



Project: WELD COUNTY, COLORADO
Site: SE SW SEC. 3 T4N R64W 6th P.M.
Well: POPHAM 1C
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation	
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 1167ft FSL & 2205ft FWL of Sec 3	
1200.0	1200.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (3°/100ft BUR)	
2277.6	2344.9	34.35	242.13	-155.7	-294.4	-16.1	333.0	EOB TO 34.35° INC	
4931.2	5559.0	34.35	242.13	-1003.5	-1897.4	-103.6	2146.4	END OF TANGENT	
6008.8	6703.9	0.00	0.00	-1159.2	-2191.8	-119.7	2479.5	EOD TO VERTICAL	
6108.8	6803.9	0.00	0.00	-1159.2	-2191.8	-119.7	2479.5	KOP (8°/100ft BUR)	
6825.0	7929.0	90.00	1.04	-443.1	-2178.8	523.3	3195.7	HZ LP: 737ft FSL & 35ft FWL of Sec 3	
6825.0	12832.6	90.00	1.04	4459.7	-2089.8	4925.1	8099.3	BHL: 370ft FSL & 115ft FEL of Sec 33	

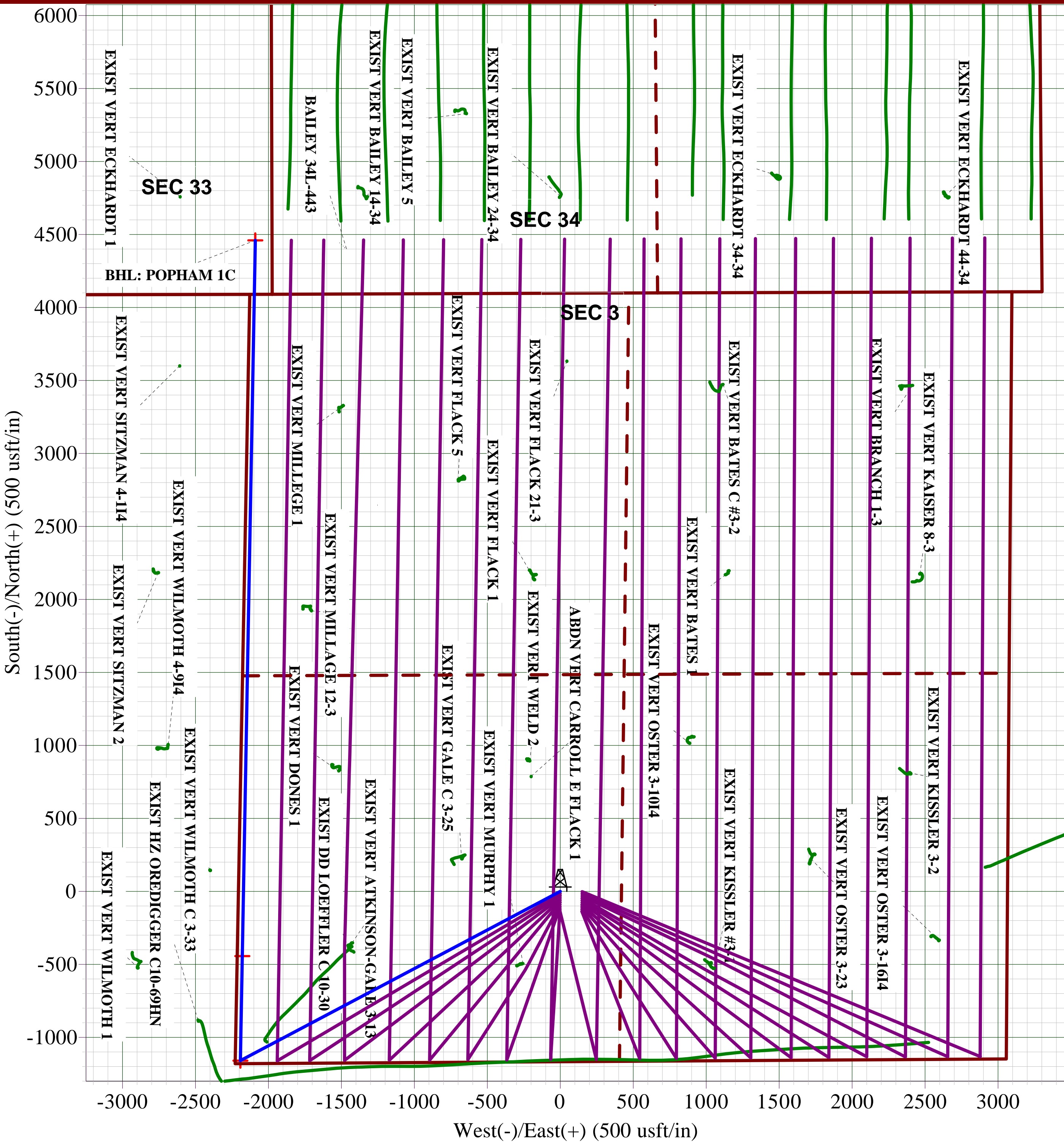
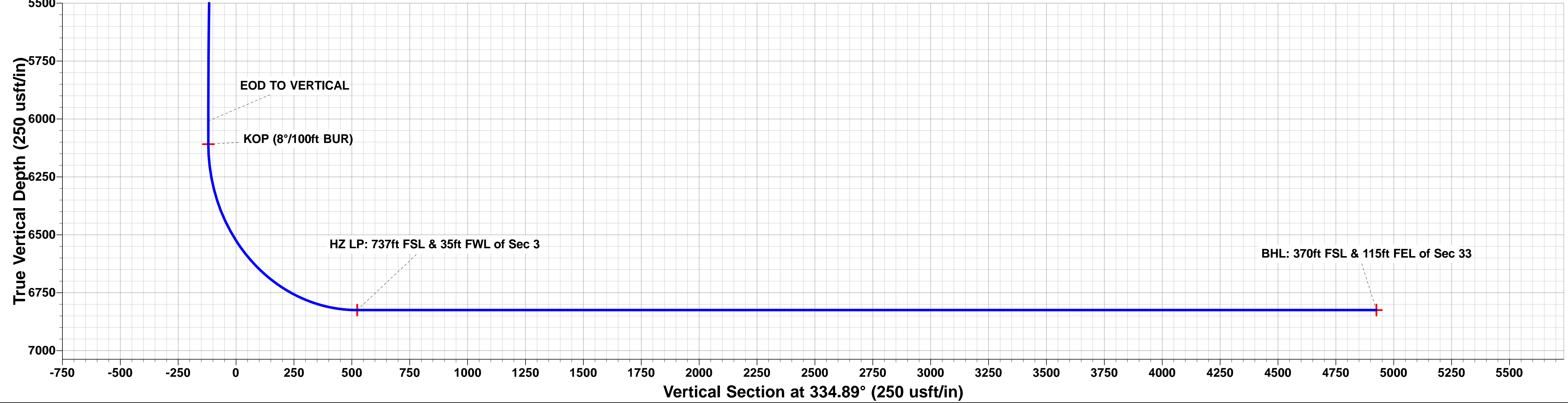
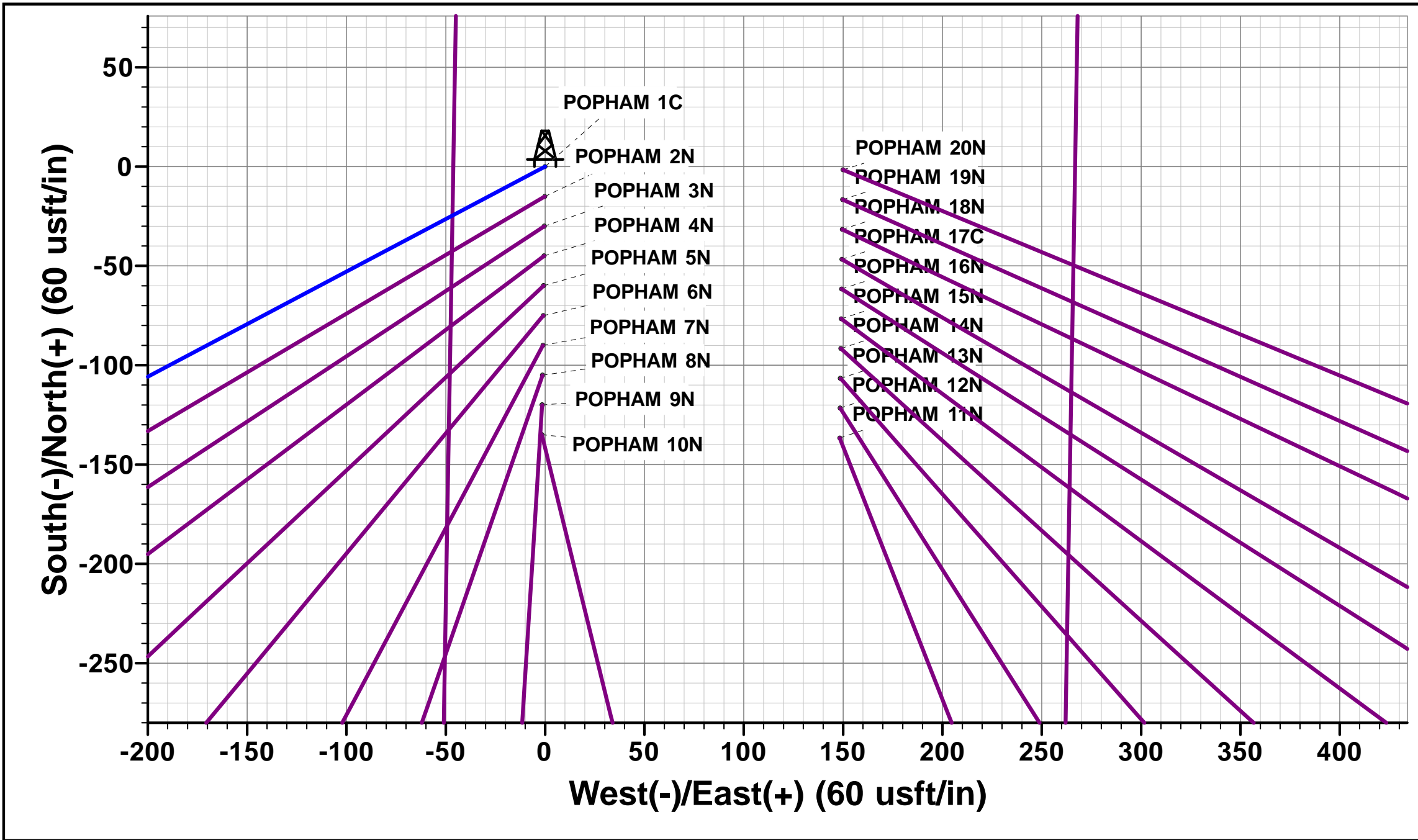
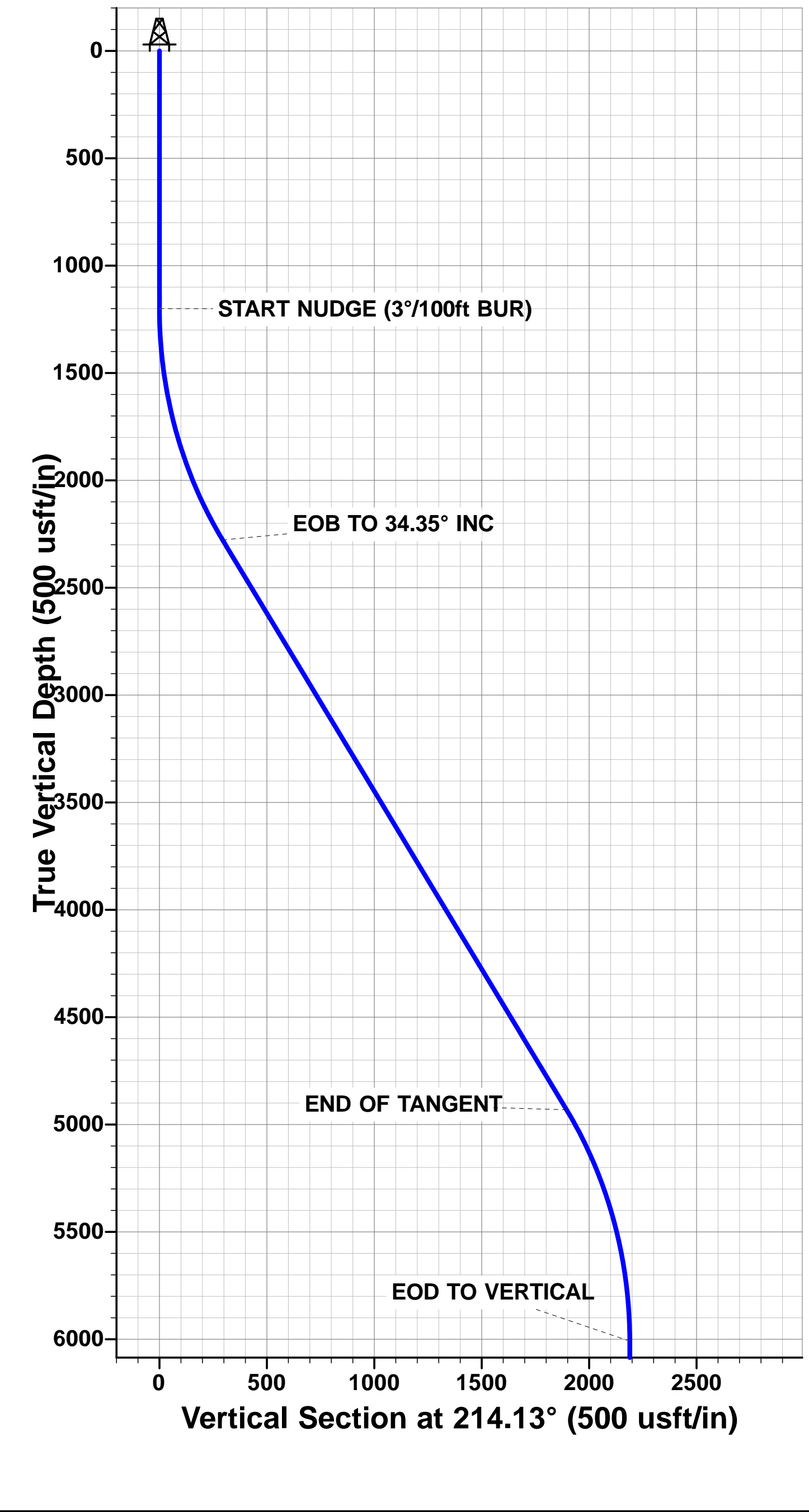
PROPOSED LOCAL COORDINATES:

SHL: 1167ft FSL & 2205ft FWL of Sec 3

HZ LP: 737ft FSL & 35ft FWL of Sec 3

BHL: 370ft FSL & 115ft FEL of Sec 33

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: POPHAM 1C	6108.8	-1159.2	-2191.8	40.334144	-104.545906
EP: POPHAM 1C	6825.0	-443.1	-2178.8	40.336110	-104.545860
BHL: POPHAM 1C	6825.0	4459.7	-2089.8	40.349568	-104.545542



PDC ENERGY

**WELD COUNTY, COLORADO
SE SW SEC. 3 T4N R64W 6th P.M.
POPHAM 1C**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

19 September, 2017



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well POPHAM 1C - Slot POPHAM 1C
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4685.0usft (Original Well Elev)
Reference Site:	SE SW SEC. 3 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4685.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	POPHAM 1C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	19/09/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	12,832.6	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 SW SEC. 3 T4N R64W 6th P.M.						
POPHAM 10N - ORIGINAL WELLBORE - PROPOSAL #	300.0	300.0	135.0	133.9	125.878	CC, ES
POPHAM 10N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,041.1	2,439.3	2,264.6	13.959	SF
POPHAM 11N - ORIGINAL WELLBORE - PROPOSAL #	300.0	297.0	201.6	200.6	189.272	CC, ES
POPHAM 11N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,117.0	2,667.0	2,483.5	14.536	SF
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	400.0	398.0	191.9	190.4	126.502	CC, ES
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,077.5	2,923.6	2,743.9	16.271	SF
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	500.0	497.0	182.9	181.0	93.115	CC, ES
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,190.7	3,185.6	3,005.9	17.723	SF
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	600.0	597.0	174.8	172.4	72.407	CC, ES
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,183.9	3,432.6	3,257.1	19.565	SF
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	700.0	698.0	167.6	164.7	58.476	CC, ES
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,326.9	3,705.5	3,526.2	20.661	SF
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	800.0	798.0	161.4	158.1	48.691	CC, ES
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,382.8	3,966.7	3,786.9	22.061	SF
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	900.0	898.0	156.5	152.8	41.574	CC, ES
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,611.1	4,222.2	4,041.4	23.352	SF
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	1,000.0	998.0	152.9	148.7	36.281	CC, ES
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,617.4	4,491.5	4,307.4	24.388	SF
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	1,100.0	1,098.0	150.7	146.0	32.309	CC, ES
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,791.5	4,779.1	4,598.2	26.416	SF
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	1,200.0	1,198.0	149.9	144.8	29.316	CC, ES
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	12,832.6	12,895.2	5,002.9	4,821.9	27.635	SF
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	1,100.0	1,100.0	15.1	10.4	3.226	CC, ES
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	3,600.0	3,579.0	62.0	15.7	1.340	Level 3, SF
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	1,000.0	1,000.0	30.0	25.8	7.109	CC, ES
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,492.6	483.9	314.8	2.862	SF
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	900.0	900.0	45.0	41.2	11.930	CC, ES
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,346.5	765.4	596.9	4.540	SF
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	800.0	800.0	60.0	56.7	18.068	CC, ES
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,298.5	1,021.6	847.0	5.849	SF
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	700.0	700.0	75.0	72.1	26.126	CC, ES
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,161.7	1,304.3	1,133.2	7.621	SF
POPHAM 7N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	90.0	87.5	37.163	CC, ES
POPHAM 7N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,171.7	1,557.0	1,380.2	8.809	SF
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	500.0	500.0	105.0	103.0	53.272	CC, ES
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,084.5	1,829.1	1,650.2	10.227	SF
POPHAM 9N - ORIGINAL WELLBORE - PROPOSAL #1	400.0	399.0	120.0	118.5	78.967	CC, ES

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 POPHAM 1C - Slot POPHAM 1C
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4685.0usft (Original Well Elev)
Reference Site:	SE SW SEC. 3 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4685.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	POPHAM 1C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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 SW SEC. 3 T4N R64W 6th P.M.						
POPHAM 9N - ORIGINAL WELLBORE - PROPOSAL #1	12,832.6	12,093.9	2,122.5	1,942.0	11.763	SF
SE SW SEC. 3 T4N R64W 6th P.M. (OFFSETS FOR POPHAM						
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	1,403.7	1,374.4	2,103.2	2,099.4	556.148	CC
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	1,500.0	1,468.8	2,103.3	2,099.3	521.677	ES
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	5,559.0	4,960.9	3,026.3	2,985.8	74.870	SF
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	2,266.3	5,073.0	4,390.0	4,364.7	173.414	CC
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	2,400.0	5,337.5	4,391.5	4,364.5	162.109	ES
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	12,832.6	7,677.3	6,594.1	6,478.1	56.862	SF
EXIST HZ SUDEN 34M-223 - Wellbore #1 - Wellbore #1	12,832.6	11,092.0	3,215.2	3,050.1	19.464	CC, ES, SF
EXIST HZ SUDEN 34M-423 - Wellbore #1 - Wellbore #1	12,832.6	11,065.0	3,011.5	2,848.2	18.445	CC, ES, SF
EXIST HZ SUDEN 34R-203 - Wellbore #1 - Wellbore #1	12,832.6	11,081.0	3,920.2	3,755.1	23.750	CC, ES, SF
EXIST HZ SUDEN 34R-323 - Wellbore #1 - Wellbore #1	12,832.6	11,162.0	4,482.4	4,314.8	26.743	CC, ES, SF
EXIST HZ SUDEN 34R-343 - Wellbore #1 - Wellbore #1	12,832.6	11,135.0	3,665.8	3,500.3	22.157	CC, ES, SF
EXIST HZ SUDEN 34R-423 - Wellbore #1 - Wellbore #1	12,832.6	11,245.0	4,311.8	4,143.9	25.683	CC, ES, SF
EXIST HZ SUDEN 34U-243 - Wellbore #1 - Wellbore #1	12,832.6	11,118.0	4,982.0	4,814.5	29.742	CC, ES, SF
EXIST HZ SUDEN 34U-403 - Wellbore #1 - Wellbore #1	12,832.6	11,309.0	5,318.9	5,150.8	31.647	CC, ES, SF
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	899.8	874.8	2,446.4	2,444.0	991.776	CC
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	1,200.0	1,170.3	2,446.6	2,443.4	759.266	ES
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	12,832.6	6,700.0	3,959.5	3,873.5	46.052	SF
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,918.5	6,800.0	3,131.5	3,061.5	44.726	CC
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	12,000.0	6,800.0	3,132.5	3,061.0	43.820	ES
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	12,832.6	6,800.0	3,262.2	3,175.5	37.648	SF
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	1,280.6	1,400.0	4,190.7	4,187.1	1,183.328	CC, ES
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	12,832.6	6,700.0	4,545.9	4,459.8	52.795	SF
EXIST VERT ECKHARDT 34-34 - Wellbore #1 - Wellbor	12,832.6	6,475.0	3,581.0	3,495.6	41.963	CC, ES, SF
EXIST VERT ECKHARDT 44-34 - Wellbore #1 - Wellbor	12,832.6	6,300.0	4,750.6	4,665.4	55.771	CC, ES, SF
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	10,607.5	6,650.0	1,926.4	1,880.6	42.074	CC, ES
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	12,100.0	6,650.0	2,436.9	2,364.9	33.835	SF
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	11,210.6	6,700.0	1,425.1	1,368.9	25.383	CC, ES
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	11,900.0	6,700.0	1,583.1	1,514.6	23.135	SF
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	2,595.6	2,463.1	518.4	506.3	42.751	CC
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	2,600.0	2,466.7	518.4	506.3	42.567	ES
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	3,100.0	2,868.6	598.2	580.8	34.507	SF
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	992.2	965.2	3,285.5	3,282.9	1,258.233	CC
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	1,200.0	1,154.8	3,285.8	3,282.7	1,048.574	ES
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	12,832.6	6,750.0	5,073.1	4,987.0	58.871	SF
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	1,208.5	1,177.6	1,175.2	1,171.8	353.933	CC, ES
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	12,832.6	6,700.0	5,810.9	5,724.7	67.384	SF
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	100.0	46.6	2,525.2	2,525.1	10,000.000	CC, ES
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	12,832.6	6,800.0	5,708.4	5,622.0	66.027	SF
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	2,586.8	2,453.0	312.6	300.5	25.755	CC
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	2,600.0	2,464.0	312.7	300.4	25.430	ES
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	2,800.0	2,627.8	335.4	321.1	23.349	SF
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	1,211.2	1,184.5	1,345.7	1,342.5	423.002	CC, ES
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	12,832.6	6,700.0	4,540.6	4,454.7	52.907	SF
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	222.5	165.5	2,616.9	2,616.3	4,758.875	CC
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	700.0	638.2	2,617.3	2,615.5	1,433.249	ES
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	12,832.6	6,700.0	6,649.6	6,563.4	77.172	SF
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	1,211.4	1,184.3	1,725.3	1,722.0	528.690	CC, ES
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	12,832.6	6,500.0	5,644.2	5,558.7	66.049	SF
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	108.3	121.3	917.4	917.2	3,875.310	CC, ES
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	12,600.0	6,700.0	3,813.3	3,732.1	46.932	SF

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Anticollision Report



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Site Error:	0.0 usft	North Reference:	True
Reference Well:	POPHAM 1C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 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						
SW SW SEC. 34 T5N R64W 6th P.M.						
ABDN VERT CARROLL E FLACK 1 - Wellbore #1 - Desi	1,200.0	1,194.0	812.9	787.4	31.870	CC
ABDN VERT CARROLL E FLACK 1 - Wellbore #1 - Desi	1,400.0	1,393.6	815.5	785.6	27.258	ES
ABDN VERT CARROLL E FLACK 1 - Wellbore #1 - Desi	9,500.0	6,818.9	1,980.1	1,815.3	12.014	SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	5,700.0	5,150.7	85.5	22.0	1.347	Level 3, ES, SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	5,707.3	5,157.5	85.5	22.3	1.354	Level 3, CC
EXIST HZ CHESNUT 27G-203 - Wellbore #1 - Wellbore	12,832.6	13,769.0	358.6	177.8	1.984	CC, ES, SF
EXIST HZ CHESNUT 27G-423 - Wellbore #1 - Wellbore	12,832.6	13,972.0	601.9	376.2	2.668	CC, ES, SF
EXIST HZ CHESNUT 27K-203 - Wellbore #1 - Wellbore	12,832.6	13,900.0	1,289.8	1,069.1	5.843	CC, ES, SF
EXIST HZ CHESNUT 27K-323 - Wellbore #1 - Wellbore	12,832.6	14,120.0	1,886.7	1,675.0	8.914	CC, ES, SF
EXIST HZ CHESNUT 27K-343 - Wellbore #1 - Wellbore	12,832.6	13,920.0	926.8	704.7	4.173	CC, ES, SF
EXIST HZ CHESNUT 27K-403 - Wellbore #1 - Wellbore	12,832.6	14,160.0	1,575.6	1,363.3	7.422	CC, ES, SF
EXIST HZ CHESNUT 27O-243 - Wellbore #1 - Wellbore	12,832.6	14,066.0	2,239.9	2,028.3	10.581	CC, ES, SF
EXIST HZ CHESNUT 27O-303 - Wellbore #1 - Wellbore	12,832.6	14,196.0	2,556.5	2,343.3	11.988	CC, ES, SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,924.4	6,329.9	146.7	91.0	2.632	CC
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,950.0	6,353.0	147.6	90.4	2.582	ES, SF
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	4,323.2	3,906.6	337.6	304.0	10.044	CC, ES
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	4,400.0	3,968.2	340.6	306.3	9.915	SF
EXIST VERT BAILEY 14-34 - Wellbore #1 - Wellbore #1	12,832.6	6,525.0	838.8	758.3	10.421	CC, ES, SF
EXIST VERT BAILEY 24-34 - Wellbore #1 - Wellbore #1	12,832.6	6,500.0	2,080.0	1,995.4	24.576	CC, ES, SF
EXIST VERT BAILEY 5 - Wellbore #1 - Wellbore #1	12,832.6	6,790.0	1,627.1	1,540.4	18.777	CC, ES, SF
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	9,251.3	6,808.2	595.4	567.8	21.604	CC, ES
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	9,400.0	6,806.8	613.7	584.6	21.139	SF
EXIST VERT ECKHARDT 1 - Wellbore #1 - Design #1	12,832.6	6,823.0	595.8	375.2	2.701	CC, ES, SF
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	12,045.1	6,815.0	2,150.3	1,944.1	10.430	CC
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	12,100.0	6,815.0	2,151.0	1,943.8	10.383	ES
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	12,500.0	6,815.0	2,197.9	1,983.4	10.248	SF
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	10,313.1	6,750.0	382.7	343.2	9.689	CC, ES
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	10,400.0	6,750.0	392.4	351.6	9.597	SF
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	11,668.5	6,750.0	601.0	537.3	9.443	CC, ES
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	11,800.0	6,750.0	615.2	549.2	9.321	SF
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	10,552.7	6,525.0	724.6	674.7	14.522	CC, ES
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	10,700.0	6,525.0	739.4	687.4	14.207	SF
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	11,964.3	6,838.0	502.3	297.4	2.451	CC, ES
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	12,000.0	6,838.0	503.6	298.0	2.449	SF
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	6,850.0	6,143.8	1,037.4	984.0	19.427	SF
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	7,940.0	6,760.0	757.8	729.4	26.665	CC, ES
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	9,341.2	6,800.0	589.2	559.6	19.892	CC, ES
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	9,500.0	6,800.0	610.3	578.9	19.468	SF
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	8,512.3	6,825.0	229.0	204.9	9.500	CC, ES, SF

Offset Design SE SW SEC. 3 T4N R64W 6th P.M. - POPHAM 10N - ORIGINAL WELLBORE - PROPOSAL #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-179.30	-134.9	-1.6	135.0					
100.0	100.0	100.0	100.0	0.1	0.1	-179.30	-134.9	-1.6	135.0	134.8	0.17	779.786		
200.0	200.0	200.0	200.0	0.3	0.3	-179.30	-134.9	-1.6	135.0	134.3	0.62	216.764		
300.0	300.0	300.0	300.0	0.5	0.5	-179.30	-134.9	-1.6	135.0	133.9	1.07	125.878	CC, ES	
400.0	400.0	395.6	395.6	0.8	0.7	-179.47	-136.5	-1.3	136.6	135.1	1.49	91.767		
500.0	500.0	491.0	490.9	1.0	0.9	-179.95	-141.1	-0.1	141.4	139.5	1.90	74.304		

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