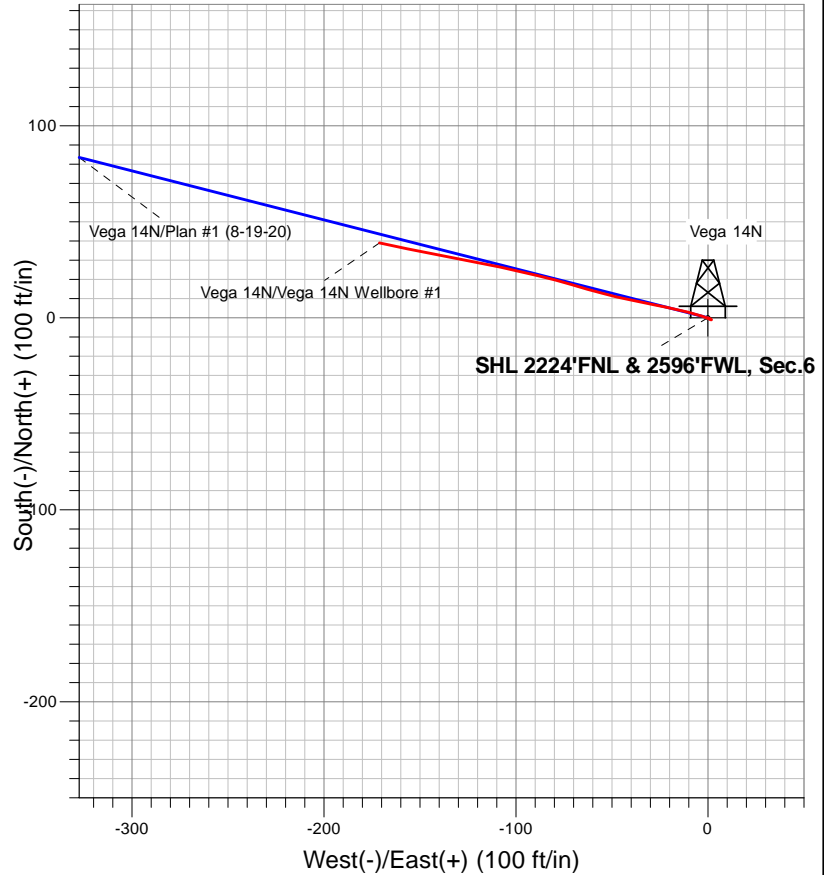


PDC Energy Inc. DJ Basin

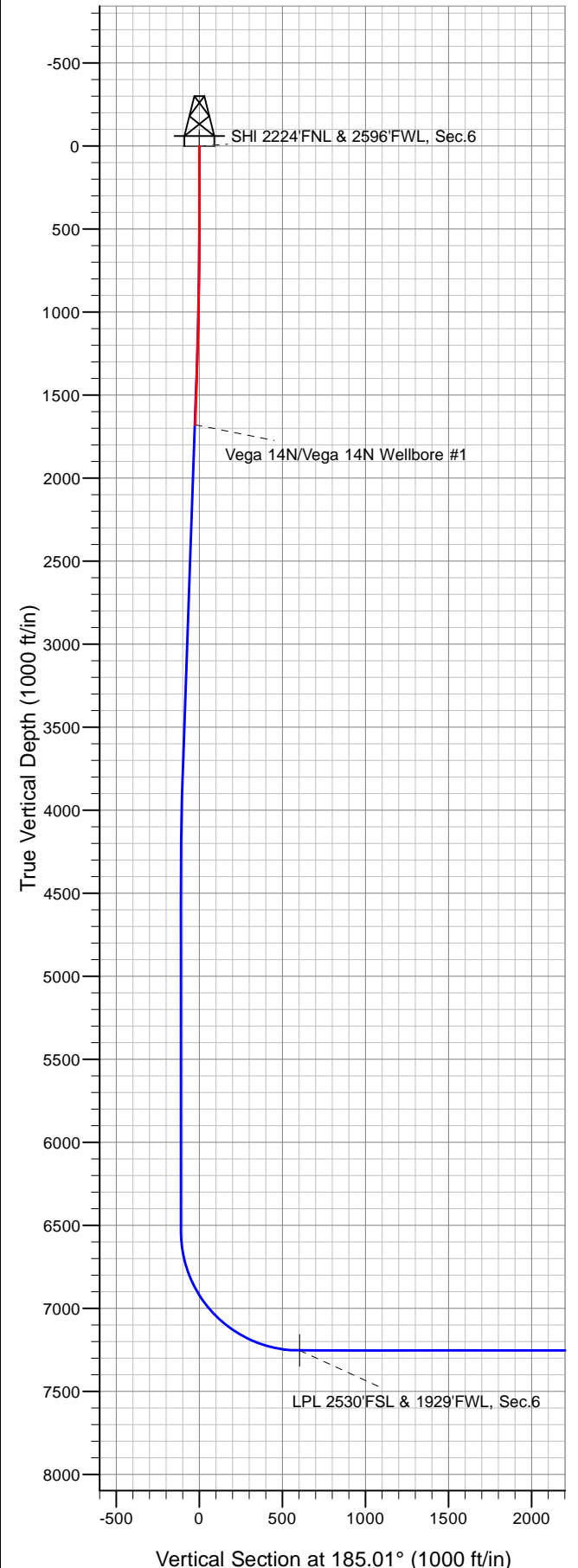


LEGEND

- ▲ Vega 14N, Vega 14N Wellbore #1, Plan #1 (8-19-20) V0
- Vega 14N Wellbore #1

Final Survey Plot

Project: SEC.6-T3N-R65W
 Site: Vega 3N65W06 1-16 Pad
 Well: Vega 14N
 Plan: Vega 14N Wellbore #1





PDC Energy Inc. DJ Basin

SEC.6-T3N-R65W

Vega 3N65W06 1-16 Pad

Vega 14N

Vega 14N Wellbore #1

Design: Vega 14N Wellbore #1

Standard Survey Report

01 December, 2020

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Vega 14N
Project:	SEC.6-T3N-R65W	TVD Reference:	WELL @ 4988.0ft (Original Well Elev)
Site:	Vega 3N65W06 1-16 Pad	MD Reference:	WELL @ 4988.0ft (Original Well Elev)
Well:	Vega 14N	North Reference:	True
Wellbore:	Vega 14N Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Vega 14N Wellbore #1	Database:	US_EDM

Project	SEC.6-T3N-R65W		
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		Vega 3N65W06 1-16 Pad						
Site Position:		Northing:	1,336,847.37	usft	Latitude:	40.255324		
From:	Lat/Long	Easting:	3,221,506.77	usft	Longitude:	-104.706356		
Position Uncertainty:	0.0	ft	Slot Radius:	13-3/16	"	Grid Convergence:	0.51	°

Well	Vega 14N					
Well Position	+N/-S	0.0 ft	Northing:	1,336,937.30 usft	Latitude:	40.255571
	+E/-W	0.0 ft	Easting:	3,221,505.63 usft	Longitude:	-104.706358
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,975.0 ft

Wellbore	Vega 14N Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	08/19/2020	7.98	66.62	52,045

Design	Vega 14N 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	185.01	

Survey Program	Date	12/01/2020			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
148.0	1,696.0	Survey #1 (Vega 14N 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	
148.0	0.26	122.77	148.0	-0.2	0.3	0.2	0.18	0.18	0.00	
240.0	0.35	107.47	240.0	-0.4	0.7	0.3	0.13	0.10	-16.63	
331.0	0.35	116.09	331.0	-0.6	1.2	0.5	0.06	0.00	9.47	
450.0	0.35	121.89	450.0	-0.9	1.9	0.8	0.03	0.00	4.87	
540.0	0.62	279.56	540.0	-1.0	1.6	0.9	1.06	0.30	175.19	
629.0	1.76	298.90	629.0	-0.3	0.0	0.3	1.34	1.28	21.73	
718.0	3.08	285.36	717.9	1.0	-3.5	-0.7	1.61	1.48	-15.21	
807.0	4.92	285.19	806.7	2.7	-9.5	-1.8	2.07	2.07	-0.19	
897.0	6.33	282.37	896.2	4.7	-18.1	-3.1	1.60	1.57	-3.13	

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Vega 14N
Project:	SEC.6-T3N-R65W	TVD Reference:	WELL @ 4988.0ft (Original Well Elev)
Site:	Vega 3N65W06 1-16 Pad	MD Reference:	WELL @ 4988.0ft (Original Well Elev)
Well:	Vega 14N	North Reference:	True
Wellbore:	Vega 14N Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Vega 14N 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)	
985.0	7.39	281.14	983.6	6.9	-28.4	-4.4	1.22	1.20	-1.40	
1,071.0	8.97	281.85	1,068.7	9.3	-40.4	-5.8	1.84	1.84	0.83	
1,161.0	10.11	284.66	1,157.5	12.8	-54.9	-7.9	1.37	1.27	3.12	
1,251.0	11.17	286.42	1,245.9	17.2	-70.9	-11.0	1.23	1.18	1.96	
1,340.0	12.57	283.43	1,333.0	21.9	-88.6	-14.1	1.72	1.57	-3.36	
1,430.0	13.37	282.55	1,420.7	26.4	-108.3	-16.9	0.92	0.89	-0.98	
1,520.0	13.72	280.09	1,508.2	30.6	-128.9	-19.2	0.75	0.39	-2.73	
1,636.0	14.33	282.02	1,620.8	36.0	-156.5	-22.2	0.66	0.53	1.66	
1,696.0	14.33	282.02	1,678.9	39.1	-171.0	-24.0	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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