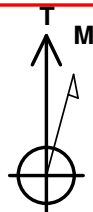




Well Name: Huron 3N  
Surface Location: Huron 5N64W22  
North American Datum 1983  
US State Plane 1983 , Colorado Northern Zone  
Ground Elevation: 4598.0  
WELL @ 4621.0usft (Original Well Elev)  
Northing 1382242.81 Easting 3270720.04 Latitude 40° 22' 42.911 N Longitude 104° 31' 41.732 W Slot

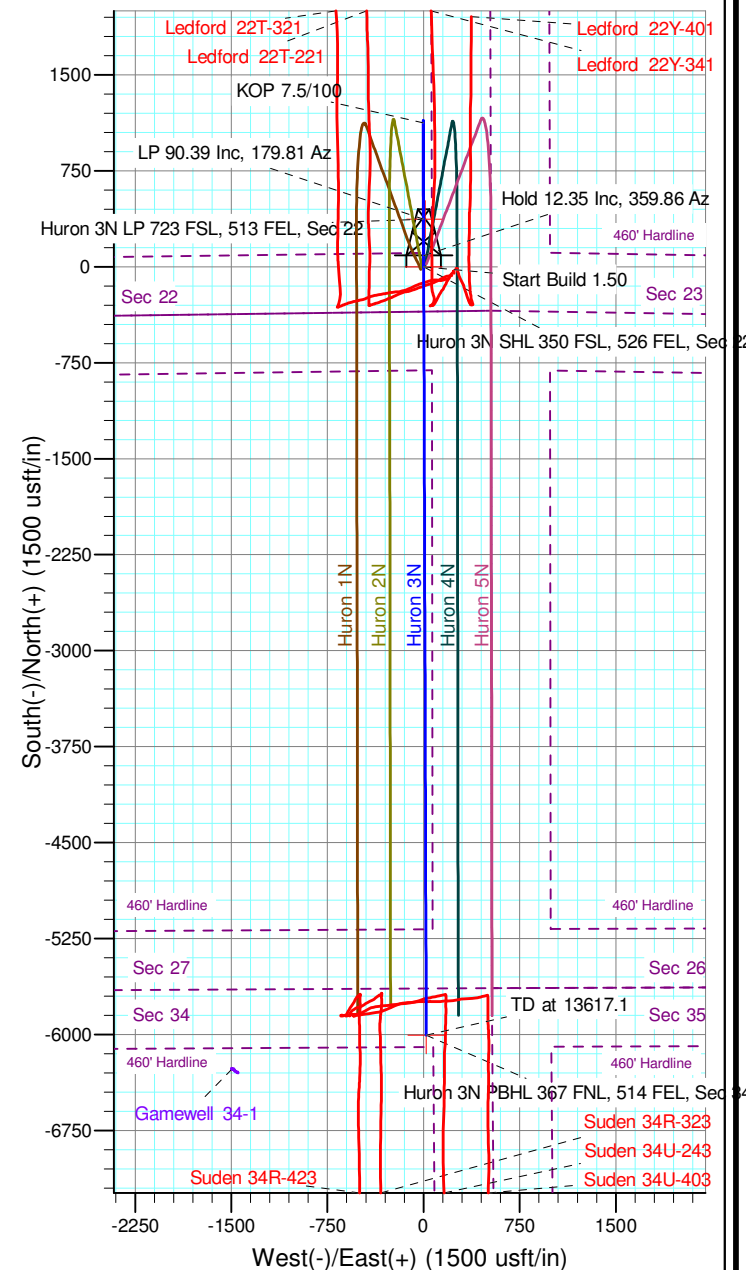
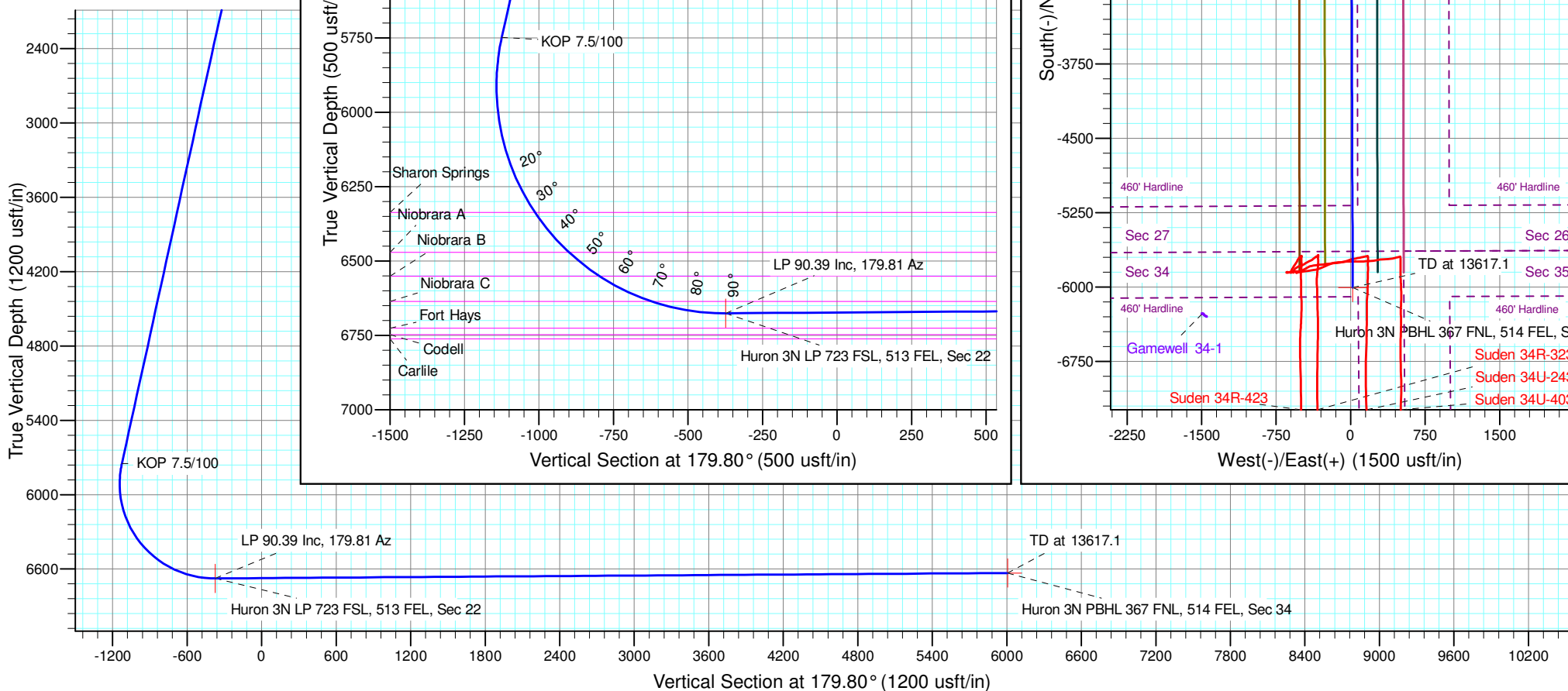
#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1023.6	12.35	359.86	1017.2	88.4	-0.2	1.50	359.86	-88.4	
4	5867.1	12.35	359.86	5748.6	1124.7	-2.7	0.00	0.00	-1124.7	
5	7237.1	90.39	179.81	6676.0	373.2	0.0	7.50	179.95	-373.2	
6	13617.1	90.39	179.81	6632.6	-6006.6	21.2	0.00	0.00	6006.6	



Azimuths to True North  
Magnetic North: 8.08°

Magnetic Field  
Strength: 52408.9nT  
Dip Angle: 66.87°  
Date: 06/13/2017  
Model: IGRF2015



# **PDC Energy Inc. DJ Basin**

**SEC. 22 T5N-R64W**

**Huron 5N64W22**

**Huron 3N**

**Wellbore #1**

**Plan #2 20Jul17 kjs**

## **Anticollision Report**

**20 July, 2017**

<b>Company:</b>	PDC Energy Inc. DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Huron 3N
<b>Project:</b>	SEC. 22 T5N-R64W	<b>TVD Reference:</b>	WELL @ 4621.0usft (Original Well Elev)
<b>Reference Site:</b>	Huron 5N64W22	<b>MD Reference:</b>	WELL @ 4621.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Huron 3N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.45 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	Plan #2 20Jul17 kjs	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2 20Jul17 kjs		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,682.5 usft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.45 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	07/20/17		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	13,617.1	Plan #2 20Jul17 kjs (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Existing Wells Sec 34 T5N R64W						
Gamewell 34-1 - Wellbore #1 - Wellbore #1	13,617.1	6,500.0	1,551.6	1,385.3	9.330	CC, ES, SF
Suden 34R-323 - Wellbore #1 - Wellbore #1	13,617.1	6,768.7	364.9	198.0	2.185	CC, ES, SF
Suden 34R-423 - Wellbore #1 - Wellbore #1	13,617.1	6,802.5	520.5	352.1	3.090	CC, ES, SF
Suden 34U-243 - Wellbore #1 - Wellbore #1	13,617.1	6,766.1	211.6	72.3	1.519	CC, ES, SF
Suden 34U-403 - Wellbore #1 - Wellbore #1	13,617.1	6,864.2	487.5	316.9	2.858	CC, ES, SF
Existing Wells Sec. 22-T5N-R64W						
Ledford 22T-221 - Wellbore #1 - Wellbore #1	218.7	196.1	230.8	229.9	269.010	CC
Ledford 22T-221 - Wellbore #1 - Wellbore #1	300.0	277.1	231.1	229.9	179.900	ES
Ledford 22T-221 - Wellbore #1 - Wellbore #1	6,800.0	7,401.8	418.0	365.8	8.006	SF
Ledford 22T-321 - Wellbore #1 - Wellbore #1	255.4	233.7	220.1	219.1	231.866	CC
Ledford 22T-321 - Wellbore #1 - Wellbore #1	300.0	278.2	220.2	219.0	185.059	ES
Ledford 22T-321 - Wellbore #1 - Wellbore #1	6,800.0	7,489.9	678.8	626.3	12.939	SF
Ledford 22Y-341 - Wellbore #1 - Wellbore #1	7,300.0	6,965.0	67.7	23.9	1.546	ES, SF
Ledford 22Y-341 - Wellbore #1 - Wellbore #1	7,332.2	6,934.7	67.1	24.0	1.558	CC
Ledford 22Y-401 - Wellbore #1 - Wellbore #1	0.0	0.0	260.1			
Ledford 22Y-401 - Wellbore #1 - Wellbore #1	100.0	89.4	260.1	259.9	1,184.110	ES
Ledford 22Y-401 - Wellbore #1 - Wellbore #1	7,000.0	7,291.2	381.1	334.2	8.113	SF
Huron 5N64W22						
Huron 1N - Wellbore #1 - Plan #2 20Jul17 kjs	200.0	200.0	30.0	29.2	39.335	CC
Huron 1N - Wellbore #1 - Plan #2 20Jul17 kjs	300.0	300.3	30.5	29.2	23.172	ES
Huron 1N - Wellbore #1 - Plan #2 20Jul17 kjs	13,500.0	13,455.1	536.6	242.2	1.823	SF
Huron 2N - Wellbore #1 - Plan #2 20Jul17 kjs	200.0	200.0	15.0	14.2	19.667	CC
Huron 2N - Wellbore #1 - Plan #2 20Jul17 kjs	13,400.0	13,345.2	285.9	1.6	1.006	Level 2, ES, SF
Huron 4N - Wellbore #1 - Plan #2 20Jul17 kjs	200.0	200.0	15.0	14.2	19.666	CC
Huron 4N - Wellbore #1 - Plan #2 20Jul17 kjs	13,451.7	13,376.0	260.4	-25.1	0.912	Level 1, ES, SF
Huron 5N - Wellbore #1 - Plan #2 20Jul17 kjs	200.0	200.0	30.0	29.2	39.334	CC
Huron 5N - Wellbore #1 - Plan #2 20Jul17 kjs	300.0	299.3	30.3	28.9	23.062	ES
Huron 5N - Wellbore #1 - Plan #2 20Jul17 kjs	13,500.0	13,499.2	515.0	219.3	1.742	SF