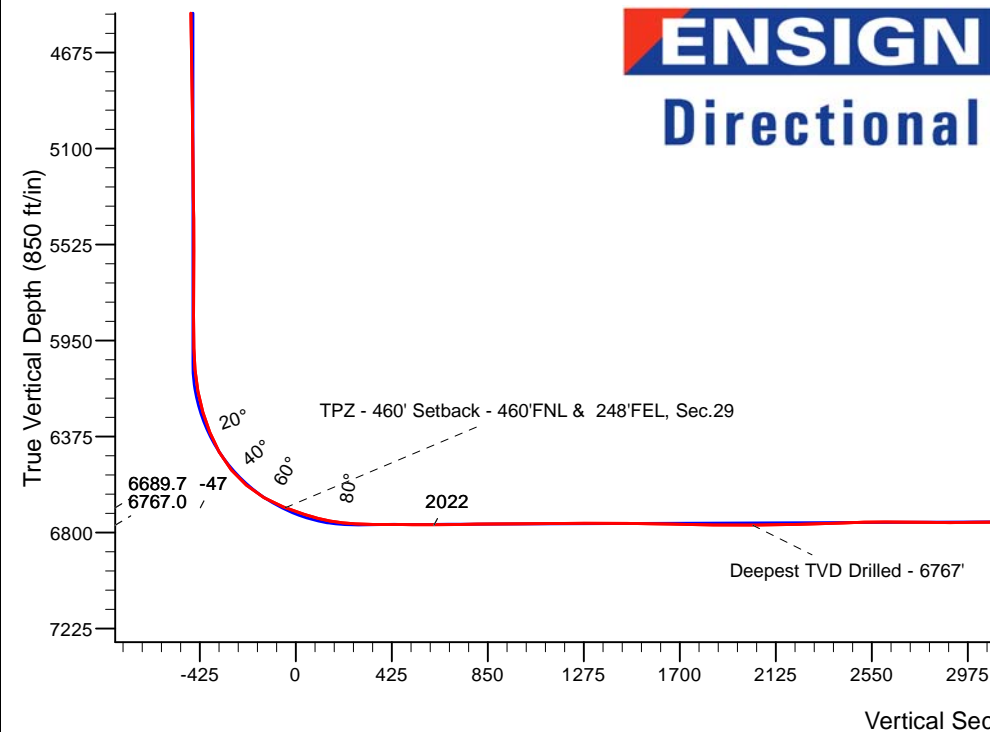
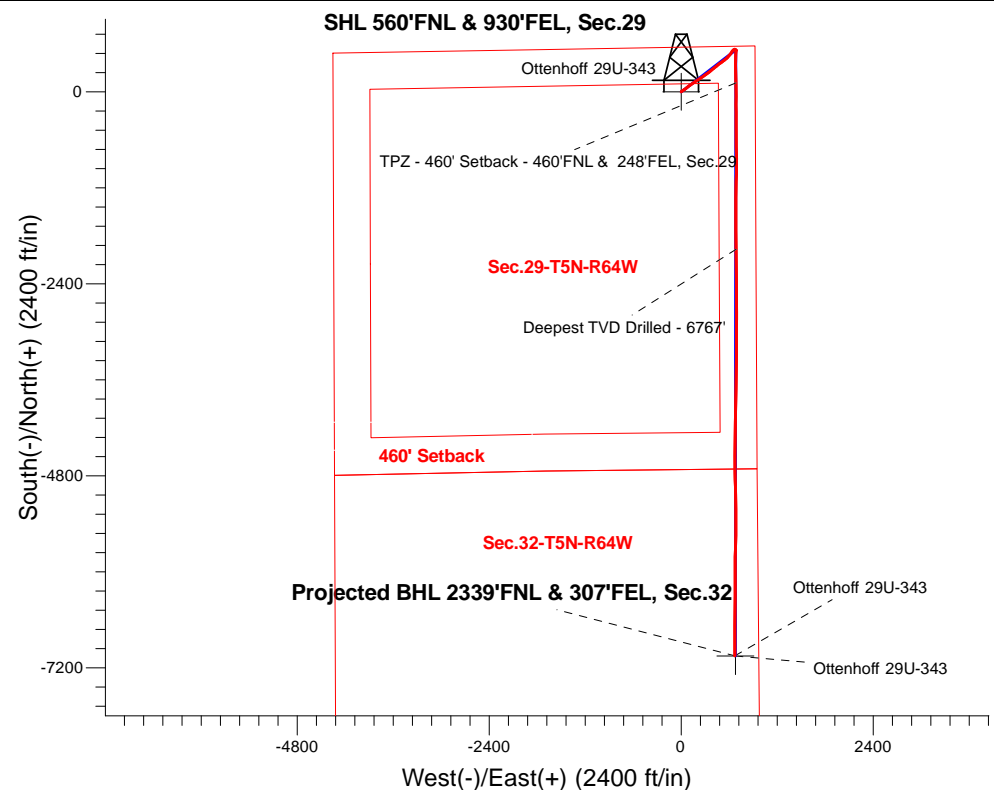
Surface Location: Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4662.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1166.53	259764.52	40.375955	-104.567621	
RKB - 23' WELL @ 4685.0ft (RKB - 23')						

FINAL SURVEY

Projected Bottom Hole Location
14,126'MD 6730'TVD 7,051'S & 668'E of SHL
90.7 degree Incl @ 179.9 degree AZM



Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W
Ottenhoff 29U-343
Ottenhoff 29U-343 Wellbore #1
12:23, July 19 2018

ANNOTATIONS

TVD	MD	Annotation
6689.7	6952.3	TPZ - 460' Setback - 460'FNL & 248'FEL, Sec.29
6767.0	9040.0	Deepest TVD Drilled - 6767'

LEGEND

- ▲ Ottenhoff 29U-343, Ottenhoff 29U-343 Wellbore #1, Plan #4 (7-10-18) V0
- Ottenhoff 29U-343 Wellbore #1
- Survey #1

Projected BHL 2339'FNL & 307'FEL, Sec.32

Ottenhoff 29U-343

Ottenhoff 29U-343



PDC Energy Inc. DJ Basin

SEC.29-T5N-R64W

Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W

Ottenhoff 29U-343

Ottenhoff 29U-343 Wellbore #1

Survey: Survey #1

Standard Survey Report

19 July, 2018

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Ottenhoff 29U-343
Project:	SEC.29-T5N-R64W	TVD Reference:	WELL @ 4685.0ft (RKB - 23')
Site:	Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W	MD Reference:	WELL @ 4685.0ft (RKB - 23')
Well:	Ottenhoff 29U-343	North Reference:	True
Wellbore:	Ottenhoff 29U-343 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ottenhoff 29U-343 Wellbore #1	Database:	US_EDM

Project	SEC.29-T5N-R64W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W						
Site Position:		Northing:	1,381,166.77	usft	Latitude:	40.375956		
From:	Lat/Long	Easting:	3,259,749.48	usft	Longitude:	-104.567675		
Position Uncertainty:	0.0	ft	Slot Radius:	13-3/16	"	Grid Convergence:	0.60	°

Well	Ottenhoff 29U-343					
Well Position	+N-S	0.0 ft	Northing:	1,381,166.55 usft	Latitude:	40.375955
	+E-W	0.0 ft	Easting:	3,259,764.53 usft	Longitude:	-104.567621
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,662.0 ft

Wellbore	Ottenhoff 29U-343 Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/10/2018	8.15	66.90	52,231

Design	Ottenhoff 29U-343 Wellbore #1				
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	174.59	

Survey Program	Date	7/19/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
154.0	14,126.0	Survey #1 (Ottenhoff 29U-343 Wellbore #1	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	
154.0	0.50	304.40	154.0	0.4	-0.6	-0.4	0.32	0.32	0.00	
250.0	1.80	29.30	250.0	1.9	-0.2	-1.9	1.90	1.35	88.44	
345.0	3.70	41.10	344.9	5.5	2.6	-5.3	2.08	2.00	12.42	
441.0	3.90	53.00	440.7	9.8	7.2	-9.1	0.85	0.21	12.40	
536.0	5.50	60.40	535.3	14.0	13.8	-12.7	1.80	1.68	7.79	
632.0	7.00	59.40	630.8	19.3	22.8	-17.0	1.57	1.56	-1.04	
727.0	9.10	55.80	724.8	26.5	34.0	-23.1	2.27	2.21	-3.79	
823.0	10.40	53.90	819.4	35.8	47.3	-31.2	1.39	1.35	-1.98	
919.0	10.10	55.00	913.9	45.8	61.2	-39.8	0.37	-0.31	1.15	

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Site:	Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W	MD Reference:	WELL @ 4685.0ft (RKB - 23')
Well:	Ottenhoff 29U-343	North Reference:	True
Wellbore:	Ottenhoff 29U-343 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ottenhoff 29U-343 Wellbore #1	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)
1,014.0	11.40	53.00	1,007.2	56.2	75.5	-48.8	1.42	1.37	-2.11
1,110.0	12.80	50.90	1,101.1	68.6	91.3	-59.7	1.53	1.46	-2.19
1,206.0	13.60	53.20	1,194.6	82.1	108.6	-71.5	1.00	0.83	2.40
1,301.0	14.70	54.60	1,286.7	95.7	127.4	-83.3	1.21	1.16	1.47
1,396.0	16.20	53.60	1,378.2	110.6	147.9	-96.2	1.60	1.58	-1.05
1,491.0	14.20	54.40	1,469.9	125.2	168.0	-108.8	2.12	-2.11	0.84
1,590.0	12.70	54.80	1,566.2	138.6	186.8	-120.3	1.52	-1.52	0.40
1,682.0	13.50	63.70	1,655.8	149.2	204.7	-129.2	2.36	0.87	9.67
1,778.0	14.90	61.10	1,748.9	160.1	225.5	-138.1	1.60	1.46	-2.71
1,874.0	17.60	56.70	1,841.0	174.0	248.5	-149.8	3.09	2.81	-4.58
1,970.0	17.60	54.00	1,932.5	190.5	272.4	-164.0	0.85	0.00	-2.81
2,065.0	17.00	53.30	2,023.2	207.3	295.1	-178.5	0.67	-0.63	-0.74
2,161.0	16.50	53.30	2,115.2	223.8	317.3	-192.9	0.52	-0.52	0.00
2,256.0	15.70	51.90	2,206.4	239.8	338.2	-206.8	0.94	-0.84	-1.47
2,352.0	14.90	51.40	2,299.0	255.5	358.1	-220.6	0.84	-0.83	-0.52
2,447.0	14.40	49.60	2,391.0	270.8	376.6	-234.1	0.71	-0.53	-1.89
2,543.0	16.40	52.80	2,483.5	286.7	396.5	-248.0	2.26	2.08	3.33
2,639.0	15.50	50.90	2,575.8	303.0	417.3	-262.3	1.08	-0.94	-1.98
2,734.0	15.50	50.20	2,667.4	319.2	436.9	-276.5	0.20	0.00	-0.74
2,830.0	15.30	50.30	2,759.9	335.5	456.5	-290.9	0.21	-0.21	0.10
2,925.0	15.70	54.60	2,851.5	350.9	476.6	-304.4	1.28	0.42	4.53
3,021.0	15.60	54.40	2,943.9	365.9	497.7	-317.4	0.12	-0.10	-0.21
3,116.0	14.90	52.60	3,035.6	380.8	517.8	-330.2	0.89	-0.74	-1.89
3,212.0	13.60	50.70	3,128.6	395.4	536.3	-343.1	1.44	-1.35	-1.98
3,308.0	12.30	48.40	3,222.2	409.4	552.7	-355.4	1.46	-1.35	-2.40
3,404.0	10.70	48.60	3,316.2	422.1	567.0	-366.7	1.67	-1.67	0.21
3,500.0	9.70	44.90	3,410.7	433.7	579.4	-377.1	1.24	-1.04	-3.85
3,595.0	9.00	43.00	3,504.4	444.8	590.1	-387.1	0.81	-0.74	-2.00
3,691.0	8.50	41.90	3,599.3	455.6	600.0	-396.9	0.55	-0.52	-1.15
3,787.0	9.40	34.70	3,694.2	467.3	609.2	-407.7	1.50	0.94	-7.50
3,882.0	9.70	35.20	3,787.8	480.2	618.2	-419.7	0.33	0.32	0.53
3,978.0	9.30	35.40	3,882.5	493.1	627.4	-431.7	0.42	-0.42	0.21
4,074.0	8.40	31.90	3,977.4	505.4	635.6	-443.2	1.09	-0.94	-3.65
4,168.0	6.20	39.40	4,070.6	515.2	642.4	-452.3	2.55	-2.34	7.98
4,264.0	6.20	48.20	4,166.1	522.6	649.6	-459.0	0.99	0.00	9.17
4,360.0	5.00	60.20	4,261.6	528.2	657.1	-463.8	1.74	-1.25	12.50
4,455.0	3.50	81.10	4,356.3	530.7	663.5	-465.7	2.25	-1.58	22.00
4,551.0	2.80	94.60	4,452.2	530.9	668.8	-465.5	1.06	-0.73	14.06
4,647.0	1.80	122.10	4,548.1	529.9	672.4	-464.1	1.52	-1.04	28.65
4,743.0	1.80	121.40	4,644.1	528.4	674.9	-462.3	0.02	0.00	-0.73
4,838.0	1.50	114.30	4,739.0	527.1	677.4	-460.8	0.38	-0.32	-7.47
4,934.0	0.80	174.40	4,835.0	525.9	678.6	-459.5	1.36	-0.73	62.60
5,030.0	0.80	163.20	4,931.0	524.6	678.8	-458.2	0.16	0.00	-11.67
5,126.0	0.90	139.30	5,027.0	523.4	679.5	-456.9	0.38	0.10	-24.90

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Design:	Ottenhoff 29U-343 Wellbore #1	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)
5,222.0	0.60	136.60	5,123.0	522.4	680.3	-455.9	0.31	-0.31	-2.81
5,318.0	1.00	143.70	5,219.0	521.4	681.2	-454.8	0.43	0.42	7.40
5,413.0	1.10	129.40	5,314.0	520.1	682.4	-453.4	0.29	0.11	-15.05
5,509.0	1.40	117.00	5,409.9	519.0	684.1	-452.2	0.42	0.31	-12.92
5,605.0	1.10	95.20	5,505.9	518.4	686.1	-451.4	0.58	-0.31	-22.71
5,700.0	0.70	348.10	5,600.9	518.9	686.9	-451.8	1.54	-0.42	-112.74
5,796.0	0.60	285.70	5,696.9	519.6	686.3	-452.5	0.71	-0.10	-65.00
5,892.0	0.90	258.80	5,792.9	519.6	685.1	-452.6	0.47	0.31	-28.02
5,988.0	0.90	233.10	5,888.9	519.0	683.7	-452.2	0.42	0.00	-26.77
6,083.0	0.90	205.90	5,983.9	517.9	682.8	-451.1	0.45	0.00	-28.63
6,178.0	5.10	182.70	6,078.7	513.0	682.3	-446.3	4.51	4.42	-24.42
6,274.0	10.60	178.30	6,173.8	499.9	682.3	-433.3	5.76	5.73	-4.58
6,370.0	16.30	182.90	6,267.1	477.6	681.9	-411.1	6.04	5.94	4.79
6,465.0	22.00	179.90	6,356.8	446.5	681.3	-380.2	6.09	6.00	-3.16
6,561.0	28.80	182.00	6,443.5	405.3	680.5	-339.3	7.14	7.08	2.19
6,657.0	40.80	183.10	6,522.2	350.7	678.0	-285.2	12.52	12.50	1.15
6,752.0	48.90	180.60	6,589.5	283.8	675.9	-218.7	8.72	8.53	-2.63
6,848.0	60.40	176.70	6,645.0	205.7	678.0	-140.8	12.43	11.98	-4.06
6,943.0	68.00	177.10	6,686.3	120.3	682.6	-55.4	8.01	8.00	0.42
6,952.3	68.46	177.33	6,689.7	111.7	683.0	-46.8	5.49	4.99	2.46
TPZ - 460' Setback - 460'FNL & 248'FEL, Sec.29									
7,039.0	72.80	179.40	6,718.5	30.0	685.3	34.8	5.49	5.00	2.39
7,134.0	77.20	180.90	6,743.0	-61.8	685.0	126.1	4.88	4.63	1.58
7,230.0	85.30	179.90	6,757.6	-156.6	684.4	220.5	8.50	8.44	-1.04
7,325.0	88.40	179.40	6,762.9	-251.4	685.0	314.9	3.31	3.26	-0.53
7,421.0	89.80	180.40	6,764.4	-347.4	685.1	410.5	1.79	1.46	1.04
7,526.0	90.00	180.20	6,764.6	-452.4	684.6	515.0	0.27	0.19	-0.19
7,622.0	90.10	179.20	6,764.5	-548.4	685.1	610.6	1.05	0.10	-1.04
7,718.0	90.90	179.00	6,763.6	-644.4	686.6	706.3	0.86	0.83	-0.21
7,814.0	91.20	178.70	6,761.9	-740.3	688.5	802.0	0.44	0.31	-0.31
7,909.0	90.00	180.20	6,760.9	-835.3	689.4	896.7	2.02	-1.26	1.58
8,005.0	90.00	180.80	6,760.9	-931.3	688.6	992.1	0.63	0.00	0.63
8,100.0	90.00	180.80	6,760.9	-1,026.3	687.3	1,086.6	0.00	0.00	0.00
8,196.0	90.90	180.90	6,760.1	-1,122.3	685.9	1,182.0	0.94	0.94	0.10
8,292.0	91.30	180.40	6,758.3	-1,218.3	684.8	1,277.5	0.67	0.42	-0.52
8,388.0	89.30	180.60	6,757.8	-1,314.3	683.9	1,372.9	2.09	-2.08	0.21
8,484.0	88.80	180.60	6,759.4	-1,410.3	682.9	1,468.4	0.52	-0.52	0.00
8,579.0	89.40	180.60	6,760.9	-1,505.2	681.9	1,562.9	0.63	0.63	0.00
8,675.0	88.80	179.90	6,762.4	-1,601.2	681.5	1,658.4	0.96	-0.63	-0.73
8,770.0	89.20	179.90	6,764.0	-1,696.2	681.7	1,753.0	0.42	0.42	0.00
8,866.0	89.30	179.50	6,765.3	-1,792.2	682.2	1,848.6	0.43	0.10	-0.42
8,962.0	89.20	178.70	6,766.5	-1,888.2	683.7	1,944.3	0.84	-0.10	-0.83
9,040.0	90.19	179.69	6,767.0	-1,966.2	684.8	2,022.0	1.79	1.26	1.26

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Survey									
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Deepest TVD Drilled - 6767'									
9,057.0	90.40	179.90	6,766.9	-1,983.2	684.8	2,038.9	1.79	1.26	1.26
9,153.0	91.20	179.90	6,765.5	-2,079.2	685.0	2,134.5	0.83	0.83	0.00
9,249.0	91.50	179.50	6,763.3	-2,175.1	685.5	2,230.1	0.52	0.31	-0.42
9,345.0	91.90	179.40	6,760.4	-2,271.1	686.4	2,325.7	0.43	0.42	-0.10
9,440.0	91.80	178.70	6,757.4	-2,366.0	688.0	2,420.4	0.74	-0.11	-0.74
9,536.0	92.10	178.50	6,754.1	-2,461.9	690.4	2,516.1	0.38	0.31	-0.21
9,631.0	89.30	180.40	6,752.9	-2,556.9	691.3	2,610.7	3.56	-2.95	2.00
9,727.0	89.50	180.40	6,753.9	-2,652.9	690.6	2,706.2	0.21	0.21	0.00
9,822.0	89.30	179.50	6,754.9	-2,747.9	690.7	2,800.8	0.97	-0.21	-0.95
9,918.0	90.40	180.90	6,755.2	-2,843.9	690.3	2,896.3	1.85	1.15	1.46
10,014.0	90.60	180.60	6,754.3	-2,939.9	689.1	2,991.8	0.38	0.21	-0.31
10,109.0	90.50	180.10	6,753.4	-3,034.9	688.5	3,086.3	0.54	-0.11	-0.53
10,205.0	90.80	178.80	6,752.3	-3,130.9	689.4	3,181.9	1.39	0.31	-1.35
10,300.0	90.20	179.90	6,751.5	-3,225.8	690.5	3,276.6	1.32	-0.63	1.16
10,396.0	91.50	180.40	6,750.1	-3,321.8	690.3	3,372.1	1.45	1.35	0.52
10,491.0	90.50	181.60	6,748.4	-3,416.8	688.6	3,466.5	1.64	-1.05	1.26
10,587.0	91.50	181.50	6,746.8	-3,512.8	686.0	3,561.8	1.05	1.04	-0.10
10,683.0	89.90	180.80	6,745.6	-3,608.7	684.1	3,657.2	1.82	-1.67	-0.73
10,779.0	90.40	180.10	6,745.3	-3,704.7	683.3	3,752.7	0.90	0.52	-0.73
10,875.0	90.40	181.30	6,744.7	-3,800.7	682.1	3,848.1	1.25	0.00	1.25
10,970.0	90.00	181.30	6,744.3	-3,895.7	680.0	3,942.5	0.42	-0.42	0.00
11,066.0	90.50	181.10	6,743.9	-3,991.7	678.0	4,037.8	0.56	0.52	-0.21
11,162.0	91.00	180.90	6,742.7	-4,087.6	676.3	4,133.2	0.56	0.52	-0.21
11,257.0	91.20	180.60	6,740.8	-4,182.6	675.1	4,227.6	0.38	0.21	-0.32
11,353.0	89.10	181.30	6,740.6	-4,278.6	673.5	4,323.0	2.31	-2.19	0.73
11,448.0	89.30	181.10	6,741.9	-4,373.6	671.5	4,417.4	0.30	0.21	-0.21
11,543.0	89.10	180.40	6,743.2	-4,468.5	670.2	4,511.8	0.77	-0.21	-0.74
11,639.0	88.70	180.20	6,745.1	-4,564.5	669.7	4,607.3	0.47	-0.42	-0.21
11,735.0	88.50	179.20	6,747.4	-4,660.5	670.2	4,702.9	1.06	-0.21	-1.04
11,830.0	88.00	178.70	6,750.3	-4,755.4	672.0	4,797.6	0.74	-0.53	-0.53
11,926.0	89.90	178.80	6,752.1	-4,851.4	674.1	4,893.3	1.98	1.98	0.10
12,022.0	89.70	178.50	6,752.4	-4,947.4	676.3	4,989.1	0.38	-0.21	-0.31
12,118.0	90.60	179.40	6,752.2	-5,043.3	678.1	5,084.8	1.33	0.94	0.94
12,213.0	91.50	179.00	6,750.4	-5,138.3	679.4	5,179.5	1.04	0.95	-0.42
12,309.0	91.80	178.30	6,747.7	-5,234.2	681.7	5,275.2	0.79	0.31	-0.73
12,405.0	90.40	179.50	6,745.8	-5,330.2	683.5	5,370.9	1.92	-1.46	1.25
12,501.0	89.60	181.60	6,745.8	-5,426.2	682.6	5,466.4	2.34	-0.83	2.19
12,597.0	89.30	181.50	6,746.7	-5,522.2	680.0	5,561.7	0.33	-0.31	-0.10
12,693.0	88.50	180.60	6,748.6	-5,618.1	678.2	5,657.1	1.25	-0.83	-0.94
12,788.0	90.70	181.60	6,749.2	-5,713.1	676.4	5,751.4	2.54	2.32	1.05
12,884.0	91.00	180.80	6,747.8	-5,809.1	674.4	5,846.8	0.89	0.31	-0.83
12,980.0	91.00	180.40	6,746.1	-5,905.0	673.4	5,942.2	0.42	0.00	-0.42
13,075.0	91.40	180.40	6,744.2	-6,000.0	672.7	6,036.7	0.42	0.42	0.00

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Ottenhoff 29U-343
Project:	SEC.29-T5N-R64W	TVD Reference:	WELL @ 4685.0ft (RKB - 23')
Site:	Ottenhoff 5N64W29CR Pad Sec.29-T5N-R64W	MD Reference:	WELL @ 4685.0ft (RKB - 23')
Well:	Ottenhoff 29U-343	North Reference:	True
Wellbore:	Ottenhoff 29U-343 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Ottenhoff 29U-343 Wellbore #1	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)
13,172.0	91.60	179.90	6,741.6	-6,097.0	672.5	6,133.2	0.56	0.21	-0.52
13,267.0	91.50	178.80	6,739.0	-6,191.9	673.6	6,227.9	1.16	-0.11	-1.16
13,363.0	91.80	180.90	6,736.3	-6,287.9	673.8	6,323.4	2.21	0.31	2.19
13,458.0	92.10	180.60	6,733.0	-6,382.8	672.6	6,417.8	0.45	0.32	-0.32
13,553.0	89.80	180.60	6,731.5	-6,477.8	671.6	6,512.3	2.42	-2.42	0.00
13,649.0	89.40	180.60	6,732.1	-6,573.8	670.6	6,607.7	0.42	-0.42	0.00
13,745.0	89.80	180.60	6,732.8	-6,669.8	669.6	6,703.2	0.42	0.42	0.00
13,840.0	90.00	180.40	6,733.0	-6,764.8	668.7	6,797.7	0.30	0.21	-0.21
13,936.0	90.80	180.20	6,732.3	-6,860.8	668.2	6,893.2	0.86	0.83	-0.21
14,066.0	90.70	179.90	6,730.6	-6,990.8	668.1	7,022.6	0.24	-0.08	-0.23
14,126.0	90.70	179.90	6,729.9	-7,050.8	668.2	7,082.4	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL 560'FNL & 930'FEL	0.00	0.00	1.0	0.0	0.0	1,381,166.57	3,259,764.53	40.375955	-104.567621
- survey hits target center									
- Point									
BHL 2340'FNL & 300'FE	0.00	0.00	6,735.0	-7,052.3	675.6	1,374,122.06	3,260,514.18	40.356597	-104.565197
- survey misses target center by 9.1ft at 14126.0ft MD (6729.9 TVD, -7050.8 N, 668.2 E)									
- Point									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,952.3	6,689.7	111.7	683.0	TPZ - 460' Setback - 460'FNL & 248'FEL, Sec.29
9,040.0	6,767.0	-1,966.2	684.8	Deepest TVD Drilled - 6767'

Checked By: _____ Approved By: _____ Date: _____