



Project: WELD COUNTY, COLORADO
Site: SW SE SEC. 33 T4N R65W 6th P.M. (LORY)
Well: LORY 11N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #4

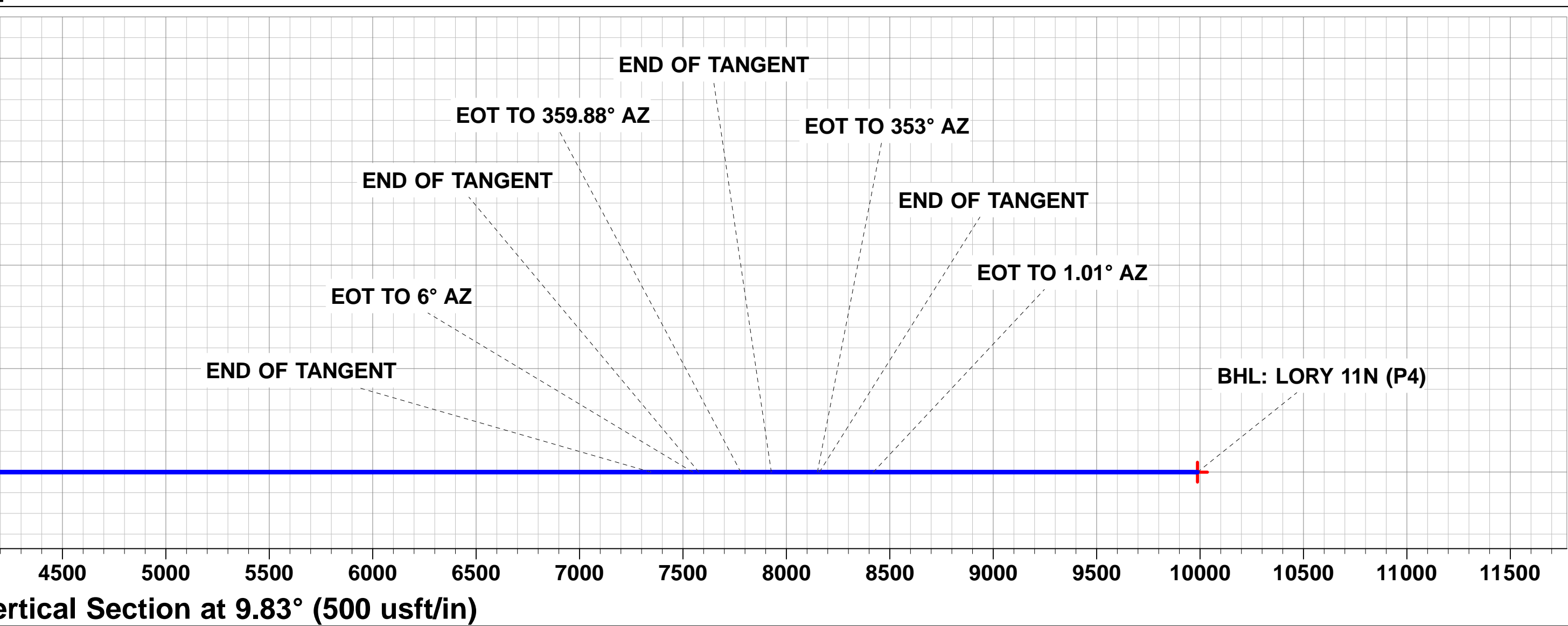
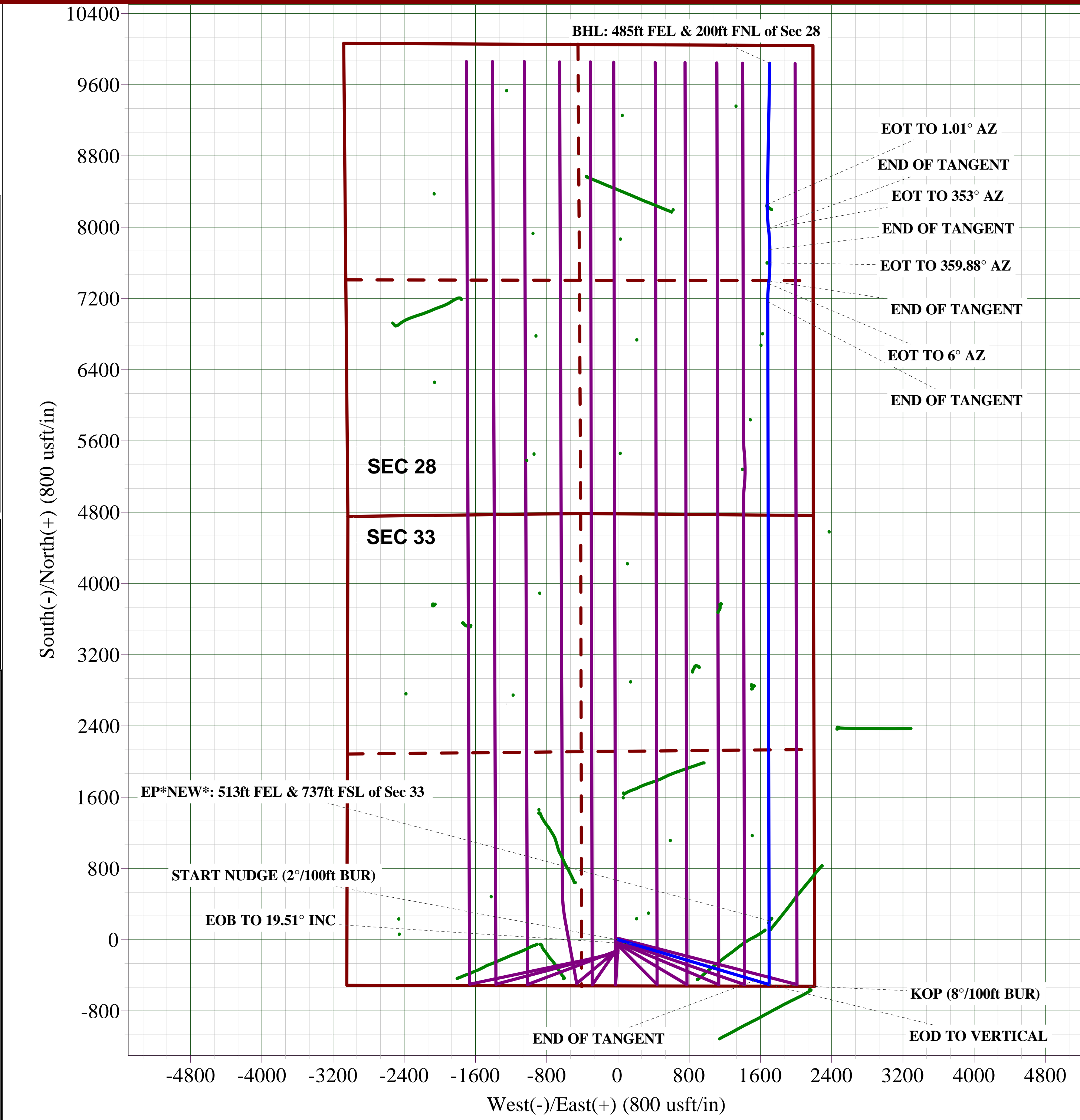
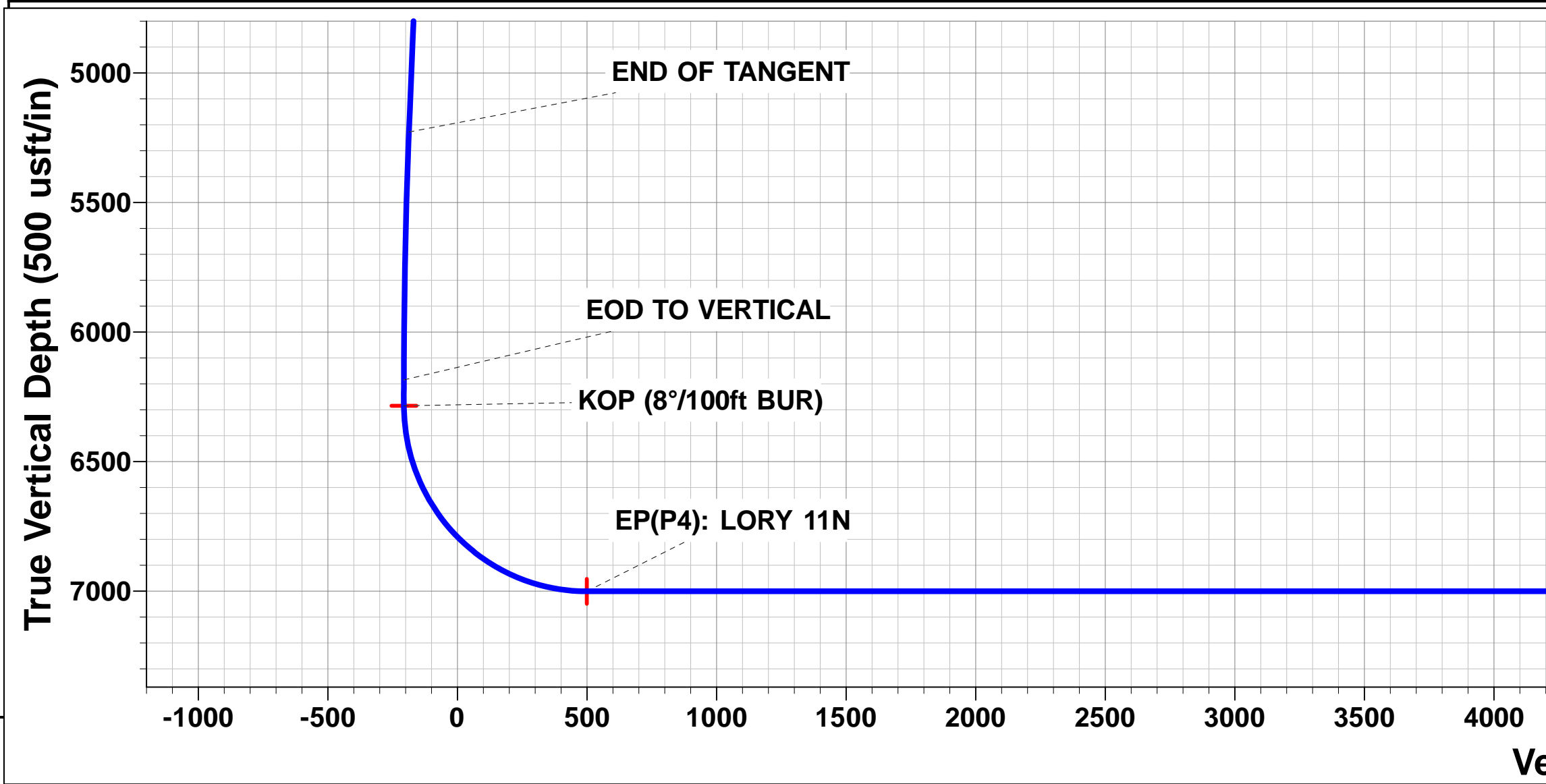
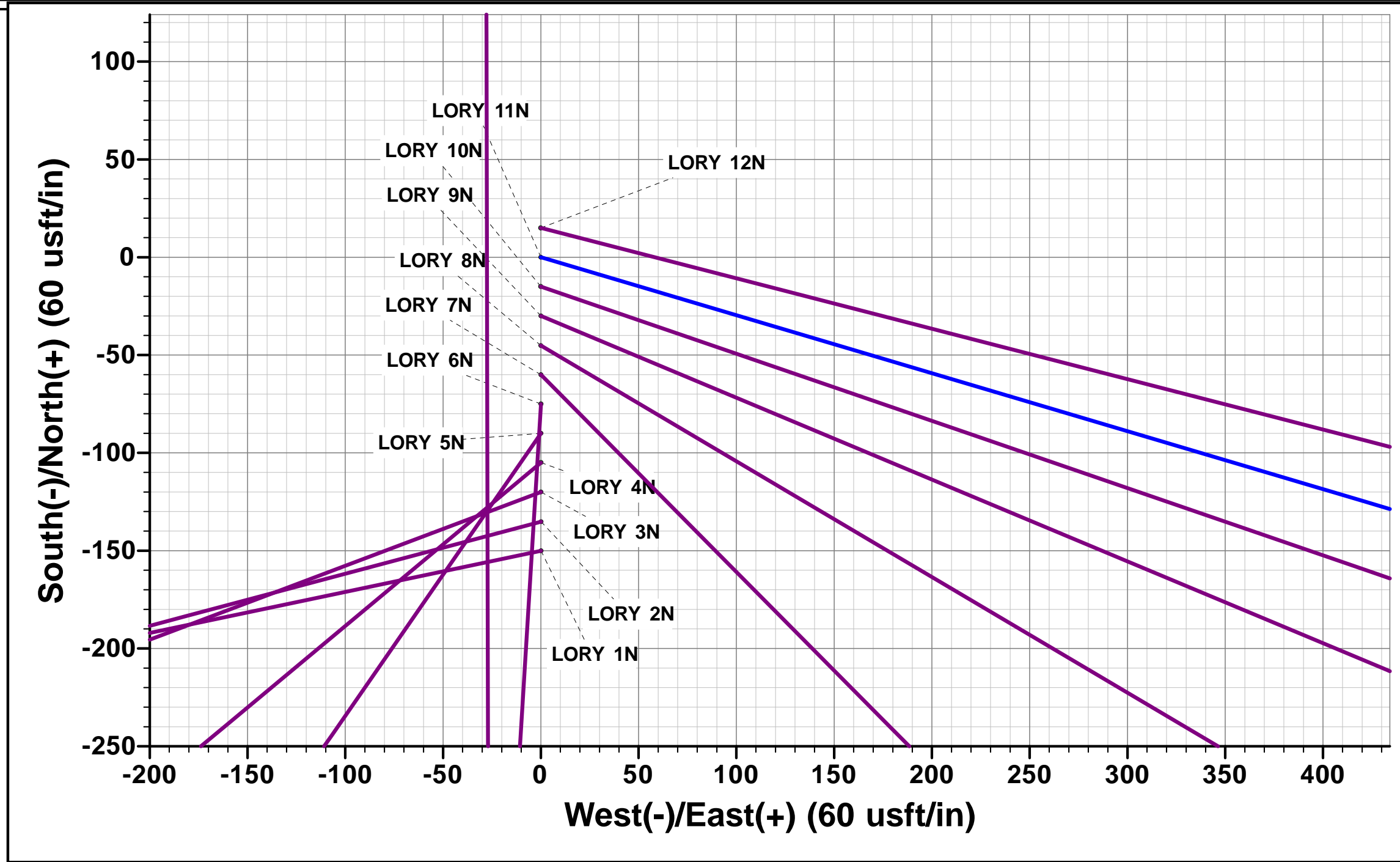
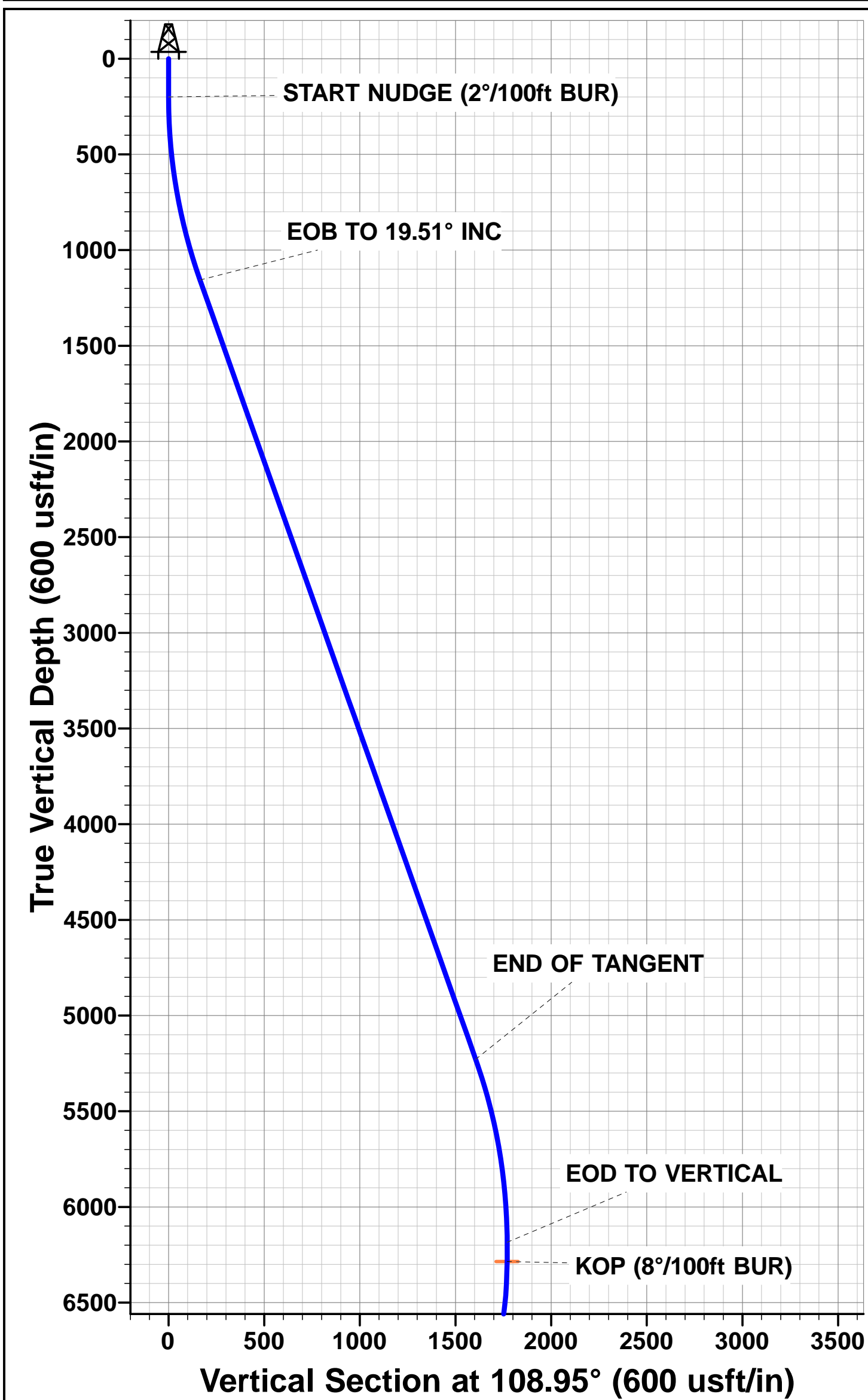
ANNOTATIONS								
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 526ft FSL & 2210ft FEL of Sec 33
200.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1156.57	1175.30	19.51	106.51	-46.72	157.64	-19.14	164.42	EOB TO 19.51° INC
5228.23	5494.88	19.51	106.51	-456.59	1540.51	-187.00	1606.75	END OF TANGENT
6184.80	6470.18	0.00	0.00	-503.31	1698.15	-206.14	1771.17	EOD TO VERTICAL
6284.80	6570.18	0.00	0.00	-503.31	1698.15	-206.14	1771.17	KOP (8°/100ft BUR)
7001.00	7695.18	90.00	359.88	212.89	1696.65	499.30	2487.37	EP*NEW*: 513ft FEL & 737ft FSL of Sec 33
7000.98	14645.18	90.00	359.88	7162.87	1682.09	7344.86	9437.37	END OF TANGENT
7000.98	14849.18	90.00	6.00	7366.51	1692.55	7547.29	9641.37	EOT TO 6° AZ
7000.98	14879.18	90.00	6.00	7396.34	1695.69	7577.22	9671.37	END OF TANGENT
7000.98	15083.18	90.00	359.88	7599.98	1706.15	7779.65	9875.37	EOT TO 359.88° AZ
7000.98	15233.18	90.00	359.88	7749.98	1705.83	7927.40	10025.37	END OF TANGENT
7000.98	15462.52	90.00	353.00	7978.74	1691.60	8150.37	10254.71	EOT TO 353° AZ
7000.98	15472.52	90.00	353.00	7988.66	1690.38	8159.95	10264.71	END OF TANGENT
7000.98	15739.56	90.00	1.01	8255.12	1676.44	8420.12	10531.75	EOT TO 1.01° AZ
7001.00	17326.12	90.00	1.01	9841.43	1704.45	9987.94	12118.31	BHL: 485ft FEL & 200ft FNL of Sec 28

PROPOSED LOCAL COORDINATES:

SHL: 526ft FSL & 2210ft FEL Sec 33
HZ LP *NEW* : 737ft FSL & 513ft FEL Sec 33

BHL: 200ft FNL & 485ft FEL Sec 28

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP(P4): LORY 11N	6284.80	-503.31	1698.15	40.261674	-104.660715
EP(P4): LORY 11N	7001.00	212.89	1696.65	40.263640	-104.660720
BHL: LORY 11N (P4)	7001.00	9841.43	1704.45	40.290070	-104.660690



PDC ENERGY

WELD COUNTY, COLORADO

SW SE SEC. 33 T4N R65W 6th P.M. (LORY)

LORY 11N

ORIGINAL WELLBORE

PROPOSAL #4

Anticollision Report

10 January, 2018



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well LORY 11N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4841.00usft (Original Well Elev)
Reference Site:	SW SE SEC. 33 T4N R65W 6th P.M. (LORY)	MD Reference:	KB-EST @ 4841.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LORY 11N	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 #4	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #4		
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 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/01/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,326.11	PROPOSAL #4 (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						
SW SE SEC. 33 T4N R65W 6th P.M. (LORY)						
ABDN VERT BOHLENDER 33-2 - GYRO - Wellbore #1 -	10,297.35	7,000.00	193.32	131.62	3.133	CC
ABDN VERT BOHLENDER 33-2 - GYRO - Wellbore #1 -	10,300.00	7,000.00	193.34	131.59	3.131	ES, SF
ABDN VERT BOHLENDER 33-6 - GYRO - Wellbore #1 -	11,379.97	7,000.99	2,568.00	2,472.75	26.960	CC
ABDN VERT BOHLENDER 33-6 - GYRO - Wellbore #1 -	11,400.00	7,000.99	2,568.08	2,472.46	26.856	ES
ABDN VERT BOHLENDER 33-6 - GYRO - Wellbore #1 -	12,700.00	7,000.99	2,887.40	2,767.43	24.066	SF
ABDN VERT CPC-BOHLENDER 33-3 - Wellbore #1 - W	11,161.43	7,000.66	567.03	489.51	7.315	CC, ES
ABDN VERT CPC-BOHLENDER 33-3 - Wellbore #1 - W	11,200.00	7,000.28	568.34	490.11	7.266	SF
ABDN VERT KRAUSE 1 - Wellbore #1 - Design #1	12,872.47	4,662.00	3,579.10	3,487.20	38.945	CC
ABDN VERT KRAUSE 1 - Wellbore #1 - Design #1	12,900.00	4,662.00	3,579.21	3,486.89	38.771	ES
ABDN VERT KRAUSE 1 - Wellbore #1 - Design #1	15,400.00	4,662.00	4,391.89	4,261.26	33.623	SF
ABDN VERT KRAUSE 28-3 - Wellbore #1 - Design #1	12,948.21	7,000.99	1,660.62	1,535.96	13.321	CC
ABDN VERT KRAUSE 28-3 - Wellbore #1 - Design #1	13,000.00	7,000.99	1,661.43	1,535.79	13.224	ES
ABDN VERT KRAUSE 28-3 - Wellbore #1 - Design #1	13,400.00	7,000.99	1,720.98	1,587.78	12.920	SF
ABDN VERT KRAUSE 28-4 - Wellbore #1 - Design #1	14,222.88	7,000.99	1,471.02	1,322.22	9.886	CC, ES
ABDN VERT KRAUSE 28-4 - Wellbore #1 - Design #1	14,500.00	7,000.99	1,496.89	1,342.83	9.716	SF
ABDN VERT OSTER PM G 28-8 - GYRO - Wellbore #1 -	15,681.83	6,950.00	54.19	-99.73	0.352	Level 1, CC, ES, SF
EXIST DD ANDERSEN 23-33 - Wellbore #1 - Wellbore #	0.00	0.00	1,659.87			
EXIST DD ANDERSEN 23-33 - Wellbore #1 - Wellbore #	100.00	94.63	1,660.00	1,659.80	8,649.209	ES
EXIST DD ANDERSEN 23-33 - Wellbore #1 - Wellbore #	10,200.00	7,121.75	3,005.61	2,927.66	38.558	SF
EXIST DD ANDERSEN 24-33 - Wellbore #1 - Wellbore #	9,468.51	7,121.91	727.60	666.08	11.827	CC, ES
EXIST DD ANDERSEN 24-33 - Wellbore #1 - Wellbore #	9,600.00	7,121.55	739.38	675.60	11.592	SF
EXIST DD ANDERSEN 33-34 - Wellbore #1 - Wellbore #	8,311.52	7,096.64	596.57	549.65	12.714	CC, ES
EXIST DD ANDERSEN 33-34 - Wellbore #1 - Wellbore #	8,400.00	7,096.39	603.10	555.01	12.542	SF
EXIST DD ANDERSEN 35-33 - Wellbore #1 - Wellbore #	0.00	10.89	908.76			
EXIST DD ANDERSEN 35-33 - Wellbore #1 - Wellbore #	200.00	208.85	909.01	908.46	1,674.152	ES
EXIST DD ANDERSEN 35-33 - Wellbore #1 - Wellbore #	14,849.18	6,820.00	8,556.69	8,394.62	52.796	SF
EXIST DD ANDERSEN 36-33 - Wellbore #1 - Wellbore #	210.62	228.67	877.37	876.78	1,500.681	CC, ES
EXIST DD ANDERSEN 36-33 - Wellbore #1 - Wellbore #	14,800.00	6,947.07	8,085.06	7,925.04	50.524	SF
EXIST DD ANDERSEN 37-33 - Wellbore #1 - Wellbore #	4,252.00	4,143.95	88.53	51.09	2.364	CC, ES, SF
EXIST DD ARISTOCRAT ANGUS 8-0-4 - Wellbore #1 - \	6,594.28	6,452.82	457.81	419.84	12.056	CC
EXIST DD ARISTOCRAT ANGUS 8-0-4 - Wellbore #1 - \	6,600.00	6,458.47	457.82	419.83	12.053	ES
EXIST DD ARISTOCRAT ANGUS 8-0-4 - Wellbore #1 - \	6,650.00	6,507.78	458.15	420.11	12.046	SF
EXIST DD KRAUSE 22-28 - Wellbore #1 - Wellbore #1	14,662.05	7,201.74	3,453.05	3,295.35	21.897	CC
EXIST DD KRAUSE 22-28 - Wellbore #1 - Wellbore #1	14,700.00	7,201.34	3,453.63	3,294.79	21.742	ES
EXIST DD KRAUSE 22-28 - Wellbore #1 - Wellbore #1	16,100.00	7,186.90	3,731.27	3,548.22	20.384	SF
EXIST DD MANTLE 4-2-28 - Wellbore #1 - Wellbore #1	16,015.50	7,117.67	2,032.53	1,850.13	11.143	CC, ES
EXIST DD MANTLE 4-2-28 - Wellbore #1 - Wellbore #1	16,400.00	7,115.55	2,068.58	1,878.88	10.904	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 LORY 11N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4841.00usft (Original Well Elev)
Reference Site:	SW SE SEC. 33 T4N R65W 6th P.M. (LORY)	MD Reference:	KB-EST @ 4841.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	LORY 11N	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 #4	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						
SW SE SEC. 33 T4N R65W 6th P.M. (LORY)						
EXIST HZ MOSER PC G34-65HN - Wellbore #1 - Wellbore	9,855.07	6,549.26	978.38	915.99	15.683	CC, ES
EXIST HZ MOSER PC G34-65HN - Wellbore #1 - Wellbore	10,100.00	6,547.49	1,008.57	942.33	15.226	SF
EXIST VERT ANDERSEN 10-33 - Wellbore #1 - Design #1	200.00	200.00	1,596.80	1,596.18	2,564.717	CC
EXIST VERT ANDERSEN 10-33 - Wellbore #1 - Design #1	9,100.00	7,001.00	1,635.06	1,580.56	30.002	ES
EXIST VERT ANDERSEN 10-33 - Wellbore #1 - Design #1	10,000.00	7,001.00	1,875.32	1,805.30	26.781	SF
EXIST VERT BOHLENDER 33-22 - GYRO - Wellbore #1 - Design #1	11,241.08	7,025.50	3,761.10	3,682.19	47.660	CC
EXIST VERT BOHLENDER 33-22 - GYRO - Wellbore #1 - Design #1	11,300.00	7,025.46	3,761.57	3,681.56	47.015	ES
EXIST VERT BOHLENDER 33-22 - GYRO - Wellbore #1 - Design #1	14,800.00	7,023.78	5,182.45	5,035.41	35.245	SF
EXIST VERT BOHLENDER 33-5 - Wellbore #1 - Design #1	200.00	200.00	3,647.03	3,646.41	5,857.721	CC, ES
EXIST VERT BOHLENDER 33-5 - Wellbore #1 - Design #1	14,849.18	7,000.98	6,146.61	5,984.74	37.973	SF
EXIST VERT BOHLENDER 33-7 - Wellbore #1 - Design #1	10,236.70	7,000.99	2,869.02	2,794.75	38.629	CC
EXIST VERT BOHLENDER 33-7 - Wellbore #1 - Design #1	10,300.00	7,000.99	2,869.72	2,794.31	38.053	ES
EXIST VERT BOHLENDER 33-7 - Wellbore #1 - Design #1	12,300.00	7,000.99	3,533.91	3,421.45	31.426	SF
EXIST VERT CPC-BOHLENDER 33-1 - Wellbore #1 - Design #1	11,709.42	7,000.99	1,582.30	1,480.91	15.606	CC, ES
EXIST VERT CPC-BOHLENDER 33-1 - Wellbore #1 - Design #1	12,200.00	7,000.99	1,656.60	1,546.03	14.982	SF
EXIST VERT CPC-BOHLENDER 33-4 - Wellbore #1 - Design #1	10,383.28	7,000.99	1,548.79	1,471.87	20.134	CC
EXIST VERT CPC-BOHLENDER 33-4 - Wellbore #1 - Design #1	10,400.00	7,000.99	1,548.88	1,471.66	20.057	ES
EXIST VERT CPC-BOHLENDER 33-4 - Wellbore #1 - Design #1	11,000.00	7,000.99	1,667.06	1,578.85	18.898	SF
EXIST VERT FRAZIER 33-15 - GYRO - Wellbore #1 - Wellbore	10,490.47	7,005.48	853.43	787.98	13.039	CC
EXIST VERT FRAZIER 33-15 - GYRO - Wellbore #1 - Wellbore	10,500.00	7,005.40	853.49	787.87	13.006	ES
EXIST VERT FRAZIER 33-15 - GYRO - Wellbore #1 - Wellbore	10,700.00	7,003.59	878.78	809.51	12.688	SF
EXIST VERT FRAZIER 33-25 - Wellbore #1 - Wellbore #1	11,045.50	7,025.92	3,428.01	3,352.48	45.391	CC
EXIST VERT FRAZIER 33-25 - Wellbore #1 - Wellbore #1	11,100.00	7,025.78	3,428.44	3,351.91	44.799	ES
EXIST VERT FRAZIER 33-25 - Wellbore #1 - Wellbore #1	14,000.00	7,018.03	4,525.51	4,394.49	34.540	SF
EXIST VERT HSR KRAUSE 14-28A - Wellbore #1 - Design #1	12,942.97	7,000.99	2,628.85	2,504.29	21.105	CC
EXIST VERT HSR KRAUSE 14-28A - Wellbore #1 - Design #1	13,000.00	7,000.99	2,629.47	2,503.83	20.929	ES
EXIST VERT HSR KRAUSE 14-28A - Wellbore #1 - Design #1	14,000.00	7,000.99	2,833.40	2,688.83	19.599	SF
EXIST VERT HSR MONTALI 14-33 - Wellbore #1 - Design #1	200.00	200.00	1,504.10	1,503.48	2,415.830	CC, ES
EXIST VERT HSR MONTALI 14-33 - Wellbore #1 - Design #1	14,849.18	7,000.98	7,553.10	7,391.23	46.662	SF
EXIST VERT HSR-HART 12-33 - Wellbore #1 - Design #1	200.00	200.00	2,900.07	2,899.44	4,657.975	CC, ES
EXIST VERT HSR-HART 12-33 - Wellbore #1 - Design #1	14,849.18	7,000.98	7,063.44	6,901.57	43.637	SF
EXIST VERT HSR-HEADLEY 9-33 - Wellbore #1 - Design #1	8,653.30	7,001.00	186.07	138.59	3.919	CC, ES, SF
EXIST VERT HSR-LARSON 16-33A - GYRO - Wellbore	7,723.51	6,960.78	29.71	6.73	1.293	Level 3, CC, ES, SF
EXIST VERT HSR-LEE 13-33 - Wellbore #1 - Design #1	200.00	200.00	2,472.76	2,472.14	3,971.658	CC, ES
EXIST VERT HSR-LEE 13-33 - Wellbore #1 - Design #1	16,800.00	7,000.99	9,986.78	9,790.81	50.960	SF
EXIST VERT HSR-MARLEY 15-33 - Wellbore #1 - Design #1	1,075.96	1,062.37	287.95	282.28	50.752	CC
EXIST VERT HSR-MARLEY 15-33 - Wellbore #1 - Design #1	1,100.00	1,085.27	288.05	282.18	49.121	ES
EXIST VERT HSR-MARLEY 15-33 - Wellbore #1 - Design #1	1,700.00	1,651.15	354.49	344.19	34.435	SF
EXIST VERT HSR-MILTON 10-33 - Wellbore #1 - Design #1	8,600.91	7,001.00	1,106.00	1,059.30	23.683	CC, ES
EXIST VERT HSR-MILTON 10-33 - Wellbore #1 - Design #1	9,000.00	7,001.00	1,175.80	1,122.93	22.240	SF
EXIST VERT HSR-ROBERT 11-33 - Wellbore #1 - Design #1	200.00	200.00	1,710.64	1,710.02	2,747.569	CC, ES
EXIST VERT HSR-ROBERT 11-33 - Wellbore #1 - Design #1	11,400.00	7,000.99	3,558.99	3,463.37	37.219	SF
EXIST VERT KRAUSE 1-J - Wellbore #1 - Design #1	13,750.48	7,000.99	3,743.19	3,603.35	26.768	CC
EXIST VERT KRAUSE 1-J - Wellbore #1 - Design #1	13,800.00	7,000.99	3,743.51	3,602.74	26.592	ES
EXIST VERT KRAUSE 1-J - Wellbore #1 - Design #1	15,739.56	7,000.98	4,234.89	4,058.99	24.075	SF
EXIST VERT KRAUSE 28-2 - Wellbore #1 - Design #1	14,268.98	7,000.99	2,603.70	2,454.02	17.396	CC
EXIST VERT KRAUSE 28-2 - Wellbore #1 - Design #1	14,300.00	7,000.99	2,603.88	2,453.62	17.329	ES
EXIST VERT KRAUSE 28-2 - Wellbore #1 - Design #1	14,849.18	7,000.98	2,678.10	2,516.23	16.545	SF
EXIST VERT MANTLE 1 - Wellbore #1 - Design #1	15,690.07	7,000.98	1,056.13	881.62	6.052	CC
EXIST VERT MANTLE 1 - Wellbore #1 - Design #1	15,701.85	7,000.98	1,056.23	881.38	6.041	ES
EXIST VERT MANTLE 1 - Wellbore #1 - Design #1	15,800.00	7,000.98	1,064.03	887.06	6.012	SF
EXIST VERT MANTLE 32-28 - Wellbore #1 - Design #1	15,517.10	7,000.98	1,665.22	1,496.41	9.864	CC, ES
EXIST VERT MANTLE 32-28 - Wellbore #1 - Design #1	15,739.56	7,000.98	1,692.78	1,516.87	9.623	SF

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

Anticollision Report



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Reference Design:	PROPOSAL #4	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
SW SE SEC. 33 T4N R65W 6th P.M. (LORY)						
EXIST VERT MOSER G 34-30 - Wellbore #1 - Design #1	12,063.26	7,000.99	684.20	576.19	6.335	CC, ES
EXIST VERT MOSER G 34-30 - Wellbore #1 - Design #1	12,100.00	7,000.99	685.19	576.49	6.304	SF
EXIST VERT OGG 21-28 - Wellbore #1 - Design #1	16,967.97	7,001.00	2,948.49	2,749.32	14.804	CC
EXIST VERT OGG 21-28 - Wellbore #1 - Design #1	17,000.00	7,001.00	2,948.66	2,748.88	14.760	ES
EXIST VERT OGG 21-28 - Wellbore #1 - Design #1	17,326.12	7,001.00	2,970.16	2,764.18	14.419	SF
EXIST VERT OGG 22-28 - Wellbore #1 - Design #1	15,584.16	7,000.98	2,640.19	2,469.02	15.425	CC
EXIST VERT OGG 22-28 - Wellbore #1 - Design #1	15,600.00	7,000.98	2,640.30	2,468.60	15.378	ES
EXIST VERT OGG 22-28 - Wellbore #1 - Design #1	16,100.00	7,000.99	2,724.81	2,542.14	14.917	SF
EXIST VERT OGG 31-28 - Wellbore #1 - Design #1	16,711.84	7,000.99	1,645.40	1,451.10	8.468	CC, ES
EXIST VERT OGG 31-28 - Wellbore #1 - Design #1	17,000.00	7,001.00	1,670.45	1,470.67	8.362	SF
EXIST VERT OSTER 1 - Wellbore #1 - Design #1	13,323.33	7,000.99	198.89	67.14	1.510	CC, ES, SF
EXIST VERT OSTER 43-28 - Wellbore #1 - Design #1	14,288.10	7,000.99	58.26	-91.78	0.388	Level 1, CC, ES, SF
EXIST VERT OSTER G 28-8A - Wellbore #1 - Design #1	15,084.23	7,000.98	32.23	-131.81	0.196	Level 1, CC, ES, SF
EXIST VERT OSTER G 28-9 - Wellbore #1 - Design #1	14,158.76	7,000.99	76.10	-71.48	0.516	Level 1, CC, ES, SF
EXIST VERT OSTER PM G 28-1 - Wellbore #1 - Design	16,838.94	7,000.99	370.84	174.12	1.885	CC, ES, SF
EXIST VERT OSTER PM G 28-16 - Wellbore #1 - Design	12,766.87	7,000.99	288.20	166.96	2.377	CC, ES, SF
EXIST VERT PEARSON 1 - Wellbore #1 - Design #1	15,795.33	7,000.98	3,742.62	3,565.73	21.158	CC
EXIST VERT PEARSON 1 - Wellbore #1 - Design #1	15,900.00	7,000.98	3,744.09	3,565.22	20.932	ES
EXIST VERT PEARSON 1 - Wellbore #1 - Design #1	17,300.00	7,001.00	4,033.77	3,828.28	19.630	SF
EXIST VERT UPRR 36 PAN AM C #1 - Wellbore #1 - De	200.00	200.00	2,456.85	2,456.23	3,946.096	CC, ES
EXIST VERT UPRR 36 PAN AM C #1 - Wellbore #1 - De	15,500.00	4,707.00	9,255.77	9,107.05	62.234	SF
EXIST VERT UPRR 36 PAN AM C #2 - Wellbore #1 - De	1,412.77	1,380.41	385.40	376.75	44.573	CC, ES
EXIST VERT UPRR 36 PAN AM C #2 - Wellbore #1 - De	2,200.00	2,122.46	466.51	452.02	32.214	SF
LORY 10N - ORIGINAL WELLBORE - PROPOSAL #2	360.49	360.39	14.40	13.08	10.918	CC
LORY 10N - ORIGINAL WELLBORE - PROPOSAL #2	17,326.12	17,337.42	318.58	-51.40	0.861	Level 1, ES, SF
LORY 12N - ORIGINAL WELLBORE - PROPOSAL #1	250.47	250.55	14.55	13.71	17.378	CC
LORY 12N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,511.38	300.01	-63.04	0.826	Level 1, ES, SF
LORY 1N - ORIGINAL WELLBORE - PROPOSAL #1	100.00	100.00	150.06	149.89	867.050	CC
LORY 1N - ORIGINAL WELLBORE - PROPOSAL #1	200.00	198.90	150.42	149.81	244.977	ES
LORY 1N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,281.37	3,406.19	3,024.10	8.915	SF
LORY 2N - ORIGINAL WELLBORE - PROPOSAL #1	282.55	281.50	135.14	134.17	139.316	CC
LORY 2N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	298.70	135.15	134.10	129.541	ES
LORY 2N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,295.13	3,114.71	2,731.72	8.133	SF
LORY 3N - ORIGINAL WELLBORE - PROPOSAL #1	405.95	403.98	118.91	117.40	78.707	CC, ES
LORY 3N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,138.87	2,756.19	2,374.37	7.219	SF
LORY 4N - ORIGINAL WELLBORE - PROPOSAL #1	463.71	461.74	102.66	100.87	57.399	CC, ES
LORY 4N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,186.28	2,361.97	1,979.45	6.175	SF
LORY 5N - ORIGINAL WELLBORE - PROPOSAL #1	529.19	527.70	86.69	84.57	40.907	CC, ES
LORY 5N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,087.09	2,014.16	1,633.17	5.287	SF
LORY 6N - ORIGINAL WELLBORE - PROPOSAL #1	550.36	549.49	71.90	69.67	32.150	CC, ES
LORY 6N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,174.73	1,754.51	1,374.17	4.613	SF
LORY 7N - ORIGINAL WELLBORE - PROPOSAL #1	513.31	512.69	57.55	55.50	28.121	CC, ES
LORY 7N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,097.06	1,286.05	906.07	3.385	SF
LORY 8N - ORIGINAL WELLBORE - PROPOSAL #1	471.16	470.75	43.28	41.44	23.513	CC
LORY 8N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	499.45	43.38	41.40	21.922	ES
LORY 8N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,221.69	956.02	573.94	2.502	SF
LORY 9N - ORIGINAL WELLBORE - PROPOSAL #1	418.88	418.65	28.78	27.19	18.107	CC, ES
LORY 9N - ORIGINAL WELLBORE - PROPOSAL #1	17,326.12	17,198.76	594.21	211.11	1.551	SF

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