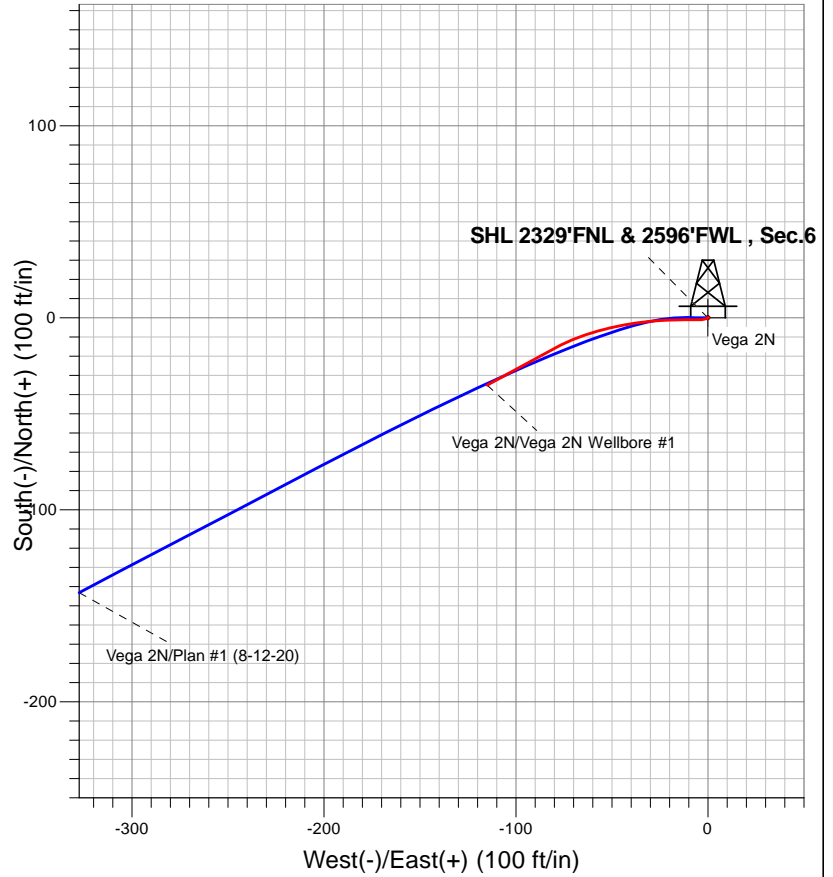


## PDC Energy Inc. DJ Basin

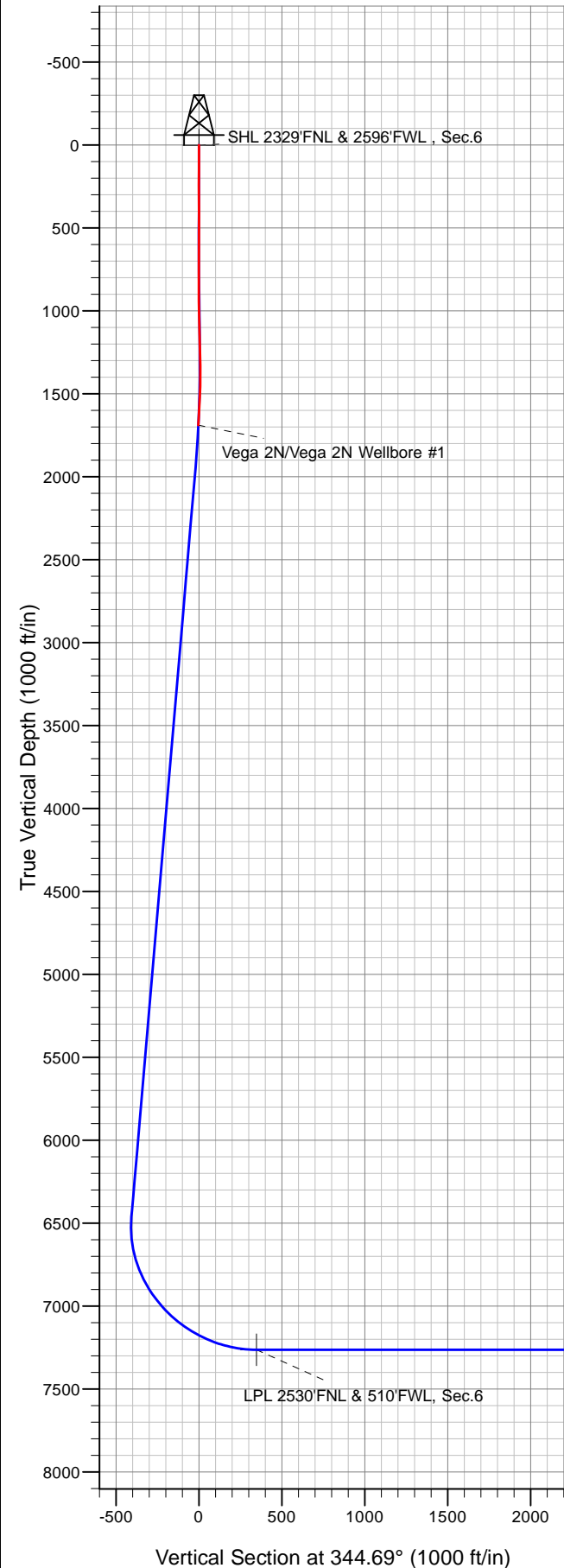


### LEGEND

- ▲— Vega 2N, Vega 2N Wellbore #1, Plan #1 (8-12-20) V0
- Vega 2N Wellbore #1

## Final Survey Plot

Project: SEC.6-T3N-R65W  
 Site: Vega 3N65W06 1-16 Pad  
 Well: Vega 2N  
 Plan: Vega 2N Wellbore #1





## **PDC Energy Inc. DJ Basin**

**SEC.6-T3N-R65W**

**Vega 3N65W06 1-16 Pad**

**Vega 2N**

**Vega 2N Wellbore #1**

**Design: Vega 2N Wellbore #1**

## **Standard Survey Report**

**02 December, 2020**

<b>Company:</b>	PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Vega 2N
<b>Project:</b>	SEC.6-T3N-R65W	<b>TVD Reference:</b>	WELL @ 4988.0ft (Original Well Elev)
<b>Site:</b>	Vega 3N65W06 1-16 Pad	<b>MD Reference:</b>	WELL @ 4988.0ft (Original Well Elev)
<b>Well:</b>	Vega 2N	<b>North Reference:</b>	True
<b>Wellbore:</b>	Vega 2N Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Vega 2N Wellbore #1	<b>Database:</b>	US_EDM

<b>Project</b>	SEC.6-T3N-R65W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	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 2N					
Well Position	+N/-S	0.0 ft	Northing:	1,336,832.32 usft	Latitude:	40.255283
	+E/-W	0.0 ft	Easting:	3,221,506.99 usft	Longitude:	-104.706356
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,975.0 ft

<b>Wellbore</b>	Vega 2N Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	08/12/2020	7.98	66.62	52,047

<b>Design</b>	Vega 2N Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	344.69	

<b>Survey Program</b>	<b>Date</b>	12/02/2020			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
148.0	1,700.0	Survey #1 (Vega 2N Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
148.0	0.09	62.82	148.0	0.1	0.1	0.0	0.06	0.06	0.00	
240.0	0.09	148.08	240.0	0.0	0.2	0.0	0.13	0.00	92.67	
331.0	0.26	328.78	331.0	0.1	0.1	0.1	0.38	0.19	-197.03	
450.0	0.09	93.06	450.0	0.4	0.1	0.3	0.27	-0.14	104.44	
540.0	0.09	163.19	540.0	0.3	0.2	0.2	0.11	0.00	77.92	
629.0	0.26	203.80	629.0	0.0	0.1	0.0	0.23	0.19	45.63	
718.0	0.18	251.44	718.0	-0.2	-0.1	-0.2	0.22	-0.09	53.53	
807.0	0.09	235.97	807.0	-0.3	-0.3	-0.2	0.11	-0.10	-17.38	
897.0	1.76	253.72	897.0	-0.7	-1.7	-0.2	1.86	1.86	19.72	

<b>Company:</b>	PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Vega 2N
<b>Project:</b>	SEC.6-T3N-R65W	<b>TVD Reference:</b>	WELL @ 4988.0ft (Original Well Elev)
<b>Site:</b>	Vega 3N65W06 1-16 Pad	<b>MD Reference:</b>	WELL @ 4988.0ft (Original Well Elev)
<b>Well:</b>	Vega 2N	<b>North Reference:</b>	True
<b>Wellbore:</b>	Vega 2N Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Vega 2N Wellbore #1	<b>Database:</b>	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	3.43	272.71	984.9	-1.0	-5.6	0.6	2.11	1.90	21.58	
1,071.0	5.36	268.31	1,070.6	-0.9	-12.2	2.3	2.28	2.24	-5.12	
1,161.0	6.60	268.49	1,160.1	-1.2	-21.6	4.5	1.38	1.38	0.20	
1,251.0	8.44	263.21	1,249.4	-2.1	-33.3	6.7	2.18	2.04	-5.87	
1,340.0	9.85	258.29	1,337.2	-4.4	-47.2	8.2	1.81	1.58	-5.53	
1,430.0	10.99	252.32	1,425.8	-8.6	-62.9	8.3	1.74	1.27	-6.63	
1,520.0	11.96	241.59	1,514.0	-15.7	-79.3	5.8	2.60	1.08	-11.92	
1,640.0	13.54	241.42	1,631.0	-28.3	-102.6	-0.2	1.32	1.32	-0.14	
1,700.0	13.54	241.42	1,689.3	-35.0	-114.9	-3.4	0.00	0.00	0.00	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_