



Project: WELD COUNTY, COLORADO (TRUE)
Site: SE NW SEC. 6 T3N R65W 6th P.M.
Well: VEGA 14N
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: 2224ft FNL & 2596ft FWL of Sec 6
500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1095.57	1099.94	12.00	283.79	14.91	-60.79	-9.55	62.59	EOB TO 12° INC
3840.23	3905.92	12.00	283.79	153.92	-627.32	-98.51	645.93	END OF TANGENT
4435.80	4505.86	0.00	0.00	168.84	-688.11	-108.06	708.52	EOD TO VERTICAL
6546.80	6616.86	0.00	0.00	168.84	-688.11	-108.06	708.52	KOP (8°/100ft BUR)
7263.00	7741.86	90.00	180.21	-547.35	-690.74	605.62	1424.71	EP: 2530ft FSL & 1905ft FWL of Sec 6
7263.00	15394.57	90.00	180.22	-8200.01	-719.32	8231.50	9077.43	BHL: 150ft FSL & 1905ft FWL of Sec 7

PROPOSED LOCAL COORDINATES:

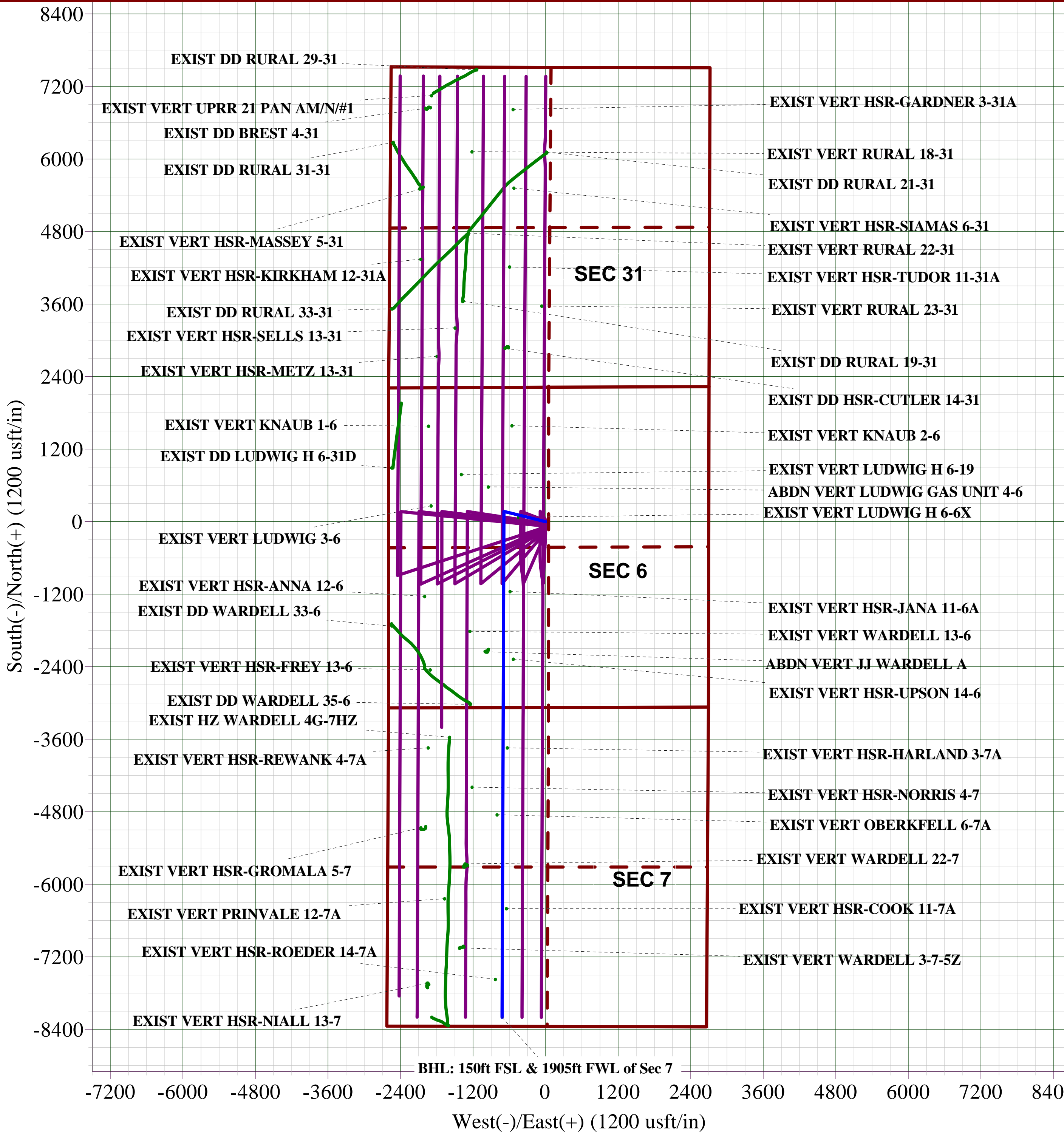
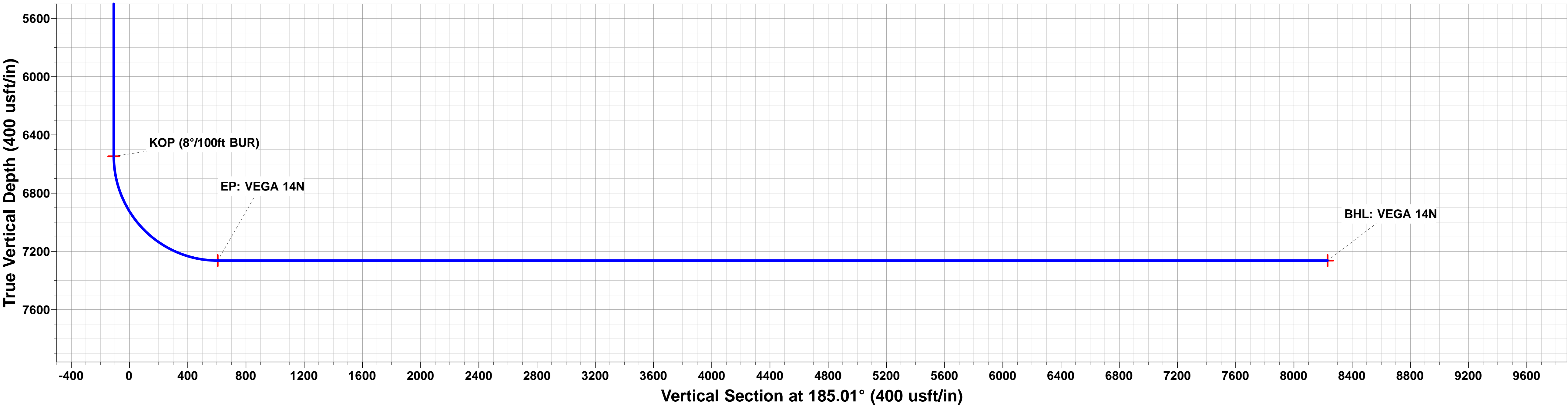
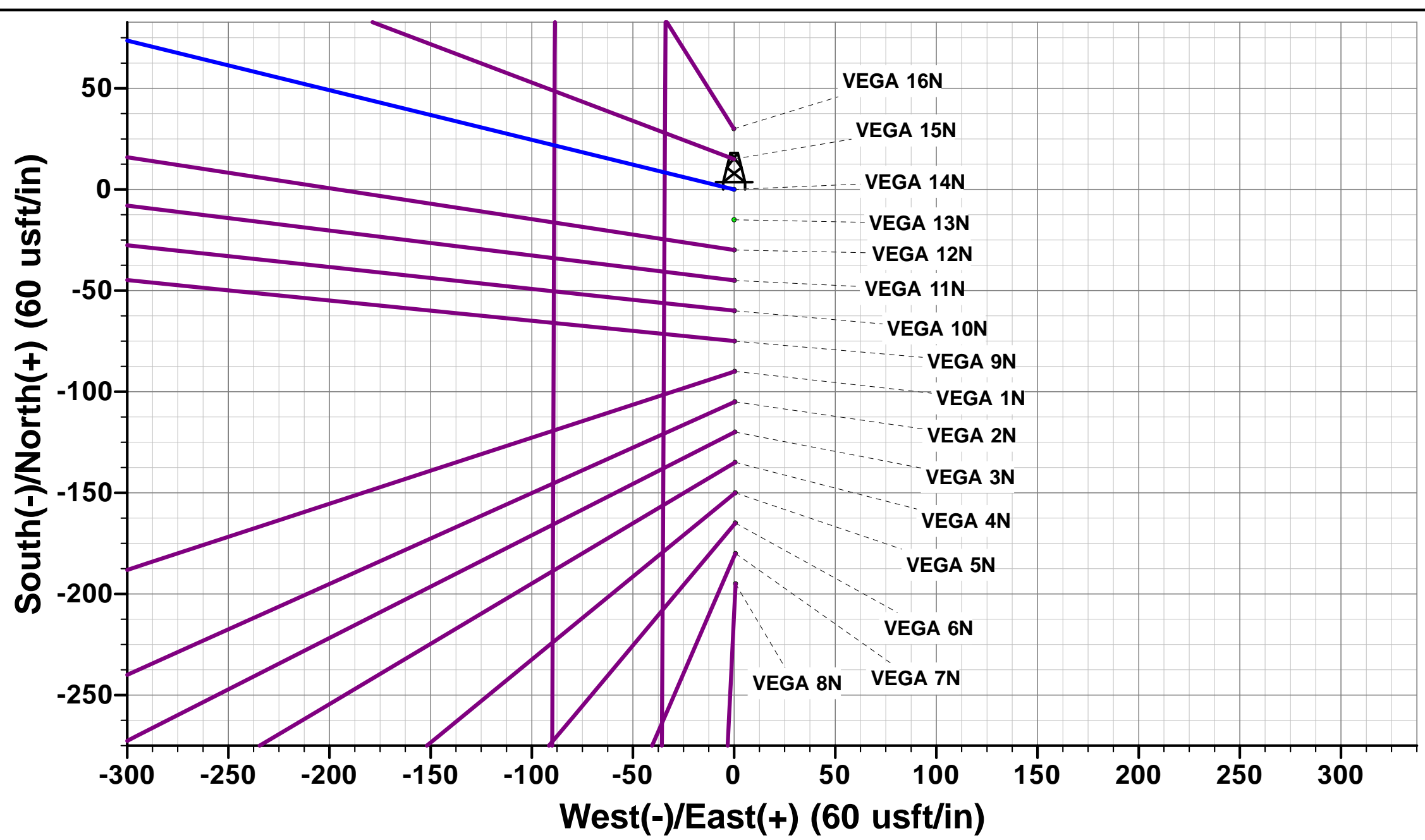
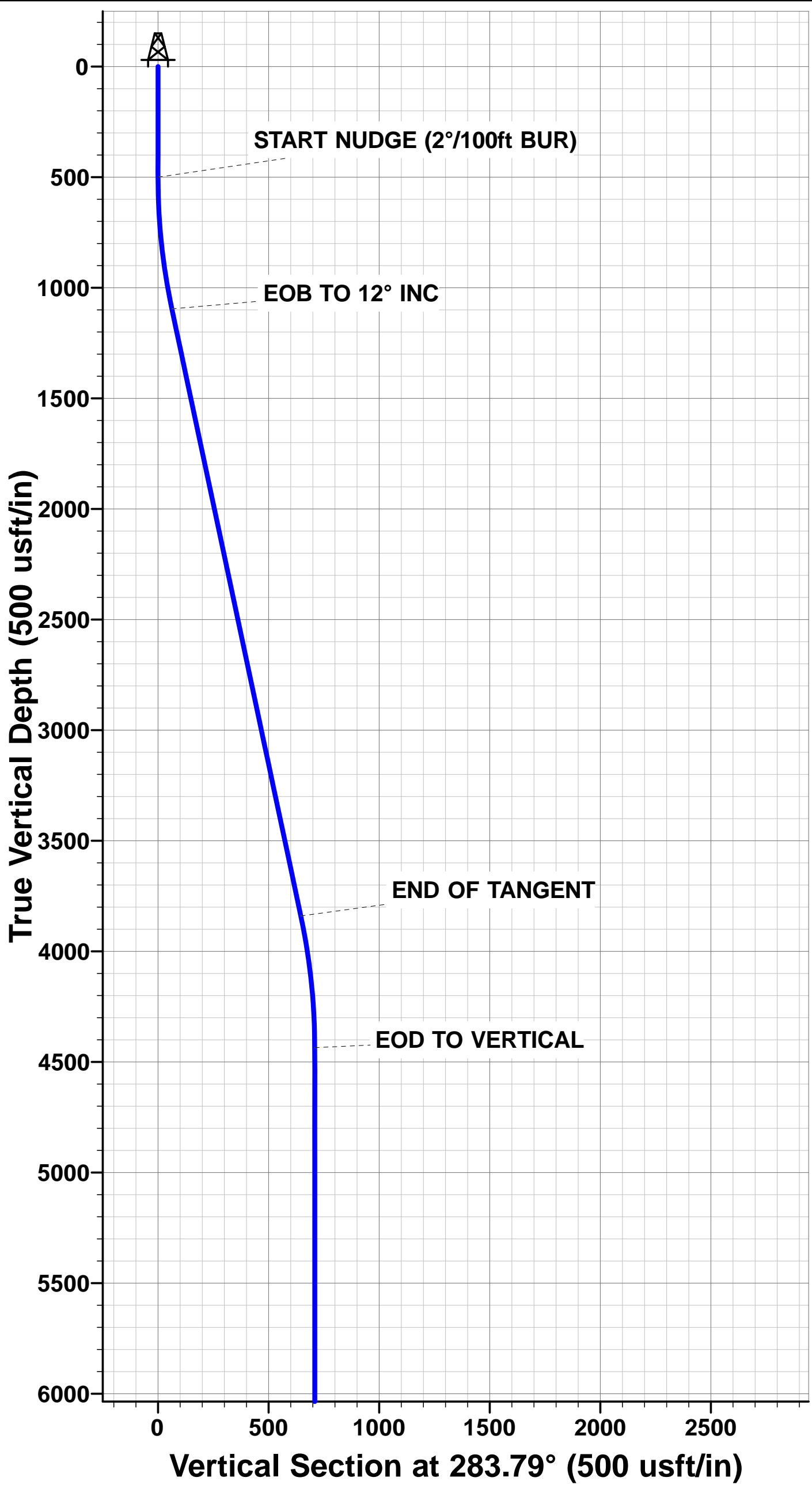
SHL: 2224ft FNL & 2596ft FWL of Sec 6

EP: 2530ft FSL & 1905ft FWL of Sec 6

BHL: 150ft FSL & 1905ft FWL of Sec 7

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: VEGA 14N	6546.80	168.84	-688.11	40.256034	-104.708823
EP: VEGA 14N	7263.00	-547.35	-690.74	40.254068	-104.708832
BHL: VEGA 14N	7263.00	-8200.02	-719.32	40.233062	-104.708934



PDC ENERGY

**WELD COUNTY, COLORADO
SE NW SEC. 6 T3N R65W 6th P.M.
VEGA 14N**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

24 January, 2018



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well VEGA 14N
Project:	WELD COUNTY, COLORADO	TVD Reference:	WELL @ 4998.00usft (Original Well Elev)
Reference Site:	SE NW SEC. 6 T3N R65W 6th P.M.	MD Reference:	WELL @ 4998.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	VEGA 14N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	22/01/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,394.57	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	9,341.48	7,247.12	287.26	242.11	6.362	CC, ES
ABDN VERT JJ WARDELL A - Wellbore #1 - Wellbore #1	9,400.00	7,247.65	293.16	246.98	6.348	SF
ABDN VERT LUDWIG GAS UNIT 4-6 - Wellbore #1 - De	6,616.86	6,524.80	481.87	449.97	15.105	CC, ES
ABDN VERT LUDWIG GAS UNIT 4-6 - Wellbore #1 - De	6,650.00	6,557.93	482.52	450.53	15.083	SF
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	5,413.25	5,175.19	6,775.92	6,757.40	365.869	CC
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	5,700.00	5,452.80	6,776.33	6,757.34	356.814	ES
EXIST DD BREST 4-31 - Wellbore #1 - Wellbore #1	10,200.00	7,072.96	9,926.21	9,865.04	162.259	SF
EXIST DD HSR-CUTLER 14-31 - Wellbore #1 - Wellbore	6,617.54	6,529.08	2,699.77	2,678.62	127.695	CC, ES
EXIST DD HSR-CUTLER 14-31 - Wellbore #1 - Wellbore	11,200.00	7,256.50	6,874.43	6,818.10	122.037	SF
EXIST DD LUDWIG H 6-31D - Wellbore #1 - Wellbore #1	4,623.06	4,645.88	1,971.86	1,940.13	62.140	CC, ES
EXIST DD LUDWIG H 6-31D - Wellbore #1 - Wellbore #1	14,100.00	7,402.00	8,001.18	7,844.65	51.116	SF
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	6,121.35	6,091.59	3,538.24	3,504.83	105.910	CC
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	6,200.00	6,159.80	3,538.36	3,504.71	105.160	ES
EXIST DD RURAL 19-31 - Wellbore #1 - Wellbore #1	13,500.00	7,298.13	9,974.53	9,829.09	68.580	SF
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	104.00	0.00	4,955.26	4,955.16	10,000.000	CC
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	200.00	82.00	4,955.50	4,955.11	10,000.000	ES
EXIST DD RURAL 21-31 - Wellbore #1 - Wellbore #1	11,000.00	7,443.65	9,943.21	9,840.15	96.479	SF
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	3,981.39	3,450.00	7,183.35	7,159.76	304.608	CC
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	4,000.00	3,450.00	7,183.39	7,159.74	303.717	ES
EXIST DD RURAL 29-31 - Wellbore #1 - Wellbore #1	9,700.00	7,364.87	9,985.75	9,919.90	151.644	SF
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	2,718.42	2,027.00	5,783.76	5,771.89	487.359	CC
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	2,800.00	2,057.89	5,784.11	5,771.83	471.019	ES
EXIST DD RURAL 31-31 - Wellbore #1 - Wellbore #1	10,700.00	7,259.66	9,944.11	9,857.26	114.506	SF
EXIST DD RURAL 33-31 - Wellbore #1 - Wellbore #1	5,671.76	5,817.00	3,824.43	3,775.33	77.897	CC
EXIST DD RURAL 33-31 - Wellbore #1 - Wellbore #1	6,616.86	6,754.75	3,824.72	3,773.24	74.287	ES
EXIST DD RURAL 33-31 - Wellbore #1 - Wellbore #1	13,500.00	7,509.18	9,996.48	9,847.09	66.915	SF
EXIST DD WARDELL 33-6 - Wellbore #1 - Wellbore #1	8,923.25	7,375.70	1,847.70	1,792.18	33.279	CC, ES
EXIST DD WARDELL 33-6 - Wellbore #1 - Wellbore #1	10,100.00	7,410.96	2,190.25	2,113.89	28.684	SF
EXIST DD WARDELL 35-6 - Wellbore #1 - Wellbore #1	10,219.00	7,322.22	544.62	467.58	7.069	CC, ES
EXIST DD WARDELL 35-6 - Wellbore #1 - Wellbore #1	10,300.00	7,322.13	550.61	472.08	7.012	SF
EXIST HZ WARDELL 4G-7HZ - Wellbore #1 - Wellbore #	15,394.57	7,331.09	904.84	732.28	5.244	CC, ES, SF
EXIST VERT HSR-ANNA 12-6 - Wellbore #1 - Design #1	8,435.62	7,241.00	1,304.89	1,260.41	29.336	CC, ES
EXIST VERT HSR-ANNA 12-6 - Wellbore #1 - Design #1	9,100.00	7,241.01	1,464.28	1,408.96	26.465	SF
EXIST VERT HSR-COOK 11-7A - Wellbore #1 - Design #	13,594.60	7,241.01	65.48	-73.51	0.471	Level 1, CC, ES, SF
EXIST VERT HSR-FREY 13-6 - Wellbore #1 - Design #1	9,650.98	7,241.01	1,209.49	1,144.44	18.594	CC, ES
EXIST VERT HSR-FREY 13-6 - Wellbore #1 - Design #1	10,100.00	7,241.01	1,290.15	1,216.95	17.624	SF
EXIST VERT HSR-GARDNER 3-31A - Wellbore #1 - Des	6,616.86	6,524.80	6,652.35	6,618.37	195.766	CC, ES

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

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well VEGA 14N
Project:	WELD COUNTY, COLORADO	TVD Reference:	WELL @ 4998.00usft (Original Well Elev)
Reference Site:	SE NW SEC. 6 T3N R65W 6th P.M.	MD Reference:	WELL @ 4998.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	VEGA 14N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SE NW SEC. 6 T3N R65W 6th P.M.						
EXIST VERT HSR-GARDNER 3-31A - Wellbore #1 - Des	10,300.00	7,241.01	9,926.29	9,849.41	129.115	SF
EXIST VERT HSR-GROMALA 5-7 - Wellbore #1 - Wellbo	12,265.85	7,243.70	1,352.49	1,253.11	13.610	CC
EXIST VERT HSR-GROMALA 5-7 - Wellbore #1 - Wellbo	12,300.00	7,243.29	1,352.92	1,252.90	13.526	ES
EXIST VERT HSR-GROMALA 5-7 - Wellbore #1 - Wellbo	12,600.00	7,239.74	1,393.15	1,287.43	13.178	SF
EXIST VERT HSR-HARLAND 3-7A - Wellbore #1 - Desig	10,935.93	7,241.01	70.95	-17.74	0.800	Level 1, CC, ES, SF
EXIST VERT HSR-JANA 11-6A - Wellbore #1 - Design #1	8,349.24	7,241.00	106.08	62.89	2.456	CC, ES, SF
EXIST VERT HSR-MASSEY 5-31 - Wellbore #1 - Des	6,616.86	6,524.80	4,394.09	4,361.08	133.149	CC, ES
EXIST VERT HSR-KIRKHAM 12-31A - Wellbore #1 - Des	12,700.00	7,241.01	9,940.37	9,818.40	81.497	SF
EXIST VERT HSR-MASSEY 5-31 - Wellbore #1 - Wellbo	5,469.87	5,260.93	5,517.47	5,499.17	301.387	CC
EXIST VERT HSR-MASSEY 5-31 - Wellbore #1 - Wellbo	6,624.72	6,475.94	5,518.84	5,498.52	271.677	ES
EXIST VERT HSR-MASSEY 5-31 - Wellbore #1 - Wellbo	11,600.00	7,150.00	9,999.70	9,912.62	114.825	SF
EXIST VERT HSR-METZ 13-31 - Wellbore #1 - Design #	6,616.86	6,524.80	2,795.43	2,762.80	85.664	CC, ES
EXIST VERT HSR-METZ 13-31 - Wellbore #1 - Design #	14,400.00	7,241.01	9,999.59	9,845.23	64.780	SF
EXIST VERT HSR-NIAL 13-7 - Wellbore #1 - Wellbore #	14,839.50	7,242.71	1,245.36	1,096.83	8.385	CC, ES
EXIST VERT HSR-NIAL 13-7 - Wellbore #1 - Wellbore #	15,000.00	7,243.20	1,255.66	1,104.06	8.283	SF
EXIST VERT HSR-NORRIS 4-7 - Wellbore #1 - Design #	11,588.73	7,241.01	509.82	408.87	5.051	CC
EXIST VERT HSR-NORRIS 4-7 - Wellbore #1 - Design #	11,600.00	7,241.01	509.94	408.79	5.041	ES, SF
EXIST VERT HSR-REWANK 4-7A - Wellbore #1 - Desig	10,940.74	7,241.01	1,238.30	1,149.52	13.948	CC, ES
EXIST VERT HSR-REWANK 4-7A - Wellbore #1 - Desig	11,300.00	7,241.01	1,289.36	1,193.85	13.500	SF
EXIST VERT HSR-ROEDER 14-7A - Wellbore #1 - Desig	14,765.45	7,241.00	113.01	-48.33	0.700	Level 1, CC, ES, SF
EXIST VERT HSR-SELLS 13-31 - Wellbore #1 - Design	6,616.86	6,524.80	3,142.55	3,109.33	94.595	CC, ES
EXIST VERT HSR-SELLS 13-31 - Wellbore #1 - Design	13,900.00	7,241.01	9,941.94	9,797.12	68.651	SF
EXIST VERT HSR-SIAMAS 6-31 - Wellbore #1 - Design	6,616.86	6,524.80	5,352.62	5,318.62	157.457	CC, ES
EXIST VERT HSR-SIAMAS 6-31 - Wellbore #1 - Design	11,600.00	7,241.01	9,926.04	9,824.89	98.128	SF
EXIST VERT HSR-TUDOR 11-31A - Wellbore #1 - Desig	6,616.86	6,524.80	4,046.93	4,012.94	119.092	CC, ES
EXIST VERT HSR-TUDOR 11-31A - Wellbore #1 - Desig	12,900.00	7,241.01	9,920.82	9,795.05	78.880	SF
EXIST VERT HSR-UPSON 14-6 - Wellbore #1 - Design #	9,467.41	7,241.01	163.23	101.46	2.643	CC, ES, SF
EXIST VERT KNAUB 1-6 - Wellbore #1 - Design #1	6,616.86	6,524.80	1,883.67	1,852.51	60.461	CC, ES
EXIST VERT KNAUB 1-6 - Wellbore #1 - Design #1	15,394.57	7,241.00	9,856.11	9,682.73	56.847	SF
EXIST VERT KNAUB 2-6 - Wellbore #1 - Design #1	6,616.86	6,524.80	1,425.35	1,391.28	41.828	CC, ES
EXIST VERT KNAUB 2-6 - Wellbore #1 - Design #1	6,650.00	6,557.93	1,426.12	1,391.96	41.747	SF
EXIST VERT LUDWIG 3-6 - Wellbore #1 - Design #1	6,616.86	6,524.80	1,208.60	1,179.14	41.014	CC
EXIST VERT LUDWIG 3-6 - Wellbore #1 - Design #1	6,650.00	6,557.93	1,208.66	1,179.07	40.845	ES
EXIST VERT LUDWIG 3-6 - Wellbore #1 - Design #1	7,050.00	6,932.02	1,224.51	1,193.76	39.820	SF
EXIST VERT LUDWIG H 6-19 - Wellbore #1 - Design #1	6,616.86	6,524.80	933.92	903.36	30.561	CC, ES
EXIST VERT LUDWIG H 6-19 - Wellbore #1 - Design #1	6,650.00	6,557.93	934.42	903.76	30.479	SF
EXIST VERT LUDWIG H 6-6X - Wellbore #1 - Design #1	2,964.32	2,897.21	36.49	19.25	2.117	CC, ES, SF
EXIST VERT OBERKFELL 6-7A - Wellbore #1 - Design #	12,044.03	7,241.01	95.24	-14.30	0.869	Level 1, CC, ES, SF
EXIST VERT PRINVALE 12-7A - Wellbore #1 - Design #	13,435.23	7,241.01	958.34	822.38	7.049	CC, ES
EXIST VERT PRINVALE 12-7A - Wellbore #1 - Design #	13,600.00	7,241.01	972.40	833.30	6.991	SF
EXIST VERT RURAL 18-31 - Wellbore #1 - Design #1	6,616.86	6,524.80	5,974.67	5,940.92	177.028	CC, ES
EXIST VERT RURAL 18-31 - Wellbore #1 - Design #1	11,000.00	7,241.01	9,938.82	9,848.94	110.570	SF
EXIST VERT RURAL 22-31 - Wellbore #1 - Design #1	6,616.86	6,524.80	4,642.20	4,608.55	137.969	CC, ES
EXIST VERT RURAL 22-31 - Wellbore #1 - Design #1	12,400.00	7,241.01	9,995.02	9,878.74	85.957	SF
EXIST VERT RURAL 23-31 - Wellbore #1 - Design #1	6,616.86	6,524.80	3,454.58	3,420.44	101.191	CC, ES
EXIST VERT RURAL 23-31 - Wellbore #1 - Design #1	13,600.00	7,241.01	9,992.87	9,853.77	71.841	SF
EXIST VERT UPRR 21 PAN AM/N#1 - Wellbore #1 - De	4,757.30	4,665.24	6,983.39	6,956.87	263.325	CC
EXIST VERT UPRR 21 PAN AM/N#1 - Wellbore #1 - De	4,800.00	4,686.00	6,983.43	6,956.80	262.293	ES
EXIST VERT UPRR 21 PAN AM/N#1 - Wellbore #1 - De	6,616.86	4,686.00	7,221.43	7,192.04	245.762	SF
EXIST VERT WARDELL 13-6 - Wellbore #1 - Design #1	9,011.06	7,241.01	555.84	502.03	10.330	CC, ES
EXIST VERT WARDELL 13-6 - Wellbore #1 - Design #1	9,100.00	7,241.01	562.91	507.58	10.174	SF
EXIST VERT WARDELL 22-7 - Wellbore #1 - Wellbore #	12,860.10	7,261.93	622.92	512.31	5.632	CC, ES
EXIST VERT WARDELL 22-7 - Wellbore #1 - Wellbore #	12,900.00	7,260.12	624.20	512.82	5.604	SF

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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well VEGA 14N
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Reference Site:	SE NW SEC. 6 T3N R65W 6th P.M.	MD Reference:	WELL @ 4998.00usft (Original Well Elev)
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Reference Well:	VEGA 14N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	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 WARDELL 3-7-5Z - Wellbore #1 - Wellbore	14,250.53	7,241.57	708.98	571.29	5.149	CC, ES
EXIST VERT WARDELL 3-7-5Z - Wellbore #1 - Wellbore	14,300.00	7,240.05	710.70	572.06	5.126	SF
VEGA 10N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	59.96	57.99	30.420	CC, ES
VEGA 10N - ORIGINAL WELLBORE - PROPOSAL #1	15,394.57	15,766.01	1,404.70	1,090.94	4.477	SF
VEGA 11N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	44.99	43.02	22.825	CC, ES
VEGA 11N - ORIGINAL WELLBORE - PROPOSAL #1	2,100.00	2,110.80	77.19	63.10	5.477	SF
VEGA 12N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	29.95	27.97	15.192	CC, ES
VEGA 12N - ORIGINAL WELLBORE - PROPOSAL #1	15,394.57	15,481.79	604.88	290.70	1.925	SF
VEGA 15N - ORIGINAL WELLBORE - PROPOSAL #1	400.00	400.00	15.01	13.49	9.864	CC, ES
VEGA 15N - ORIGINAL WELLBORE - PROPOSAL #1	15,394.57	15,264.73	346.22	44.99	1.149	Level 2, SF
VEGA 16N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	300.00	30.02	28.95	27.999	CC, ES
VEGA 16N - ORIGINAL WELLBORE - PROPOSAL #1	15,394.57	15,342.56	649.86	335.14	2.065	SF
VEGA 1N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	89.95	87.98	45.631	CC
VEGA 1N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.98	90.38	87.97	37.472	ES
VEGA 1N - ORIGINAL WELLBORE - PROPOSAL #1	2,000.00	1,983.12	229.26	216.53	18.018	SF
VEGA 2N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	104.99	103.02	53.263	CC
VEGA 2N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.98	105.43	103.02	43.710	ES
VEGA 2N - ORIGINAL WELLBORE - PROPOSAL #1	2,100.00	2,065.20	286.63	273.17	21.284	SF
VEGA 3N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	119.93	117.96	60.841	CC
VEGA 3N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.98	120.36	117.95	49.901	ES
VEGA 3N - ORIGINAL WELLBORE - PROPOSAL #1	8,500.00	7,362.01	1,227.90	1,173.71	22.659	SF
VEGA 4N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	134.94	132.97	68.455	CC
VEGA 4N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.98	135.37	132.96	56.123	ES
VEGA 4N - ORIGINAL WELLBORE - PROPOSAL #1	8,200.00	7,412.65	850.60	801.93	17.474	SF
VEGA 5N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	149.98	148.01	76.088	CC
VEGA 5N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	599.98	150.42	148.00	62.361	ES
VEGA 5N - ORIGINAL WELLBORE - PROPOSAL #1	7,800.00	7,521.52	397.13	356.39	9.747	SF
VEGA 6N - ORIGINAL PROPOSAL - PROPOSAL #1	7,651.88	7,645.82	26.03	-12.13	0.682	Level 1, CC, ES, SF
VEGA 7N - ORIGINAL WELLBORE - PROPOSAL #1	400.00	400.00	179.97	178.44	118.269	CC, ES
VEGA 7N - ORIGINAL WELLBORE - PROPOSAL #1	7,450.00	7,731.32	329.56	294.06	9.283	SF
VEGA 8N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	300.00	194.94	193.87	181.824	CC, ES
VEGA 8N - ORIGINAL WELLBORE - PROPOSAL #1	8,000.00	7,321.30	670.48	630.19	16.643	SF
VEGA 9N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	74.97	73.00	38.035	CC, ES
VEGA 9N - ORIGINAL WELLBORE - PROPOSAL #1	15,200.00	15,441.40	1,713.96	1,408.67	5.614	SF

SE NW SEC. 6 T3N R65W 6th P.M. - ABDN VERT JJ WARDELL A - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-155.94	-2,113.60	-943.66	2,314.77					
100.00	100.00	82.08	82.08	0.09	0.09	-155.94	-2,113.53	-943.76	2,314.67	2,314.50	0.17	N/A		
200.00	200.00	189.54	189.54	0.31	0.21	-155.93	-2,113.20	-944.01	2,314.49	2,313.96	0.52	4,433.024		
257.00	257.00	238.02	238.01	0.44	0.23	-155.93	-2,113.03	-944.09	2,314.35	2,313.68	0.67	3,441.344		
300.00	300.00	272.52	272.52	0.54	0.24	-155.92	-2,113.05	-944.21	2,314.43	2,313.65	0.78	2,974.072		
400.00	400.00	361.41	361.41	0.76	0.30	-155.92	-2,113.49	-944.71	2,315.10	2,314.04	1.06	2,185.216		
500.00	500.00	479.94	479.93	0.99	0.36	-155.90	-2,113.96	-945.51	2,315.77	2,314.42	1.35	1,718.073		
600.00	599.98	575.82	575.81	1.20	0.41	-79.72	-2,113.68	-946.13	2,315.47	2,313.87	1.60	1,447.923		
700.00	699.84	666.48	666.46	1.42	0.46	-79.82	-2,113.75	-946.93	2,314.97	2,313.11	1.86	1,246.495		
800.00	799.45	760.63	760.61	1.66	0.51	-80.03	-2,114.32	-947.44	2,314.20	2,312.07	2.14	1,083.367		

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