

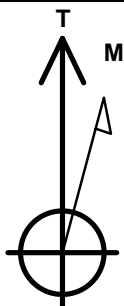
PDC Energy Inc. DJ Basin

Well Name: **Lindsey 10C (Codell)**

Surface Location: Lindsey 4N64W01 Pad Sec.1-T4N-R64W
 North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
 Ground Elevation: 4610.0
 +N/-S+E/-W Northing Easting Longitude Slot
 0.0 0.0 1366506.58 3281238.21 40.335070 -104.491150
 RKB - 23' WELL @ 4633.0ft (RKB - 23')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 329'FSL & 439'FEL, Sec.1	1.0	0.0	0.0	Point
BHL 75'FSL & 150'FWL, Sec.2	6513.0	-249.4	-9866.5	Point
WP1	6582.5	-221.7	-7458.7	Point
LPL 125'FSL & 737'FEL, Sec.1	6673.0	-205.0	-298.3	Point



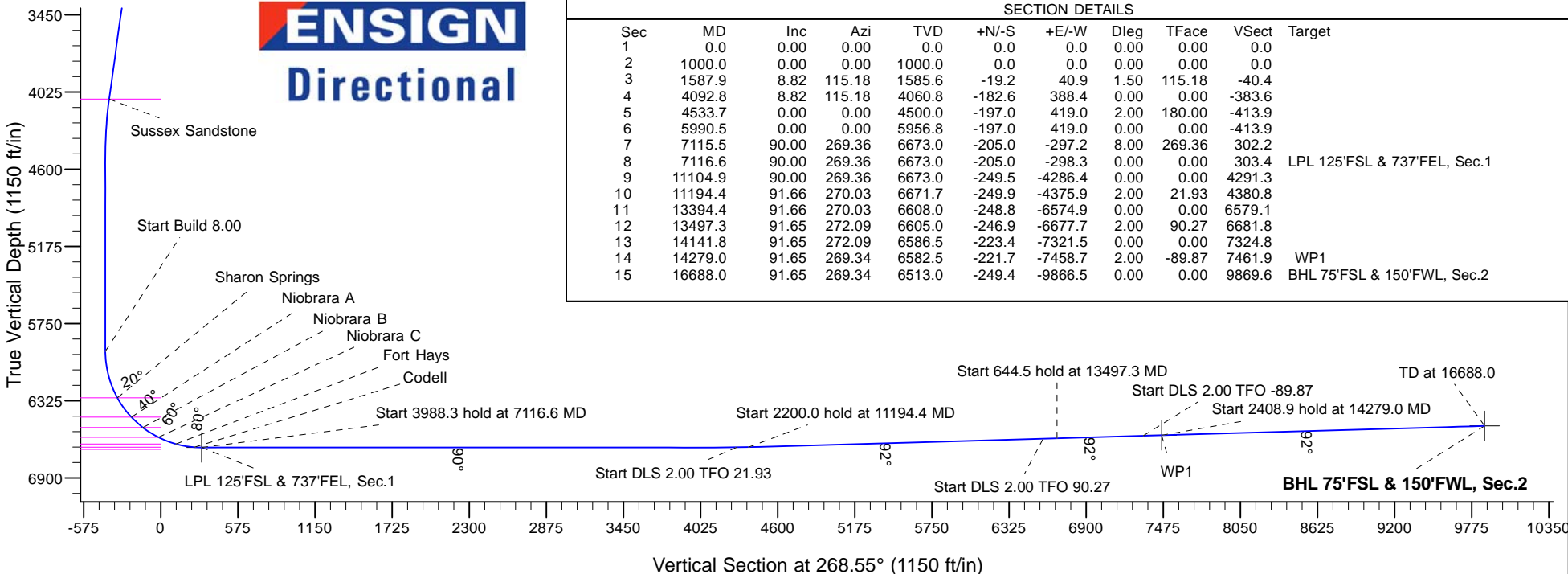
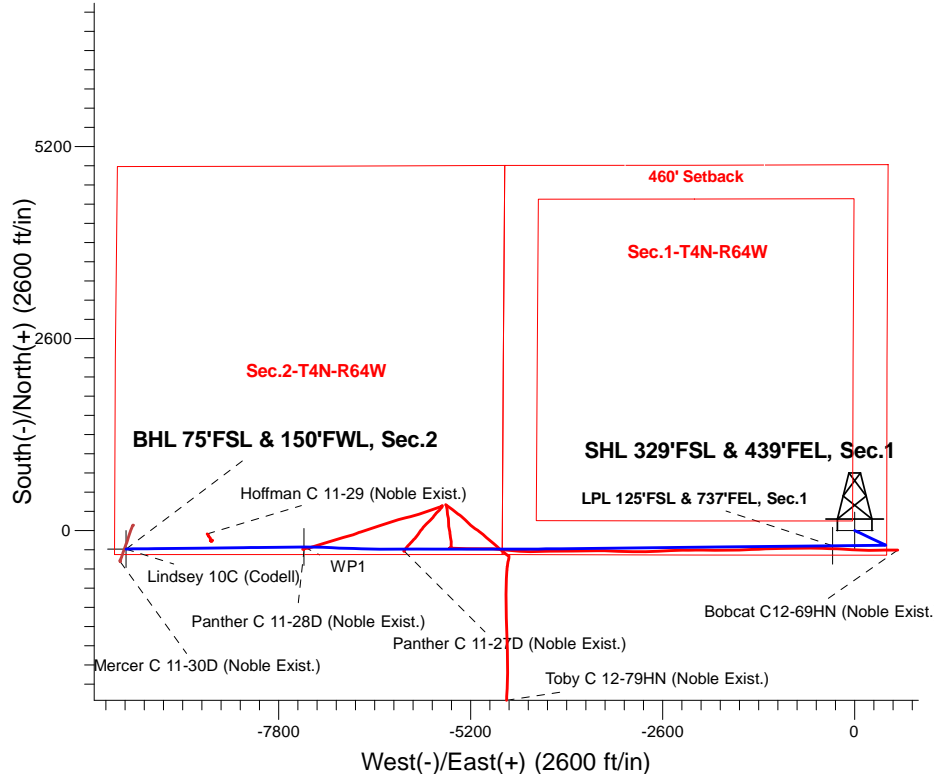
Azimuths to True North
 Magnetic North: 8.10°

Magnetic Field
 Strength: 52167.9snT
 Dip Angle: 66.88°
 Date: 4/26/2019
 Model: HDGM

Lindsey 4N64W01 Pad Sec.1-T4N-R64W
Lindsey 10C (Codell)
 Plan #2 (5-3-19)
 16:02, May 03 2019

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	Start Build 1.50
5956.8	5990.5	Start Build 8.00
6673.0	7116.6	Start 3988.3 hold at 7116.6 MD
6673.0	11104.9	Start DLS 2.00 TFO 21.93
6671.7	11194.4	Start 2200.0 hold at 11194.4 MD
6608.0	13394.4	Start DLS 2.00 TFO 90.27
6605.0	13497.3	Start 644.5 hold at 13497.3 MD
6586.5	14141.8	Start DLS 2.00 TFO -89.87
6582.5	14279.0	Start 2408.9 hold at 14279.0 MD
6513.0	16688.0	TD at 16688.0



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1587.9	8.82	115.18	1585.6	-19.2	40.9	1.50	115.18	-40.4	
4	4092.8	8.82	115.18	4060.8	-182.6	388.4	0.00	0.00	-383.6	
5	4533.7	0.00	0.00	4500.0	-197.0	419.0	2.00	180.00	-413.9	
6	5990.5	0.00	0.00	5956.8	-197.0	419.0	0.00	0.00	-413.9	
7	7115.5	90.00	269.36	6673.0	-205.0	-297.2	8.00	269.36	302.2	
8	7116.6	90.00	269.36	6673.0	-205.0	-298.3	0.00	0.00	303.4	LPL 125'FSL & 737'FEL, Sec.1
9	11104.9	90.00	269.36	6673.0	-249.5	-4286.4	0.00	0.00	4291.3	
10	11194.4	91.66	270.03	6671.7	-249.9	-4375.9	2.00	21.93	4380.8	
11	13394.4	91.66	270.03	6608.0	-248.8	-6574.9	0.00	0.00	6579.1	
12	13497.3	91.65	272.09	6605.0	-246.9	-6677.7	2.00	90.27	6681.8	
13	14141.8	91.65	272.09	6586.5	-223.4	-7321.5	0.00	0.00	7324.8	
14	14279.0	91.65	269.34	6582.5	-221.7	-7458.7	2.00	-89.87	7461.9	WP1
15	16688.0	91.65	269.34	6513.0	-249.4	-9866.5	0.00	0.00	9869.6	BHL 75'FSL & 150'FWL, Sec.2



Directional

PDC Energy Inc. DJ Basin

SEC.1-T4N-R64W

Lindsey 4N64W01 Pad Sec.1-T4N-R64W

Lindsey 10C (Codell)

Lindsey 10N Wellbore #1

Plan #2 (5-3-19)

Anticollision Report

03 May, 2019



Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Lindsey 10C (Codell)
Project:	SEC.1-T4N-R64W	TVD Reference:	WELL @ 4633.0ft (RKB - 23')
Reference Site:	Lindsey 4N64W01 Pad Sec.1-T4N-R64W	MD Reference:	WELL @ 4633.0ft (RKB - 23')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Lindsey 10C (Codell)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lindsey 10N Wellbore #1	Database:	US_EDM
Reference Design:	Plan #2 (5-3-19)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (5-3-19)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 800.0 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	5/3/2019		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	16,688.0	Plan #2 (5-3-19) (Lindsey 10N Wellbore #1	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Existing Wells Sec.2-T4N-R64W GRID						
Bobcat C12-69HN (Noble Exist.) - Wellbore #1 - Wellbore	6,640.6	11,858.2	66.2	-144.0	0.315	Level 1, CC, ES, SF
Hoffman C 11-29 (Noble Exist.) - Wellbore #1 - Wellbore	15,573.2	6,535.2	178.0	-147.4	0.547	Level 1, CC, ES, SF
Panther C 11-27D (Noble Exist.) - Wellbore #1 - Wellbore	12,920.2	6,725.8	31.7	-205.3	0.134	Level 1, CC, ES, SF
Panther C 11-28D (Noble Exist.) - Wellbore #1 - Wellbore	14,279.4	7,101.3	30.9	-282.7	0.098	Level 1, CC, ES, SF
Toby C 12-79HN (Noble Exist.) - Wellbore #1 - Wellbore	11,538.0	6,549.7	440.3	302.6	3.196	CC, ES
Toby C 12-79HN (Noble Exist.) - Wellbore #1 - Wellbore	11,600.0	6,551.1	444.7	305.0	3.184	SF
Lindsey 4N64W01 Pad Sec.1-T4N-R64W						
Lindsey 1C (Codell) - Lindsey 1C Wellbore #1 - Plan #5 (200.0	200.0	134.8	134.0	163.186	CC, ES
Lindsey 1C (Codell) - Lindsey 1C Wellbore #1 - Plan #5 (1,000.0	963.1	213.6	208.1	38.722	SF
Lindsey 2N (Nio B) - Lindsey 2N Wellbore #1 - Plan #3 (4	400.0	400.0	120.2	118.3	62.374	CC, ES
Lindsey 2N (Nio B) - Lindsey 2N Wellbore #1 - Plan #3 (4	1,000.0	977.9	164.5	159.2	31.119	SF
Lindsey 3N (Nio C) - Lindsey 3N Wellbore #1 - Plan #4 (4	600.0	600.0	105.7	102.6	34.884	CC, ES
Lindsey 3N (Nio C) - Lindsey 3N Wellbore #1 - Plan #4 (4	1,100.0	1,084.5	136.7	130.9	23.787	SF
Lindsey 4N (Nio B) - Lindsey 4N Wellbore #1 - Plan #3 (4	800.0	800.0	87.4	83.3	21.170	CC, ES
Lindsey 4N (Nio B) - Lindsey 4N Wellbore #1 - Plan #3 (4	1,100.0	1,093.1	98.8	93.0	17.191	SF
Lindsey 5N (Nio C) - Lindsey 5N Wellbore #1 - Plan #3 (4	1,000.0	1,000.0	72.9	67.6	13.928	CC, ES
Lindsey 5N (Nio C) - Lindsey 5N Wellbore #1 - Plan #3 (4	1,200.0	1,196.4	79.7	73.5	12.739	SF
Lindsey 6N (Nio B) - Lindsey 6N Wellbore #1 - Plan #4 (4	1,000.0	1,000.0	58.3	53.1	11.143	CC, ES
Lindsey 6N (Nio B) - Lindsey 6N Wellbore #1 - Plan #4 (4	1,300.0	1,298.5	65.1	58.4	9.600	SF
Lindsey 7N (Nio C) - Lindsey 7N Wellbore #1 - Plan #3 (4	1,000.0	1,000.0	43.7	38.5	8.357	CC, ES
Lindsey 7N (Nio C) - Lindsey 7N Wellbore #1 - Plan #3 (4	16,688.0	16,611.9	798.2	107.6	1.156	Level 2, SF
Lindsey 8N (Nio B) - Lindsey 8N Wellbore #1 - Plan #4 (4	1,000.0	1,000.0	29.1	23.9	5.572	CC
Lindsey 8N (Nio B) - Lindsey 8N Wellbore #1 - Plan #4 (4	16,688.0	16,539.8	532.5	-160.8	0.768	Level 1, ES, SF
Lindsey 9N (Nio C) - Lindsey 9N Wellbore #1 - Plan #1 (4	1,000.0	1,000.0	14.6	9.3	2.787	CC
Lindsey 9N (Nio C) - Lindsey 9N Wellbore #1 - Plan #1 (4	16,688.0	16,599.1	277.7	-389.2	0.416	Level 1, ES, SF
Mercer Pad Sec.2-T4N-R64W						
Mercer C 11-30D (Noble Exist.) - Mercer C 11-30D - Merc	16,688.0	6,562.1	184.5	-179.4	0.507	Level 1, CC, ES, SF