



Project: WELD COUNTY, COLORADO  
Site: SE NW SEC. 6 T3N R65W 6th P.M.  
Well: VEGA 9N  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 2299ft FNL & 2596ft FWL of Sec 6	
1000.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (3°/100ft BUR)	
1922.84	1963.14	28.89	275.73	23.72	-236.57	47.74	237.75	EOB TO 28.89° INC	
5418.96	5956.38	28.89	275.73	216.23	-2156.46	435.16	2167.27	END OF TANGENT	
6341.80	6919.53	0.00	0.00	239.95	-2393.02	482.89	2405.02	EOD TO VERTICAL	
6441.80	7019.53	0.00	0.00	239.95	-2393.02	482.89	2405.02	KOP (8°/100ft BUR)	
7158.00	8144.53	90.00	180.21	-476.24	-2395.65	1167.44	3121.22	EP: 2530ft FSL & 200ft FWL of Sec 6	
7158.00	15440.62	90.00	180.21	-7772.29	-2422.35	8141.02	10417.32	BHL: 500ft FSL & 200ft FWL of Sec 7	

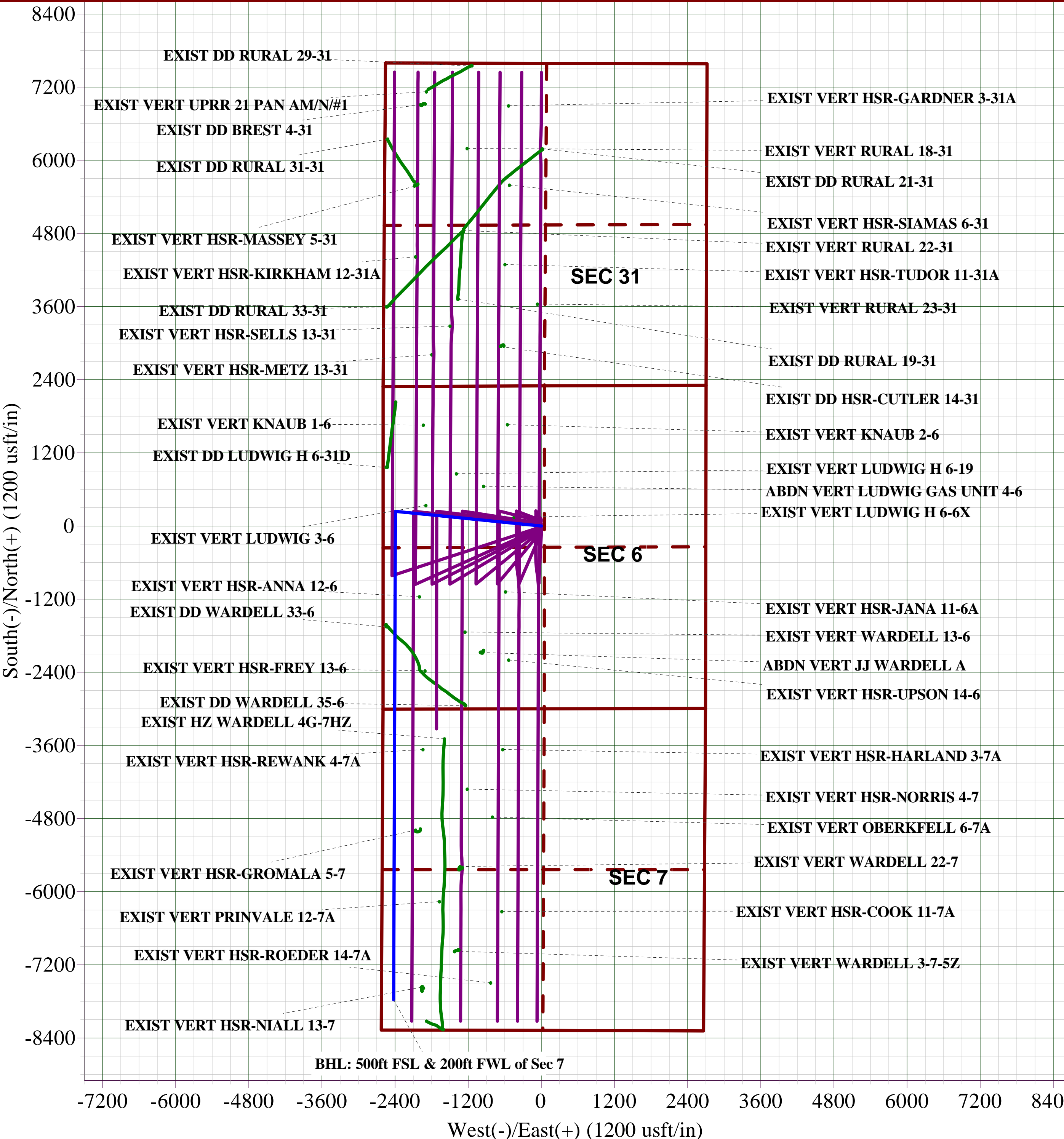
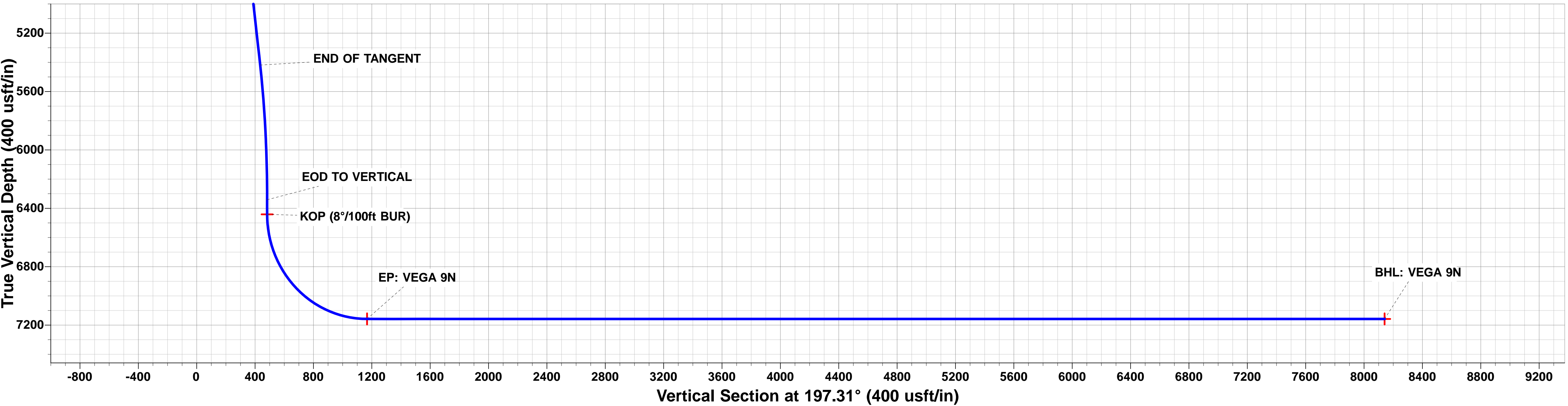
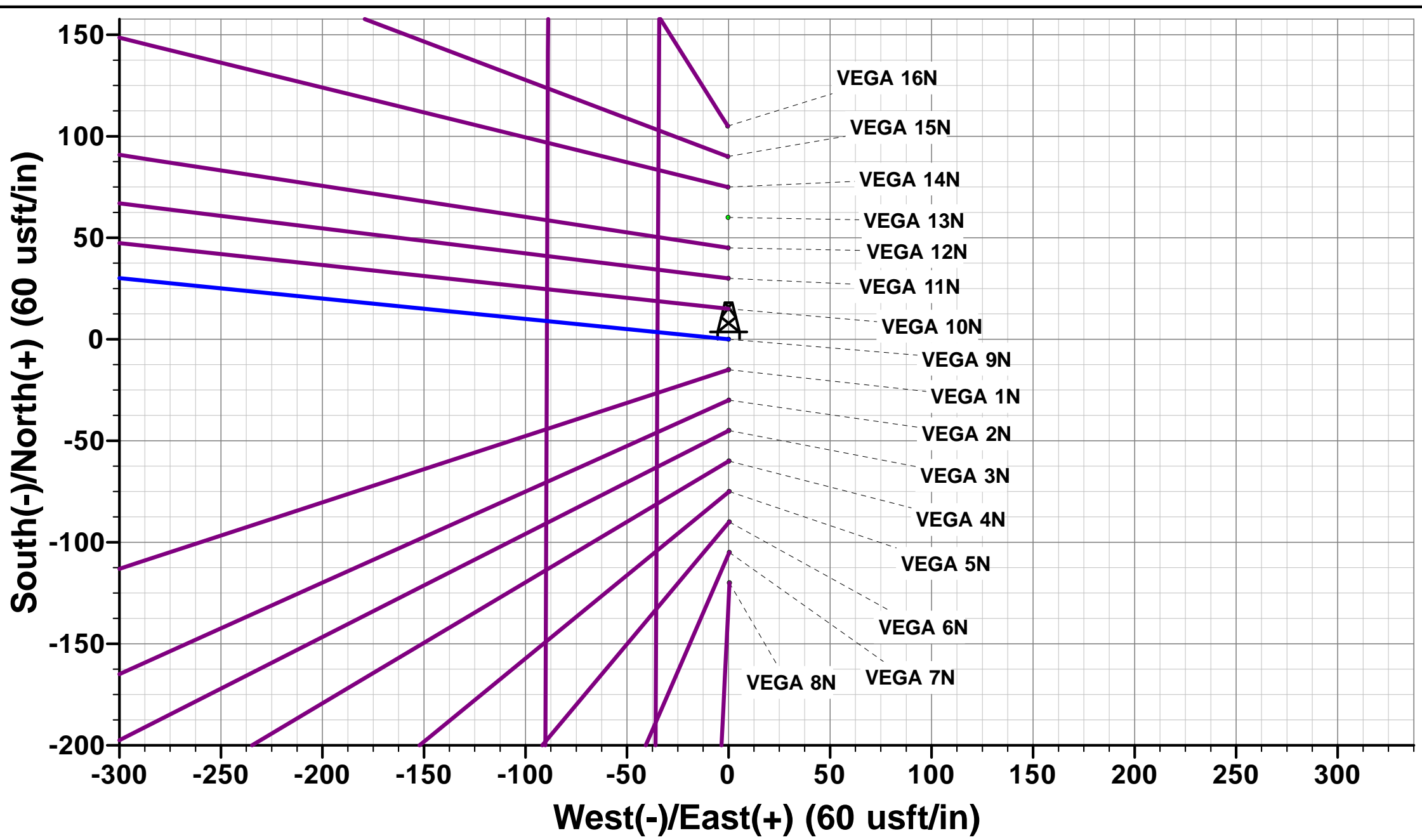
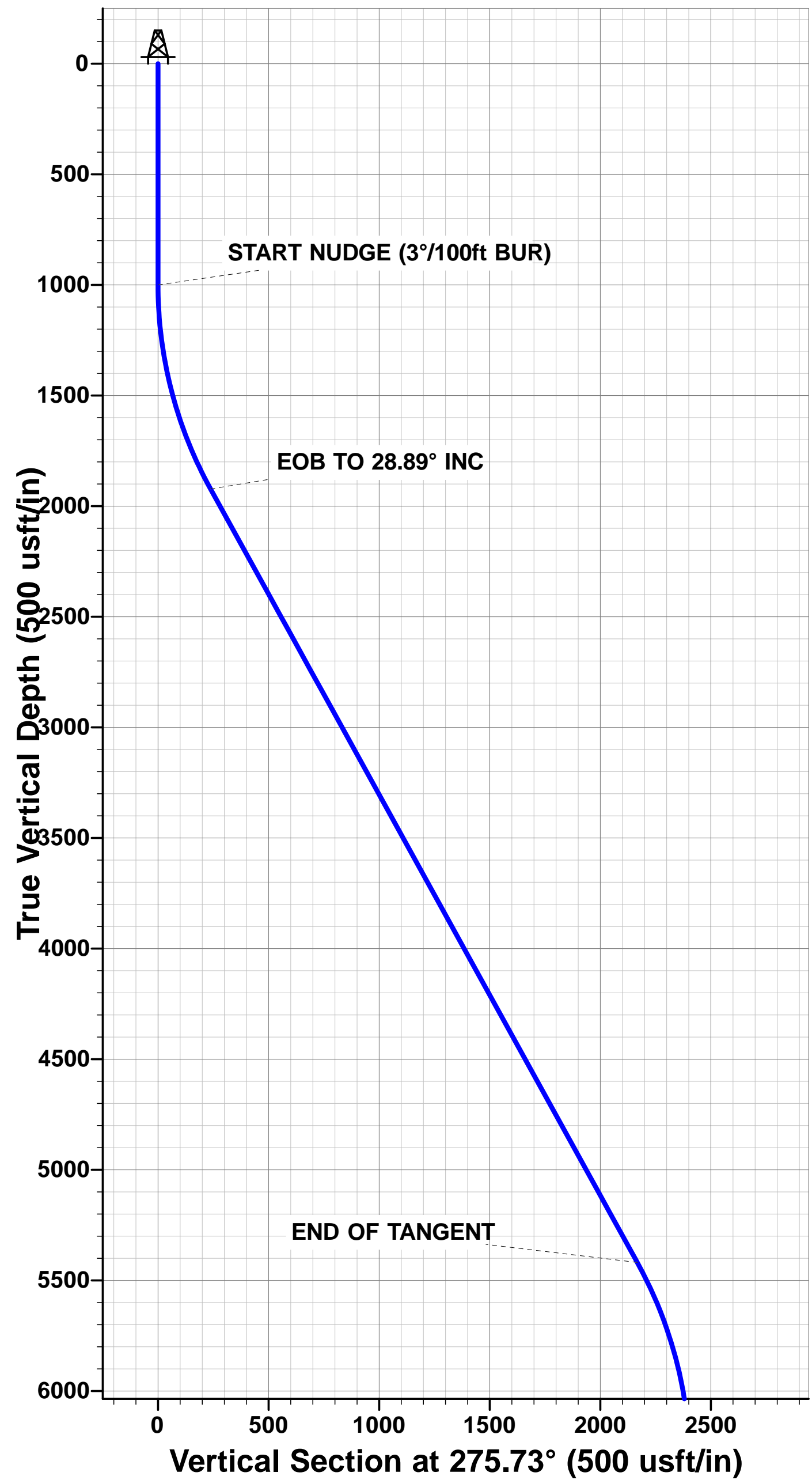
PROPOSED LOCAL COORDINATES:

SHL: 2299ft FNL & 2596ft FWL of Sec 6

EP: 2530ft FSL & 200ft FWL of Sec 6

BHL: 500ft FSL & 200ft FWL of Sec 7

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: VEGA 9N	6441.80	239.95	-2393.02	40.256023	-104.714930
EP: VEGA 9N	7158.00	-476.24	-2395.65	40.254057	-104.714939
BHL: VEGA 9N	7158.00	-7772.29	-2422.35	40.234030	-104.715032



# **PDC ENERGY**

**WELD COUNTY, COLORADO  
SE NW SEC. 6 T3N R65W 6th P.M.  
VEGA 9N**

**ORIGINAL WELLBORE  
PROPOSAL #1**

## **Anticollision Report**

**24 January, 2018**



## Anticollision Report



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well VEGA 9N
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NW SEC. 6 T3N R65W 6th P.M.	<b>MD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	VEGA 9N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PROPOSAL #1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD + Stations Interval 100.00usft	<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 9,999.98 usft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	16/01/2018		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	15,440.63	PROPOSAL #1 (ORIGINAL WELLBORE)	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
Offset Well - Wellbore - Design						
SE NW SEC. 6 T3N R65W 6th P.M.						
ABDN VERT JJ WARDELL A - Wellbore #1 - Wellbore #1	9,733.04	7,131.78	1,416.50	1,368.80	29.691	CC, ES
ABDN VERT JJ WARDELL A - Wellbore #1 - Wellbore #1	10,500.00	7,139.35	1,610.79	1,549.62	26.334	SF
ABDN VERT LUDWIG GAS UNIT 4-6 - Wellbore #1 - De	3,555.85	3,295.27	552.54	522.30	18.272	CC
ABDN VERT LUDWIG GAS UNIT 4-6 - Wellbore #1 - De	3,600.00	3,333.92	552.95	522.17	17.965	ES
ABDN VERT LUDWIG GAS UNIT 4-6 - Wellbore #1 - De	3,900.00	3,596.58	577.02	543.25	17.087	SF
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	6,591.71	5,800.00	6,673.03	6,618.98	123.455	CC
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	6,600.00	5,800.00	6,673.04	6,618.96	123.393	ES
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	7,019.53	6,124.81	6,679.66	6,624.96	122.124	SF
EXIST DD HSR-CUTLER 14-31 - Wellbore #1 - Wellbore	3,246.10	2,996.02	2,889.27	2,868.30	137.772	CC
EXIST DD HSR-CUTLER 14-31 - Wellbore #1 - Wellbore	3,400.00	3,131.75	2,890.18	2,867.52	127.558	ES
EXIST DD HSR-CUTLER 14-31 - Wellbore #1 - Wellbore	7,019.53	6,434.90	3,204.61	3,154.71	64.227	SF
EXIST DD LUDWIG H 6-31D - Wellbore #1 - Wellbore #1	7,024.01	6,542.53	740.12	672.80	10.994	CC, ES
EXIST DD LUDWIG H 6-31D - Wellbore #1 - Wellbore #1	7,050.00	6,568.48	740.58	673.21	10.993	SF
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	5,519.15	5,197.00	3,577.67	3,520.62	62.712	CC
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	5,600.00	5,237.46	3,578.21	3,520.22	61.706	ES
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	7,050.00	6,465.53	3,627.24	3,559.28	53.378	SF
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	104.00	0.00	5,027.80	5,027.71	10,000.000	CC
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	200.00	82.00	5,028.04	5,027.65	10,000.000	ES
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	7,050.00	6,674.26	6,414.62	6,341.85	88.157	SF
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	4,153.84	3,304.71	7,227.90	7,190.75	194.566	CC
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	4,400.00	3,469.58	7,229.92	7,189.56	179.161	ES
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	7,019.53	6,139.00	7,415.73	7,346.21	106.668	SF
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	3,470.96	2,282.00	5,789.30	5,764.78	236.079	CC
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	3,600.00	2,345.00	5,790.13	5,764.12	222.536	ES
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	7,019.53	5,632.00	6,058.57	5,992.66	91.928	SF
EXIST DD RURAL 33-31 - Wellbore #1 - Wellbore #1	6,842.84	6,461.57	3,354.75	3,273.94	41.514	CC, ES
EXIST DD RURAL 33-31 - Wellbore #1 - Wellbore #1	7,019.53	6,587.56	3,356.73	3,275.71	41.429	SF
EXIST DD WARDELL 33-6 - Wellbore #1 - Wellbore #1	9,310.97	7,255.68	145.07	86.94	2.495	CC, ES, SF
EXIST DD WARDELL 35-6 - Wellbore #1 - Wellbore #1	10,611.64	7,251.70	1,161.74	1,082.52	14.665	CC, ES
EXIST DD WARDELL 35-6 - Wellbore #1 - Wellbore #1	10,900.00	7,251.20	1,196.99	1,112.57	14.179	SF
EXIST HZ WARDELL 4G-7HZ - Wellbore #1 - Wellbore #	15,441.40	7,695.95	855.32	696.03	5.370	CC, ES, SF
EXIST VERT HSR-ANNA 12-6 - Wellbore #1 - Design #1	8,828.15	7,136.00	399.70	352.09	8.395	CC, ES
EXIST VERT HSR-ANNA 12-6 - Wellbore #1 - Design #1	8,900.00	7,136.00	406.11	357.47	8.350	SF
EXIST VERT HSR-COOK 11-7A - Wellbore #1 - Design #	13,987.21	7,136.01	1,769.74	1,629.65	12.633	CC
EXIST VERT HSR-COOK 11-7A - Wellbore #1 - Design #	14,000.00	7,136.01	1,769.79	1,629.46	12.612	ES
EXIST VERT HSR-COOK 11-7A - Wellbore #1 - Design #	14,400.00	7,136.01	1,817.24	1,669.35	12.287	SF
EXIST VERT HSR-FREY 13-6 - Wellbore #1 - Design #1	10,043.49	7,136.00	495.05	427.80	7.361	CC, ES

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well VEGA 9N
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NW SEC. 6 T3N R65W 6th P.M.	<b>MD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	VEGA 9N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

## Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SE NW SEC. 6 T3N R65W 6th P.M.						
EXIST VERT HSR-FREY 13-6 - Wellbore #1 - Design #1	10,100.00	7,136.00	498.27	430.03	7.302	SF
EXIST VERT HSR-GARDNER 3-31A - Wellbore #1 - Des	3,999.97	3,684.10	6,806.48	6,770.60	189.722	CC
EXIST VERT HSR-GARDNER 3-31A - Wellbore #1 - Des	4,400.00	4,034.33	6,809.22	6,768.28	166.299	ES
EXIST VERT HSR-GARDNER 3-31A - Wellbore #1 - Des	7,050.00	6,450.26	6,909.16	6,842.40	103.494	SF
EXIST VERT HSR-GROMALA 5-7 - Wellbore #1 - Wellbo	12,659.56	7,141.80	351.95	250.99	3.486	CC, ES
EXIST VERT HSR-GROMALA 5-7 - Wellbore #1 - Wellbo	12,700.00	7,141.30	354.26	252.56	3.483	SF
EXIST VERT HSR-HARLAND 3-7A - Wellbore #1 - Design #1	11,328.50	7,136.00	1,775.42	1,685.06	19.648	CC, ES
EXIST VERT HSR-HARLAND 3-7A - Wellbore #1 - Design #1	12,000.00	7,136.00	1,898.17	1,795.39	18.468	SF
EXIST VERT HSR-JANA 11-6A - Wellbore #1 - Design #1	2,457.20	2,333.39	1,133.35	1,116.90	68.915	CC
EXIST VERT HSR-JANA 11-6A - Wellbore #1 - Design #1	2,500.00	2,370.86	1,133.54	1,116.56	66.782	ES
EXIST VERT HSR-JANA 11-6A - Wellbore #1 - Design #1	10,000.00	7,136.00	2,204.90	2,138.41	33.160	SF
EXIST VERT HSR-KIRKHAM 12-31A - Wellbore #1 - Des	7,019.53	6,419.80	4,190.29	4,122.85	62.129	CC, ES
EXIST VERT HSR-KIRKHAM 12-31A - Wellbore #1 - Des	7,050.00	6,450.26	4,190.94	4,123.47	62.121	SF
EXIST VERT HSR-MASSEY 5-31 - Wellbore #1 - Wellbo	7,025.10	6,351.66	5,354.88	5,300.09	97.746	CC, ES, SF
EXIST VERT HSR-METZ 13-31 - Wellbore #1 - Design #	5,748.83	5,215.25	2,617.49	2,559.34	45.013	CC
EXIST VERT HSR-METZ 13-31 - Wellbore #1 - Design #	5,900.00	5,347.60	2,618.51	2,558.45	43.603	ES
EXIST VERT HSR-METZ 13-31 - Wellbore #1 - Design #	7,019.53	6,419.80	2,639.23	2,572.18	39.361	SF
EXIST VERT HSR-NIALL 13-7 - Wellbore #1 - Wellbore #	15,231.57	7,142.72	459.07	309.40	3.067	CC, ES, SF
EXIST VERT HSR-NORRIS 4-7 - Wellbore #1 - Design #	11,981.25	7,136.00	1,194.62	1,092.19	11.663	CC
EXIST VERT HSR-NORRIS 4-7 - Wellbore #1 - Design #	12,000.00	7,136.00	1,194.76	1,091.98	11.624	ES
EXIST VERT HSR-NORRIS 4-7 - Wellbore #1 - Design #	12,200.00	7,136.00	1,214.48	1,107.98	11.403	SF
EXIST VERT HSR-REWANK 4-7A - Wellbore #1 - Design #	11,333.23	7,136.00	466.18	375.73	5.154	CC, ES
EXIST VERT HSR-REWANK 4-7A - Wellbore #1 - Design #	11,400.00	7,136.00	470.94	379.26	5.137	SF
EXIST VERT HSR-ROEDER 14-7A - Wellbore #1 - Design #	15,158.00	7,136.01	1,591.12	1,428.85	9.806	CC
EXIST VERT HSR-ROEDER 14-7A - Wellbore #1 - Design #	15,200.00	7,136.01	1,591.67	1,428.61	9.761	ES
EXIST VERT HSR-ROEDER 14-7A - Wellbore #1 - Design #	15,440.63	7,136.00	1,616.00	1,448.37	9.640	SF
EXIST VERT HSR-SELLS 13-31 - Wellbore #1 - Design #	5,230.87	4,761.77	3,114.87	3,063.32	60.429	CC
EXIST VERT HSR-SELLS 13-31 - Wellbore #1 - Design #	5,400.00	4,909.85	3,115.94	3,062.26	58.045	ES
EXIST VERT HSR-SELLS 13-31 - Wellbore #1 - Design #	7,019.53	6,419.80	3,169.94	3,103.32	47.578	SF
EXIST VERT HSR-SIAMAS 6-31 - Wellbore #1 - Design #	3,702.76	3,423.89	5,513.79	5,481.69	171.756	CC
EXIST VERT HSR-SIAMAS 6-31 - Wellbore #1 - Design #	4,000.00	3,684.13	5,515.66	5,479.80	153.797	ES
EXIST VERT HSR-SIAMAS 6-31 - Wellbore #1 - Design #	7,050.00	6,450.26	5,671.77	5,605.61	85.730	SF
EXIST VERT HSR-TUDOR 11-31A - Wellbore #1 - Design #	3,582.94	3,318.98	4,208.86	4,178.28	137.620	CC
EXIST VERT HSR-TUDOR 11-31A - Wellbore #1 - Design #	3,800.00	3,509.03	4,210.17	4,176.84	126.336	ES
EXIST VERT HSR-TUDOR 11-31A - Wellbore #1 - Design #	7,019.53	6,419.80	4,430.76	4,365.63	68.032	SF
EXIST VERT HSR-UPSON 14-6 - Wellbore #1 - Design #	9,860.02	7,136.00	1,867.78	1,803.70	29.150	CC
EXIST VERT HSR-UPSON 14-6 - Wellbore #1 - Design #	9,900.00	7,136.00	1,868.21	1,803.45	28.848	ES
EXIST VERT HSR-UPSON 14-6 - Wellbore #1 - Design #	10,900.00	7,136.00	2,137.79	2,055.26	25.902	SF
EXIST VERT KNAUB 1-6 - Wellbore #1 - Design #1	5,797.92	5,258.23	1,454.49	1,395.71	24.746	CC
EXIST VERT KNAUB 1-6 - Wellbore #1 - Design #1	5,900.00	5,347.60	1,455.33	1,395.28	24.237	ES
EXIST VERT KNAUB 1-6 - Wellbore #1 - Design #1	7,019.53	6,419.80	1,488.07	1,421.68	22.415	SF
EXIST VERT KNAUB 2-6 - Wellbore #1 - Design #1	2,960.26	2,773.82	1,599.23	1,576.51	70.394	CC
EXIST VERT KNAUB 2-6 - Wellbore #1 - Design #1	3,000.00	2,808.62	1,599.34	1,576.13	68.893	ES
EXIST VERT KNAUB 2-6 - Wellbore #1 - Design #1	5,600.00	5,084.95	2,045.60	1,996.59	41.741	SF
EXIST VERT LUDWIG 3-6 - Wellbore #1 - Design #1	5,439.61	4,944.52	146.46	92.25	2.702	CC, ES, SF
EXIST VERT LUDWIG H 6-19 - Wellbore #1 - Design #1	4,516.35	4,136.20	713.62	671.18	16.813	CC, ES
EXIST VERT LUDWIG H 6-19 - Wellbore #1 - Design #1	4,900.00	4,472.09	737.31	690.88	15.881	SF
EXIST VERT LUDWIG H 6-6X - Wellbore #1 - Design #1	2,420.22	2,301.01	101.56	85.57	6.351	CC, ES, SF
EXIST VERT OBERKFELL 6-7A - Wellbore #1 - Design #	12,436.59	7,136.00	1,609.16	1,498.24	14.507	CC, ES
EXIST VERT OBERKFELL 6-7A - Wellbore #1 - Design #	12,900.00	7,136.00	1,674.56	1,554.96	14.001	SF
EXIST VERT PRINVALE 12-7A - Wellbore #1 - Design #	13,827.70	7,136.01	745.94	608.86	5.442	CC, ES
EXIST VERT PRINVALE 12-7A - Wellbore #1 - Design #	13,900.00	7,136.01	749.43	610.99	5.413	SF
EXIST VERT RURAL 18-31 - Wellbore #1 - Design #1	5,257.66	4,785.22	6,042.60	5,990.71	116.456	CC

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well VEGA 9N
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NW SEC. 6 T3N R65W 6th P.M.	<b>MD Reference:</b>	WELL @ 4998.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	VEGA 9N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

## Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SE NW SEC. 6 T3N R65W 6th P.M.						
EXIST VERT RURAL 18-31 - Wellbore #1 - Design #1	5,600.00	5,084.95	6,044.86	5,988.63	107.503	ES
EXIST VERT RURAL 18-31 - Wellbore #1 - Design #1	7,050.00	6,450.26	6,070.56	6,003.32	90.280	SF
EXIST VERT RURAL 22-31 - Wellbore #1 - Design #1	5,107.85	4,654.06	4,696.28	4,646.30	93.967	CC
EXIST VERT RURAL 22-31 - Wellbore #1 - Design #1	5,400.00	4,909.85	4,698.40	4,644.72	87.531	ES
EXIST VERT RURAL 22-31 - Wellbore #1 - Design #1	7,050.00	6,450.26	4,741.37	4,674.36	70.755	SF
EXIST VERT RURAL 23-31 - Wellbore #1 - Design #1	2,351.43	2,240.79	3,616.80	3,601.66	238.766	CC
EXIST VERT RURAL 23-31 - Wellbore #1 - Design #1	2,500.00	2,370.86	3,617.52	3,600.55	213.184	ES
EXIST VERT RURAL 23-31 - Wellbore #1 - Design #1	7,019.53	6,419.80	4,123.14	4,061.29	66.665	SF
EXIST VERT UPRR 21 PAN AM/N/#1 - Wellbore #1 - De	5,536.19	4,686.00	6,936.88	6,882.37	127.259	CC
EXIST VERT UPRR 21 PAN AM/N/#1 - Wellbore #1 - De	5,600.00	4,686.00	6,937.17	6,881.97	125.683	ES
EXIST VERT UPRR 21 PAN AM/N/#1 - Wellbore #1 - De	6,700.00	4,686.00	7,046.64	6,983.45	111.513	SF
EXIST VERT WARDELL 13-6 - Wellbore #1 - Design #1	9,403.61	7,136.00	1,148.73	1,092.31	20.359	CC, ES
EXIST VERT WARDELL 13-6 - Wellbore #1 - Design #1	9,800.00	7,136.00	1,215.20	1,152.16	19.275	SF
EXIST VERT WARDELL 22-7 - Wellbore #1 - Wellbore #	13,259.80	7,112.66	1,078.50	966.46	9.626	CC, ES
EXIST VERT WARDELL 22-7 - Wellbore #1 - Wellbore #	13,500.00	7,100.57	1,104.86	988.40	9.487	SF
EXIST VERT WARDELL 3-7-5Z - Wellbore #1 - Wellbore	14,645.61	7,143.09	995.63	856.66	7.164	CC, ES
EXIST VERT WARDELL 3-7-5Z - Wellbore #1 - Wellbore	14,800.00	7,139.96	1,007.52	865.65	7.101	SF
VEGA 10N - ORIGINAL WELLBORE - PROPOSAL #1	900.00	900.00	15.01	11.24	3.982	CC
VEGA 10N - ORIGINAL WELLBORE - PROPOSAL #1	1,500.00	1,498.88	15.43	8.65	2.275	ES
VEGA 10N - ORIGINAL WELLBORE - PROPOSAL #1	15,441.40	15,420.53	317.26	25.01	1.086	Level 2, SF
VEGA 11N - ORIGINAL WELLBORE - PROPOSAL #1	800.00	800.00	29.98	26.66	9.031	CC
VEGA 11N - ORIGINAL WELLBORE - PROPOSAL #1	1,900.00	1,892.76	34.51	22.97	2.990	ES
VEGA 11N - ORIGINAL WELLBORE - PROPOSAL #1	1,963.14	1,955.45	35.67	23.28	2.879	SF
VEGA 12N - ORIGINAL WELLBORE - PROPOSAL #1	700.00	700.00	45.03	42.16	15.688	CC
VEGA 12N - ORIGINAL WELLBORE - PROPOSAL #1	800.00	799.72	45.33	42.02	13.702	ES
VEGA 12N - ORIGINAL WELLBORE - PROPOSAL #1	15,441.40	15,136.07	1,104.16	802.18	3.656	SF
VEGA 14N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	74.97	73.00	38.035	CC
VEGA 14N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.33	75.41	73.00	31.289	ES
VEGA 14N - ORIGINAL WELLBORE - PROPOSAL #1	15,441.40	15,049.04	1,707.30	1,404.90	5.646	SF
VEGA 15N - ORIGINAL WELLBORE - PROPOSAL #1	400.00	400.00	89.98	88.46	59.135	CC, ES
VEGA 15N - ORIGINAL WELLBORE - PROPOSAL #1	15,441.40	14,919.75	2,033.95	1,731.36	6.722	SF
VEGA 16N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	300.00	104.99	103.92	97.929	CC, ES
VEGA 16N - ORIGINAL WELLBORE - PROPOSAL #1	15,441.40	14,998.20	2,356.23	2,053.52	7.784	SF
VEGA 1N - ORIGINAL WELLBORE - PROPOSAL #1	1,000.00	1,000.00	14.97	10.75	3.549	CC
VEGA 1N - ORIGINAL WELLBORE - PROPOSAL #1	8,144.53	7,921.41	54.26	1.57	1.030	Level 2, ES, SF
VEGA 2N - ORIGINAL WELLBORE - PROPOSAL #1	800.00	800.00	30.02	26.70	9.042	CC, ES
VEGA 2N - ORIGINAL WELLBORE - PROPOSAL #1	8,298.17	7,779.79	333.58	283.58	6.672	SF
VEGA 3N - ORIGINAL WELLBORE - PROPOSAL #1	800.00	800.00	44.96	41.64	13.542	CC, ES
VEGA 3N - ORIGINAL WELLBORE - PROPOSAL #1	1,000.00	998.28	48.47	44.30	11.636	SF
VEGA 4N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	59.96	57.54	24.771	CC, ES
VEGA 4N - ORIGINAL WELLBORE - PROPOSAL #1	2,600.00	2,527.02	385.42	362.66	16.934	SF
VEGA 5N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	75.01	72.59	30.987	CC, ES
VEGA 5N - ORIGINAL WELLBORE - PROPOSAL #1	2,200.00	2,137.83	326.78	311.50	21.391	SF
VEGA 6N - ORIGINAL PROPOSAL - PROPOSAL #1	500.00	500.00	89.98	88.01	45.649	CC, ES
VEGA 6N - ORIGINAL PROPOSAL - PROPOSAL #1	2,100.00	2,034.54	347.51	334.35	26.407	SF
VEGA 7N - ORIGINAL WELLBORE - PROPOSAL #1	400.00	400.00	104.99	103.47	68.998	CC, ES
VEGA 7N - ORIGINAL WELLBORE - PROPOSAL #1	2,200.00	2,099.00	474.12	460.30	34.311	SF
VEGA 8N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	300.00	119.97	118.89	111.894	CC, ES
VEGA 8N - ORIGINAL WELLBORE - PROPOSAL #1	10,800.00	6,800.00	3,262.31	3,179.53	39.409	SF