



Project: WELD COUNTY, COLORADO
Site: SE SW SEC. 3 T4N R64W 6th P.M.
Well: POPHAM 11N
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: 1029ft FSL & 2356ft FWL of Sec 3	
300.0	300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
908.0	912.7	12.25	158.56	-60.7	23.9	-58.3	65.3	EOB TO 12.25° INC	
5297.8	5404.8	12.25	158.56	-948.2	372.3	-909.8	1018.6	END OF TANGENT	
5905.8	6017.5	0.00	0.00	-1008.9	396.2	-968.1	1083.9	EOD TO VERTICAL	
6005.8	6117.5	0.00	0.00	-1008.9	396.2	-968.1	1083.9	KOP (8°/100ft BUR)	
6722.0	7245.3	90.23	0.31	-289.8	400.1	-251.7	1803.0	HZ LP: 737ft FSL & 2512ft FEL of Sec 3	
6702.0	12141.3	90.24	0.30	4606.0	426.3	4625.7	6698.9	BHL: 370ft FSL & 2550ft FWL of Sec 34	

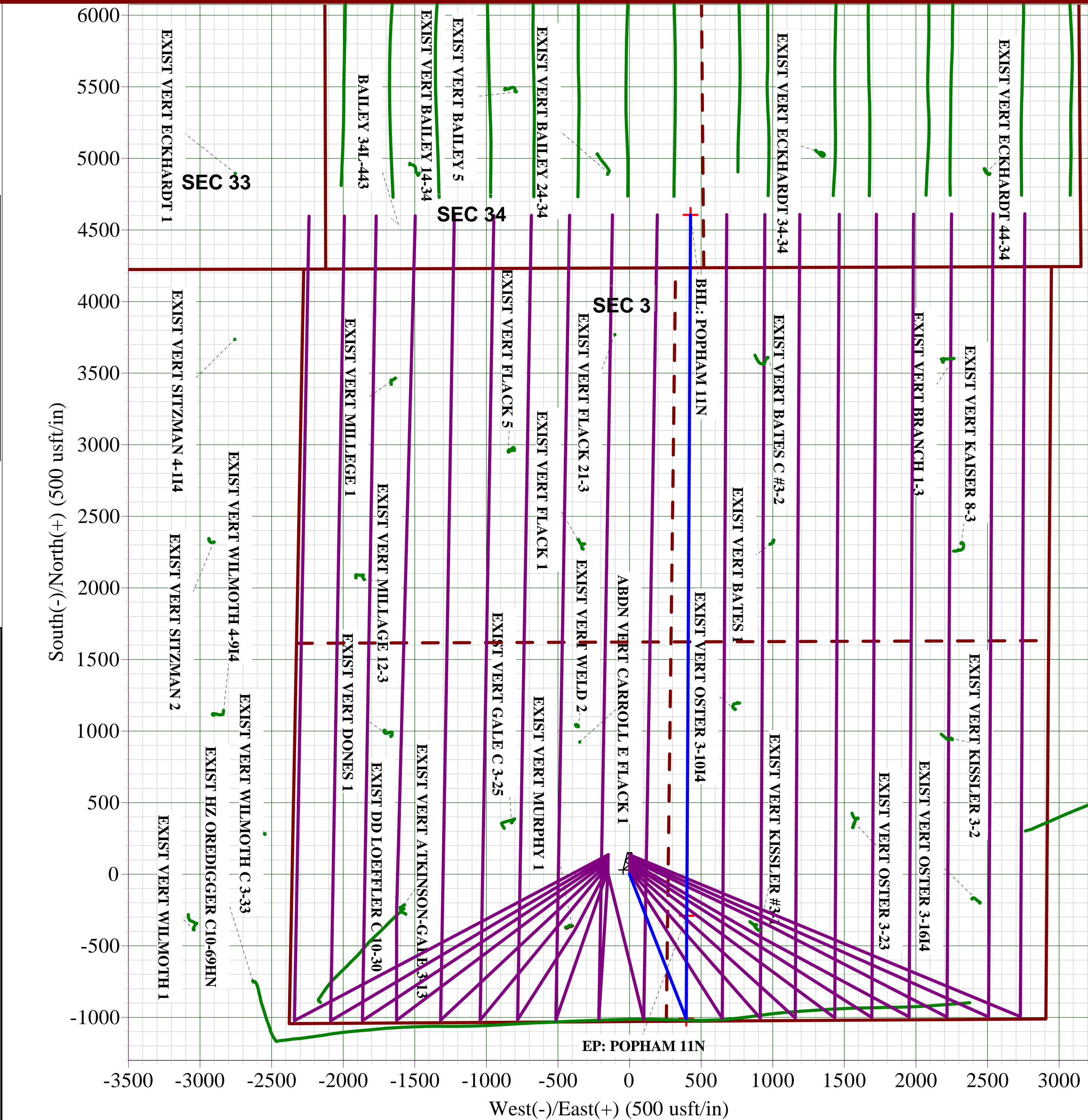
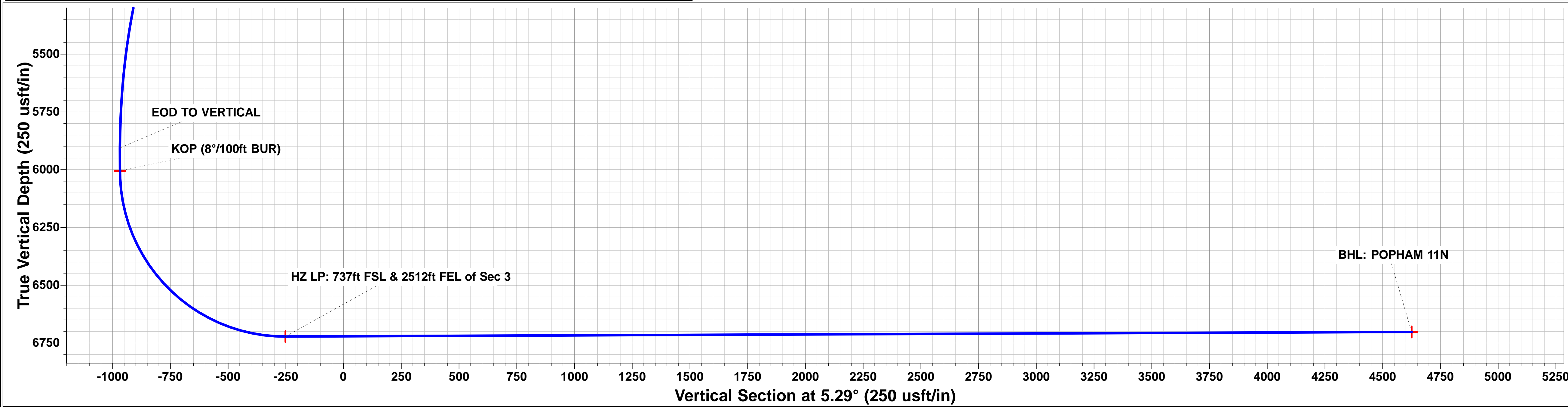
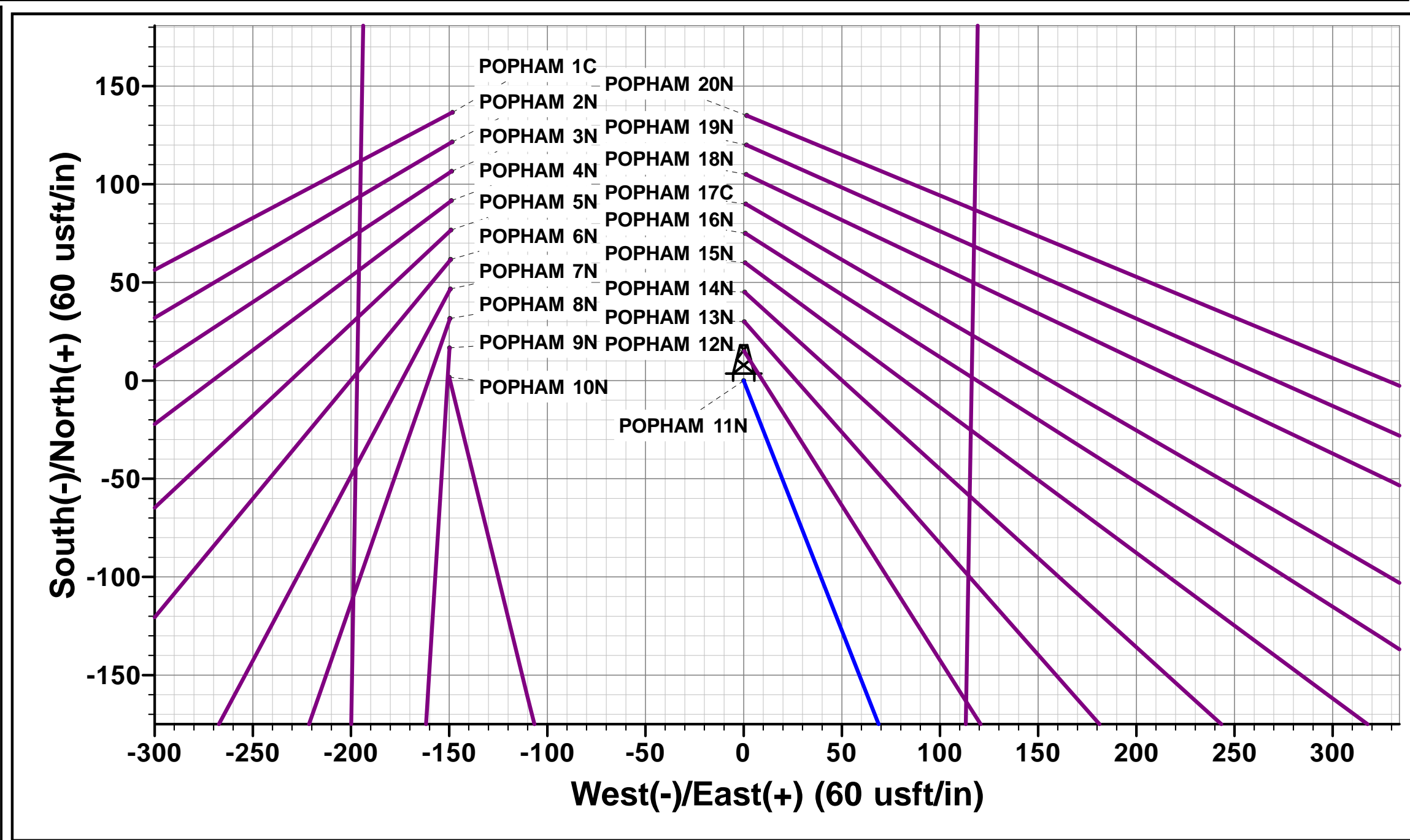
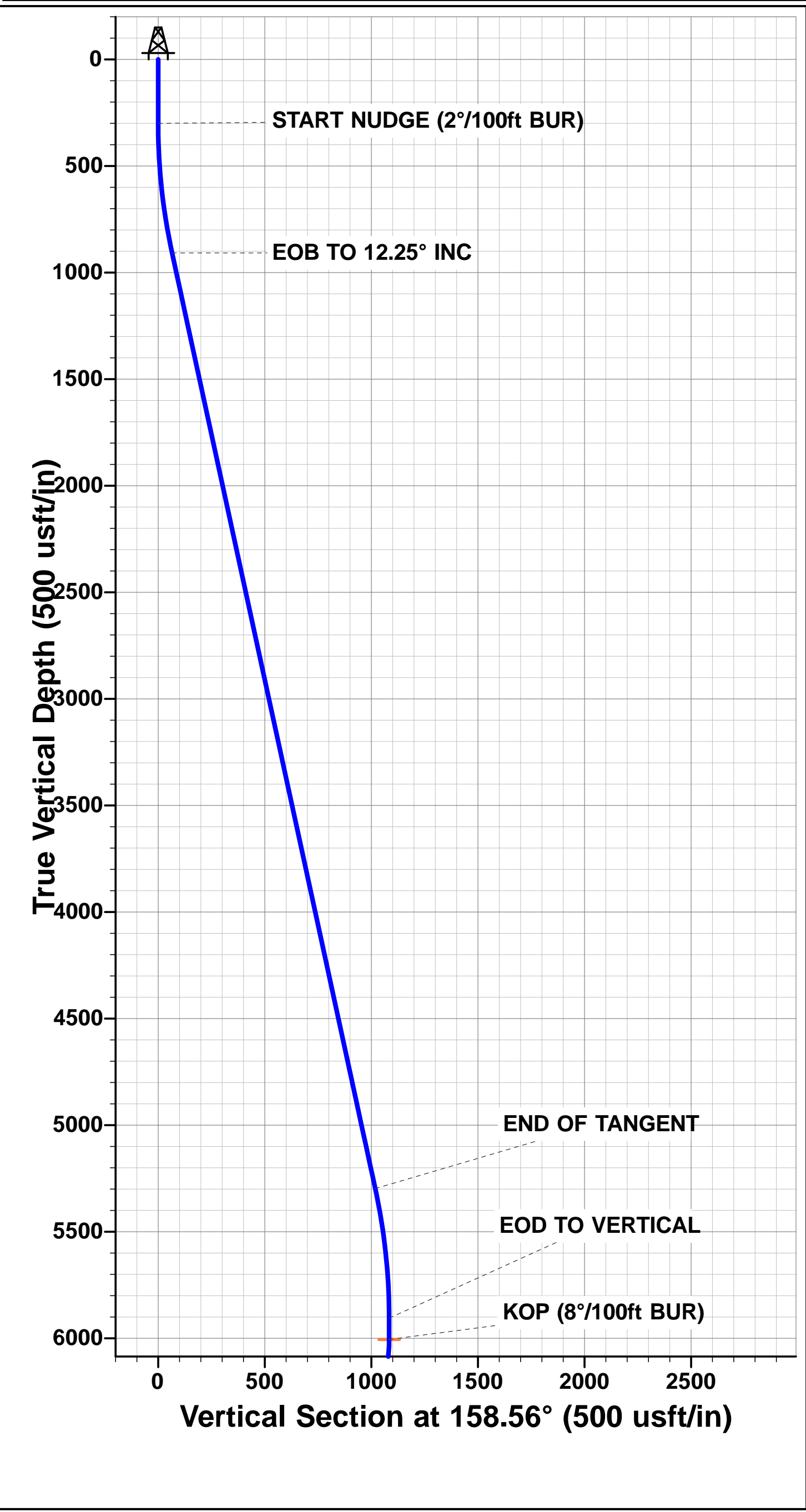
PROPOSED LOCAL COORDINATES:

SHL: 1029ft FSL & 2356ft FWL of Sec 3

HZ LP: 737ft FSL & 2512ft FEL of Sec 3

BHL: 370ft FSL & 2550ft FWL of Sec 34

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: POPHAM 11N	6005.8	-1008.9	396.2	40.334182	-104.536091
EP: POPHAM 11N	6722.0	-289.8	400.1	40.336156	-104.536078
BHL: POPHAM 11N	6702.0	4606.0	426.3	40.349595	-104.535983



PDC ENERGY

**WELD COUNTY, COLORADO
SE SW SEC. 3 T4N R64W 6th P.M.
POPHAM 11N**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

19 September, 2017



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well POPHAM 11N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4682.0usft (Original Well Elev)
Reference Site:	SE SW SEC. 3 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4682.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	POPHAM 11N	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	12,141.2	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 #	306.1	309.2	150.0	148.9	135.984	CC
POPHAM 10N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,092.8	242.3	57.5	1.311	Level 3, ES, SF
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	15.0	14.0	14.005	CC, ES
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,102.7	262.6	71.2	1.372	Level 3, SF
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	300.0	300.0	30.0	28.9	28.001	CC, ES
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,215.9	519.1	323.3	2.652	SF
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	300.0	300.0	45.0	44.0	42.002	CC, ES
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,209.2	766.2	574.8	4.003	SF
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	60.0	58.9	55.851	CC, ES
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,353.6	1,039.0	843.7	5.321	SF
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	75.0	73.9	69.823	CC, ES
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,408.0	1,299.8	1,103.9	6.637	SF
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	90.0	88.9	83.726	CC, ES
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,634.9	1,561.7	1,366.4	7.996	SF
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	105.0	103.9	97.732	CC, ES
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,642.4	1,824.5	1,624.3	9.113	SF
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	120.0	118.9	111.669	CC, ES
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,816.7	2,112.8	1,916.3	10.749	SF
POPHAM 1C - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	201.6	200.6	186.906	CC, ES
POPHAM 1C - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,832.6	2,667.1	2,482.8	14.468	SF
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	300.0	301.0	135.0	133.9	125.509	CC, ES
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	12,141.3	12,920.4	2,336.0	2,139.1	11.866	SF
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	191.9	190.8	177.866	CC, ES
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,551.9	2,418.5	2,226.6	12.603	SF
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	183.0	181.9	169.605	CC, ES
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,502.5	2,195.5	2,003.2	11.414	SF
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	174.8	173.7	162.021	CC, ES
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,369.5	1,923.8	1,732.0	10.027	SF
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	167.6	166.5	155.360	CC, ES
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,319.8	1,649.6	1,456.7	8.549	SF
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	161.5	160.4	149.656	CC, ES
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,189.4	1,375.5	1,185.4	7.236	SF
POPHAM 7N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	156.5	155.4	145.075	CC, ES
POPHAM 7N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,204.0	1,111.7	917.8	5.733	SF
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	303.0	152.9	151.8	141.721	CC, ES
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	12,141.3	12,123.9	847.7	651.7	4.324	SF
POPHAM 9N - ORIGINAL WELLBORE - PROPOSAL #1	300.0	302.0	150.7	149.6	139.984	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 POPHAM 11N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4682.0usft (Original Well Elev)
Reference Site:	SE SW SEC. 3 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4682.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	POPHAM 11N	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	12,141.3	12,138.8	544.9	347.5	2.761	SF
SE SW SEC. 3 T4N R64W 6th P.M. (OFFSETS FOR POPHAM)						
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	6,117.5	5,974.3	809.9	792.2	45.857	ES, SF
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	6,122.5	5,979.2	809.9	792.3	45.959	CC
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	7,851.1	7,543.0	2,366.3	2,311.8	43.462	CC
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	7,900.0	7,543.0	2,366.8	2,311.8	43.060	ES
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	10,000.0	7,522.3	3,196.4	3,106.8	35.692	SF
EXIST HZ SUDEN 34M-223 - Wellbore #1 - Wellbore #1	12,141.3	11,092.0	562.4	382.3	3.122	CC, ES, SF
EXIST HZ SUDEN 34M-423 - Wellbore #1 - Wellbore #1	12,141.3	11,065.0	465.6	297.4	2.769	CC, ES, SF
EXIST HZ SUDEN 34R-203 - Wellbore #1 - Wellbore #1	12,141.3	11,081.0	1,257.5	1,076.6	6.951	CC, ES, SF
EXIST HZ SUDEN 34R-323 - Wellbore #1 - Wellbore #1	12,141.3	11,162.0	1,819.2	1,636.0	9.926	CC, ES, SF
EXIST HZ SUDEN 34R-343 - Wellbore #1 - Wellbore #1	12,141.3	11,135.0	1,005.8	824.6	5.552	CC, ES, SF
EXIST HZ SUDEN 34R-423 - Wellbore #1 - Wellbore #1	12,141.3	11,245.0	1,654.5	1,471.7	9.050	CC, ES, SF
EXIST HZ SUDEN 34U-243 - Wellbore #1 - Wellbore #1	12,141.3	11,118.0	2,317.0	2,133.6	12.632	CC, ES, SF
EXIST HZ SUDEN 34U-403 - Wellbore #1 - Wellbore #1	12,141.3	11,309.0	2,657.9	2,474.5	14.491	CC, ES, SF
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	9,871.8	6,684.9	595.1	536.8	10.212	CC, ES
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	10,000.0	6,684.5	608.8	548.1	10.036	SF
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,157.2	6,697.1	457.9	374.9	5.519	CC, ES
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,200.0	6,699.2	459.9	376.1	5.490	SF
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	11,130.5	6,661.4	1,771.8	1,689.7	21.568	CC, ES
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	11,900.0	6,639.9	1,931.6	1,834.6	19.908	SF
EXIST VERT ECKHARDT 34-34 - Wellbore #1 - Wellbor	12,141.3	6,475.0	1,000.2	899.6	9.939	CC, ES, SF
EXIST VERT ECKHARDT 44-34 - Wellbore #1 - Wellbor	12,141.3	6,300.0	2,105.7	2,004.8	20.859	CC, ES, SF
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	9,868.2	6,650.0	777.3	719.3	13.408	CC, ES
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	10,100.0	6,650.0	811.1	748.9	13.023	SF
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	10,477.3	6,682.7	1,264.7	1,195.2	18.193	CC
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	10,500.0	6,682.7	1,264.9	1,195.0	18.084	ES
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	10,900.0	6,683.7	1,333.5	1,255.9	17.190	SF
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	312.6	303.4	898.9	898.0	1,020.819	CC, ES
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	9,100.0	6,701.3	1,788.6	1,744.5	40.547	SF
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	9,802.3	6,750.0	1,850.6	1,793.7	32.518	CC, ES
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	11,000.0	6,750.0	2,204.4	2,124.8	27.714	SF
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	7,200.0	6,694.9	441.0	419.0	20.026	SF
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	7,206.6	6,695.4	440.9	418.9	20.027	CC, ES
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	8,522.8	6,803.3	1,774.2	1,739.6	51.205	CC, ES
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	10,300.0	6,800.0	2,511.4	2,445.1	37.896	SF
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	1,428.4	1,391.4	522.9	517.5	97.827	CC
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	1,500.0	1,461.1	523.1	517.4	91.814	ES
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	7,100.0	6,500.0	869.0	847.3	40.224	SF
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	8,732.8	6,680.2	361.0	323.2	9.531	CC, ES
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	8,800.0	6,680.9	367.2	328.2	9.418	SF
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	7,372.5	6,654.9	1,993.5	1,971.4	90.270	CC, ES
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	12,141.3	6,609.6	5,168.6	5,067.0	50.825	SF
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	7,968.4	6,500.0	1,165.7	1,138.6	43.013	CC, ES
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	8,900.0	6,500.0	1,492.2	1,451.3	36.436	SF
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	8,576.0	6,700.0	777.7	742.4	22.045	CC
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	8,600.0	6,700.0	778.0	742.4	21.820	ES
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	8,900.0	6,700.0	842.5	801.8	20.733	SF

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well POPHAM 11N
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Reference Site:	SE SW SEC. 3 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4682.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
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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	8,455.9	6,714.1	754.4	588.6	4.551	CC, ES
ABDN VERT CARROLL E FLACK 1 - Wellbore #1 - Desi	8,500.0	6,713.9	755.7	589.2	4.540	SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	315.0	327.9	1,618.5	1,617.6	1,827.403	CC, ES
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	12,141.3	6,754.0	6,077.0	5,959.3	51.601	SF
EXIST HZ CHESNUT 27G-203 - Wellbore #1 - Wellbore	12,141.3	13,769.0	2,449.6	2,210.1	10.227	CC, ES, SF
EXIST HZ CHESNUT 27G-423 - Wellbore #1 - Wellbore	12,141.3	13,972.0	2,086.1	1,845.6	8.674	CC, ES, SF
EXIST HZ CHESNUT 27K-203 - Wellbore #1 - Wellbore	12,141.3	13,900.0	1,404.2	1,165.4	5.881	CC, ES, SF
EXIST HZ CHESNUT 27K-323 - Wellbore #1 - Wellbore	12,141.3	14,120.0	796.4	568.5	3.494	CC, ES, SF
EXIST HZ CHESNUT 27K-343 - Wellbore #1 - Wellbore	12,141.3	13,920.0	1,759.7	1,519.6	7.328	CC, ES, SF
EXIST HZ CHESNUT 27K-403 - Wellbore #1 - Wellbore	12,141.3	14,160.0	1,107.7	880.7	4.879	CC, ES, SF
EXIST HZ CHESNUT 27O-243 - Wellbore #1 - Wellbore	12,141.3	14,066.0	464.4	240.0	2.069	CC, ES, SF
EXIST HZ CHESNUT 27O-303 - Wellbore #1 - Wellbore	12,141.3	14,196.0	174.2	-52.4	0.769	Level 1, CC, ES, SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,600.0	9,259.0	242.7	166.0	3.166	ES, SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,625.5	9,259.0	240.9	166.2	3.227	CC
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	367.1	368.9	1,586.8	1,585.8	1,548.019	CC
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	400.0	400.0	1,586.9	1,585.8	1,425.310	ES
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	12,141.3	6,674.9	5,271.6	5,170.1	51.927	SF
EXIST VERT BAILEY 14-34 - Wellbore #1 - Wellbore #1	12,141.3	6,525.0	1,999.4	1,898.0	19.723	CC, ES, SF
EXIST VERT BAILEY 24-34 - Wellbore #1 - Wellbore #1	12,141.3	6,500.0	797.8	698.8	8.061	CC, ES, SF
EXIST VERT BAILEY 5 - Wellbore #1 - Wellbore #1	12,141.3	6,685.6	1,564.1	1,462.0	15.325	CC, ES, SF
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	0.0	0.0	1,923.7			
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	300.0	295.6	1,924.2	1,923.4	2,314.765	ES
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	11,200.0	6,724.9	3,407.6	3,324.2	40.874	SF
EXIST VERT ECKHARDT 1 - Wellbore #1 - Design #1	12,141.3	6,703.0	3,192.6	2,959.1	13.669	CC, ES, SF
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	11,302.4	6,698.5	524.3	307.0	2.412	CC, ES, SF
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	9,593.3	6,730.9	2,324.7	2,271.6	43.777	CC
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	9,600.0	6,730.8	2,324.7	2,271.5	43.677	ES
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	11,600.0	6,717.7	3,070.9	2,979.8	33.697	SF
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	10,945.8	6,700.0	2,083.5	2,005.1	26.564	CC
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	11,000.0	6,700.0	2,084.2	2,004.7	26.226	ES
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	12,000.0	6,700.0	2,335.0	2,236.2	23.637	SF
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	1,452.2	1,414.6	519.1	513.7	95.234	CC
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	1,500.0	1,461.1	519.2	513.6	91.309	ES
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	7,100.0	6,500.0	863.1	841.5	39.965	SF
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	9,846.8	6,525.0	3,355.7	3,298.1	58.308	CC
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	9,900.0	6,525.0	3,356.1	3,297.5	57.334	ES
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	12,141.3	6,525.0	4,065.0	3,963.7	40.118	SF
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	11,255.6	6,721.7	3,177.7	2,961.0	14.665	CC
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	11,300.0	6,721.5	3,178.0	2,960.5	14.610	ES
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	12,100.0	6,718.2	3,288.0	3,055.0	14.114	SF
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	0.0	7.8	3,065.3			
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	12,141.3	6,760.0	6,016.1	5,914.4	59.160	SF
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	0.0	7.8	3,056.3			
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	12,141.3	6,717.2	4,813.9	4,712.2	47.339	SF
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	317.5	327.9	2,565.0	2,564.1	2,976.822	CC, ES
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	12,141.3	6,714.6	5,247.4	5,146.2	51.870	SF