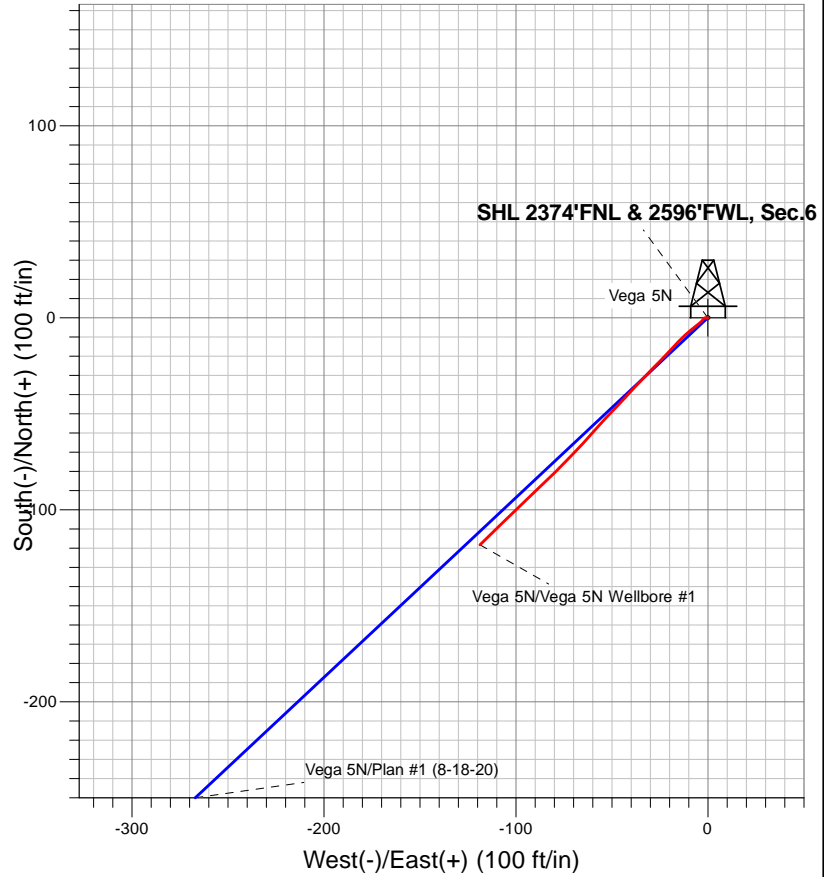
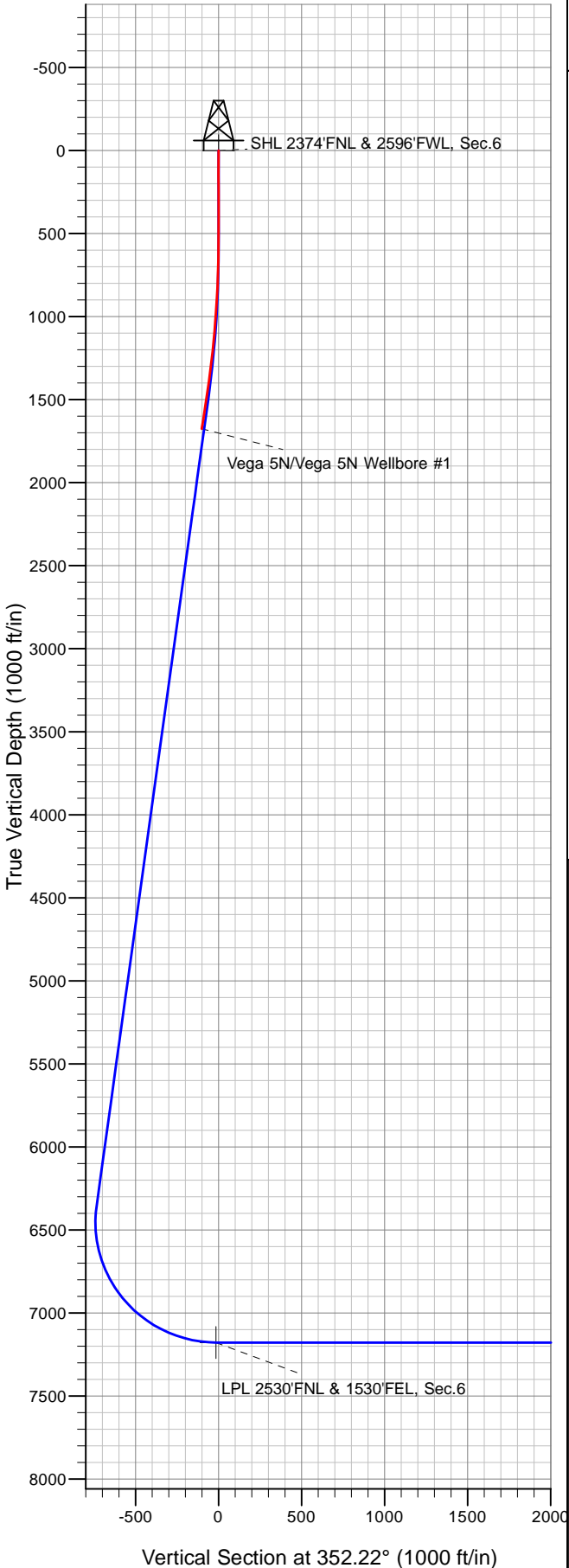


PDC Energy Inc. DJ Basin



LEGEND

- Vega 5N, Vega 5N Wellbore #1, Plan #1 (8-18-20) V0
- Vega 5N Wellbore #1

Final Survey Plot

Project: SEC.6-T3N-R65W
 Site: Vega 3N65W06 1-16 Pad
 Well: Vega 5N
 Plan: Vega 5N Wellbore #1



PDC Energy Inc. DJ Basin

SEC.6-T3N-R65W

Vega 3N65W06 1-16 Pad

Vega 5N

Vega 5N Wellbore #1

Design: Vega 5N Wellbore #1

Standard Survey Report

02 December, 2020

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Vega 5N
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 5N	North Reference:	True
Wellbore:	Vega 5N Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Vega 5N 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 5N					
Well Position	+N/-S	0.0 ft	Northing:	1,336,787.33 usft	Latitude:	40.255159
	+E/-W	0.0 ft	Easting:	3,221,507.56 usft	Longitude:	-104.706356
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,975.0 ft

Wellbore	Vega 5N Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	08/18/2020	7.98	66.62	52,045

Design	Vega 5N 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 (°)	
	7,178.0	0.0	0.0	352.22	

Survey Program	Date	12/02/2020			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
147.0	1,691.0	Survey #1 (Vega 5N 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	
147.0	0.18	259.87	147.0	0.0	-0.2	0.0	0.12	0.12	0.00	
239.0	0.26	279.03	239.0	0.0	-0.6	0.0	0.12	0.09	20.83	
330.0	0.09	224.19	330.0	-0.1	-0.8	0.1	0.24	-0.19	-60.26	
450.0	0.18	289.93	450.0	-0.1	-1.1	0.1	0.14	0.08	54.78	
539.0	0.35	278.16	539.0	0.0	-1.5	0.2	0.20	0.19	-13.22	
628.0	1.32	218.04	628.0	-0.7	-2.4	-0.4	1.33	1.09	-67.55	
717.0	2.99	229.99	716.9	-3.0	-4.8	-2.4	1.93	1.88	13.43	
806.0	4.40	231.05	805.7	-6.7	-9.2	-5.4	1.59	1.58	1.19	
896.0	6.07	224.00	895.4	-12.3	-15.2	-10.1	1.99	1.86	-7.83	

Company:	PDC Energy Inc. DJ Basin	Local Co-ordinate Reference:	Well Vega 5N
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 5N	North Reference:	True
Wellbore:	Vega 5N Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Vega 5N 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	6.24	223.14	983.8	-19.2	-21.8	-16.1	0.22	0.19	-0.97	
1,070.0	7.91	225.07	1,068.2	-26.7	-29.1	-22.5	1.98	1.96	2.27	
1,161.0	8.44	222.26	1,158.3	-36.1	-38.0	-30.6	0.73	0.58	-3.09	
1,250.0	9.94	224.02	1,246.1	-46.4	-47.7	-39.5	1.71	1.69	1.98	
1,339.0	11.52	221.55	1,333.6	-58.6	-59.0	-50.1	1.85	1.78	-2.78	
1,429.0	13.01	223.66	1,421.5	-72.6	-71.9	-62.2	1.73	1.66	2.34	
1,519.0	14.60	227.00	1,508.9	-87.7	-87.2	-75.1	1.98	1.77	3.71	
1,631.0	14.86	225.42	1,617.2	-107.4	-107.8	-91.8	0.43	0.23	-1.41	
1,691.0	14.86	225.42	1,675.2	-118.2	-118.7	-101.1	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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