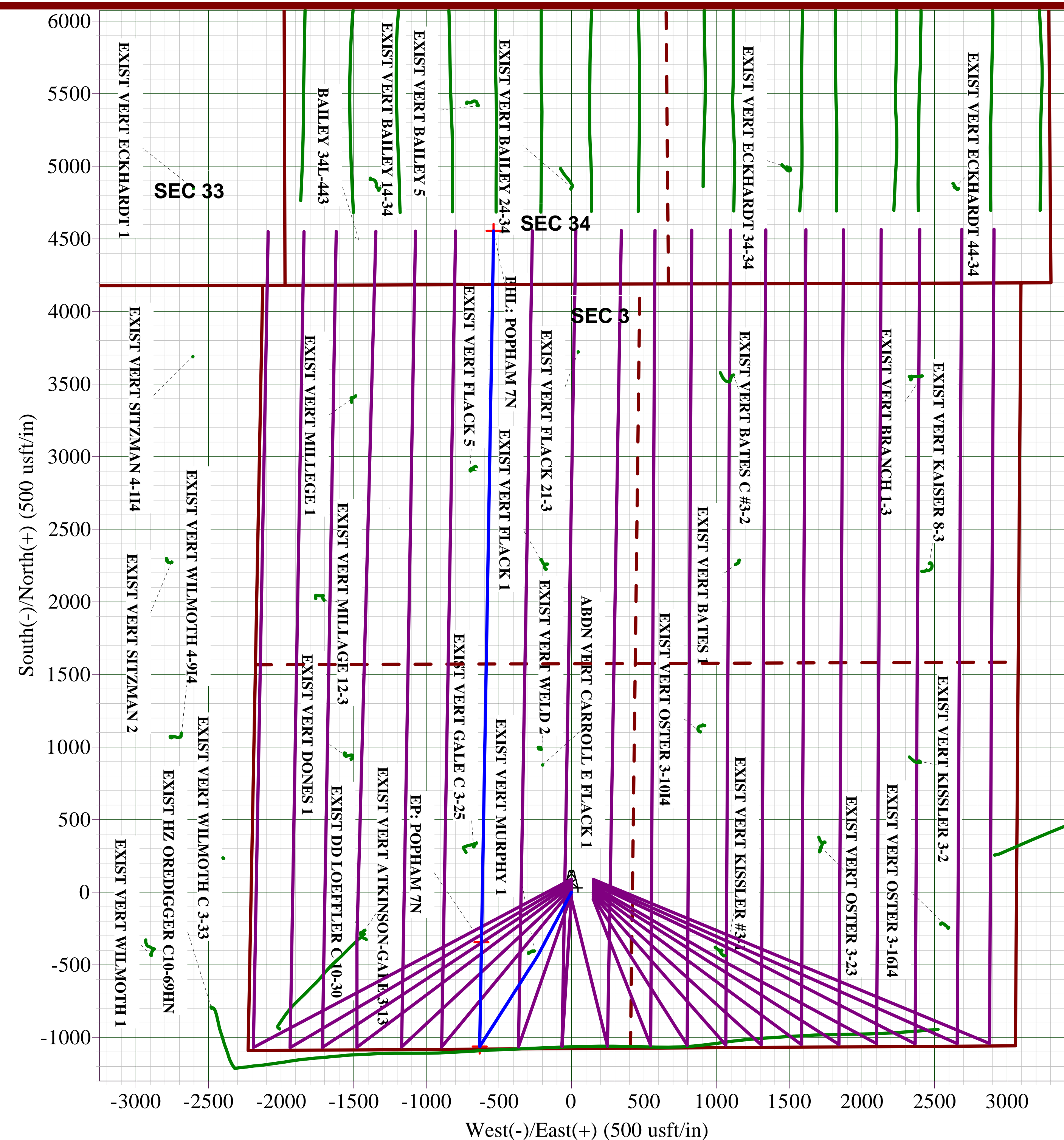
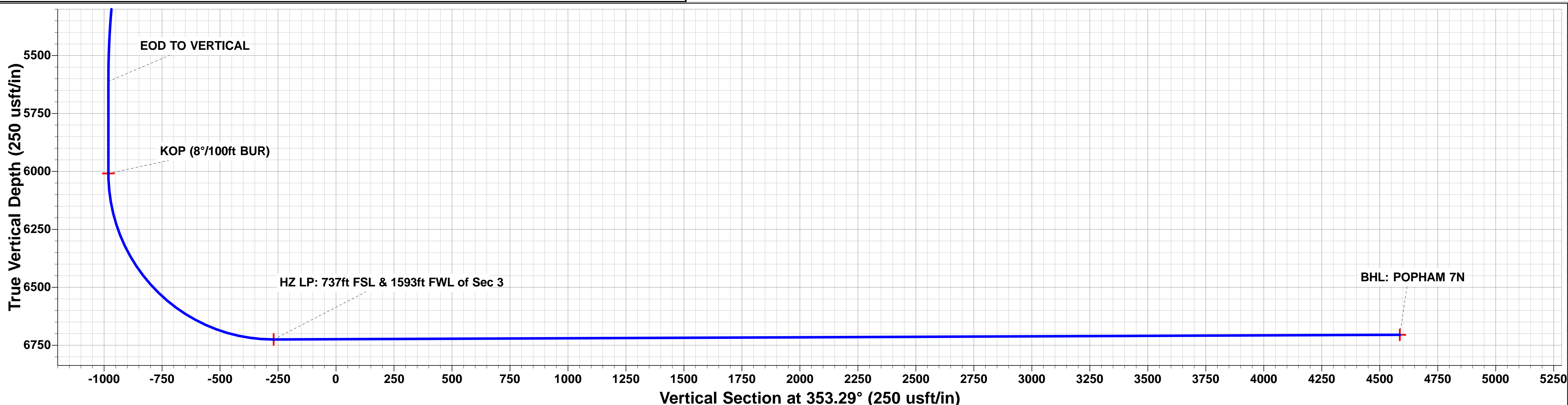
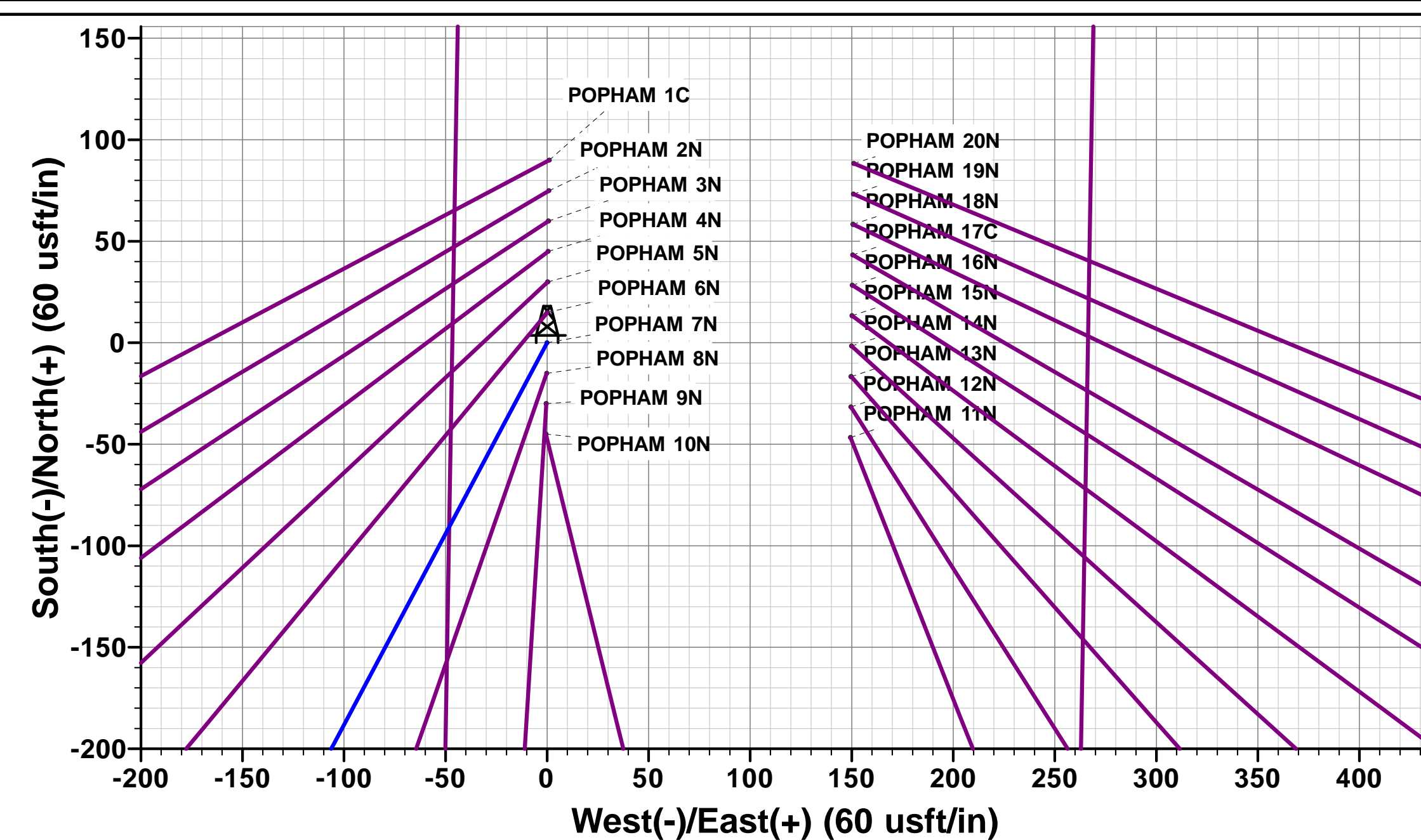


TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 1077ft FSL & 2206ft FWL of Sec 3
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1412.7	1424.0	16.48	207.99	-103.9	-55.2	-96.8	117.7	EOB TO 16.48° INC
2675.2	2740.6	16.48	207.99	-433.7	-230.5	-403.8	491.2	END OF TANGENT
2716.9	2784.1	16.48	212.59	-444.4	-236.7	-413.7	503.5	EOT TO 212.59° AZ
4798.9	4955.3	16.48	212.59	-963.4	-568.5	-890.4	1119.5	END OF TANGENT
5611.7	5779.4	0.00	0.00	-1062.6	-631.9	-981.4	1237.3	EOD TO VERTICAL
6008.8	6176.5	0.00	0.00	-1062.6	-631.9	-981.4	1237.3	KOP (8°/100ft BUR)
6725.0	7304.4	90.23	0.99	-343.6	-619.6	-268.9	1956.3	HZ LP: 737ft FSL & 1593ft FWL of Sec 3
6705.0	12204.0	90.24	0.97	4555.2	-536.0	4586.6	6855.8	BHL: 370ft FSL & 1438ft FWL of Sec 34

BHL: 370ft FSL & 1438ft FWL of Sec 34

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP: POPHAM 7N	6008.8	-1062.6	-631.9	40.334163	-104.540315
EP: POPHAM 7N	6725.0	-343.6	-619.6	40.336136	-104.540271
BHL: POPHAM 7N	6705.0	4555.2	-536.0	40.349583	-104.539971



PDC ENERGY

**WELD COUNTY, COLORADO
SE SW SEC. 3 T4N R64W 6th P.M.
POPHAM 7N**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

19 September, 2017



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well POPHAM 7N
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 7N	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	12,203.5	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	45.0	43.9	41.968	CC, ES
POPHAM 10N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,074.0	882.4	697.1	4.762	SF
POPHAM 11N - ORIGINAL WELLBORE - PROPOSAL #	300.0	297.0	156.5	155.5	146.911	CC, ES
POPHAM 11N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,131.2	1,111.7	918.0	5.740	SF
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	400.0	398.0	152.9	151.4	100.779	CC, ES
POPHAM 12N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,092.2	1,366.6	1,176.7	7.195	SF
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	500.0	497.0	150.7	148.7	76.691	CC, ES
POPHAM 13N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,205.5	1,630.8	1,441.0	8.592	SF
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	600.0	597.0	150.0	147.6	62.123	CC, ES
POPHAM 14N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,198.7	1,876.0	1,690.4	10.108	SF
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	150.7	148.3	62.376	CC, ES
POPHAM 15N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,342.6	2,150.7	1,961.4	11.360	SF
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	152.9	150.5	63.297	CC, ES
POPHAM 16N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,397.5	2,410.6	2,220.7	12.696	SF
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	156.6	154.2	64.806	CC, ES
POPHAM 17C - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,624.9	2,671.8	2,481.7	14.052	SF
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	161.6	159.2	66.871	CC, ES
POPHAM 18N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,632.0	2,935.6	2,741.4	15.118	SF
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	167.7	165.3	69.411	CC, ES
POPHAM 19N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,806.3	3,224.5	3,033.8	16.906	SF
POPHAM 1C - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	90.0	87.5	37.163	CC, ES
POPHAM 1C - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,832.6	1,557.3	1,380.0	8.784	SF
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	600.0	598.0	174.9	172.5	72.368	CC, ES
POPHAM 20N - ORIGINAL WELLBORE - PROPOSAL #	12,204.0	12,910.0	3,447.3	3,256.3	18.053	SF
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	74.9	72.5	30.942	CC, ES
POPHAM 2N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,551.9	1,307.6	1,121.7	7.034	SF
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	60.0	57.5	24.773	CC, ES
POPHAM 3N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,502.5	1,083.8	897.6	5.821	SF
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	45.0	42.6	18.588	CC, ES
POPHAM 4N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,369.5	813.8	628.0	4.380	SF
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	30.0	27.6	12.385	CC, ES
POPHAM 5N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,319.8	537.9	351.0	2.878	SF
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	600.0	600.0	15.0	12.6	6.186	CC, ES
POPHAM 6N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,189.4	271.1	90.6	1.502	SF
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	500.0	500.0	15.0	13.1	7.634	CC, ES
POPHAM 8N - ORIGINAL WELLBORE - PROPOSAL #1	12,204.0	12,117.6	275.9	91.0	1.492	Level 3, SF
POPHAM 9N - ORIGINAL WELLBORE - PROPOSAL #1	400.0	399.0	30.0	28.5	19.759	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 7N
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 7N	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	12,204.0	12,126.2	566.7	375.5	2.963	SF
SE SW SEC. 3 T4N R64W 6th P.M. (OFFSETS FOR POPHAM)						
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	4,467.8	4,317.8	1,758.3	1,735.3	76.511	CC
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	4,600.0	4,442.3	1,758.7	1,734.9	73.915	ES
ABDN VERT HOFF 31-10 - Wellbore #1 - Wellbore #1	6,200.0	5,994.9	1,766.3	1,737.7	61.776	SF
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	7,964.8	7,575.7	3,527.3	3,475.0	67.489	CC
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	8,000.0	7,575.3	3,527.5	3,475.0	67.152	ES
EXIST DD HOFFMAN C 02-33D - Wellbore #1 - Wellbore	12,100.0	7,526.8	5,435.4	5,311.9	44.011	SF
EXIST HZ SUDEN 34M-223 - Wellbore #1 - Wellbore #1	12,204.0	11,092.0	1,661.0	1,485.8	9.481	CC, ES, SF
EXIST HZ SUDEN 34M-423 - Wellbore #1 - Wellbore #1	12,204.0	11,065.0	1,480.3	1,307.9	8.583	CC, ES, SF
EXIST HZ SUDEN 34R-203 - Wellbore #1 - Wellbore #1	12,204.0	11,081.0	2,365.5	2,190.6	13.521	CC, ES, SF
EXIST HZ SUDEN 34R-323 - Wellbore #1 - Wellbore #1	12,204.0	11,162.0	2,929.2	2,751.9	16.518	CC, ES, SF
EXIST HZ SUDEN 34R-343 - Wellbore #1 - Wellbore #1	12,204.0	11,135.0	2,113.0	1,937.8	12.057	CC, ES, SF
EXIST HZ SUDEN 34R-423 - Wellbore #1 - Wellbore #1	12,204.0	11,245.0	2,762.6	2,585.3	15.580	CC, ES, SF
EXIST HZ SUDEN 34U-243 - Wellbore #1 - Wellbore #1	12,204.0	11,118.0	3,427.3	3,250.0	19.331	CC, ES, SF
EXIST HZ SUDEN 34U-403 - Wellbore #1 - Wellbore #1	12,204.0	11,309.0	3,768.2	3,590.7	21.229	CC, ES, SF
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	9,964.7	6,675.8	1,733.0	1,679.6	32.448	CC
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	10,000.0	6,675.7	1,733.3	1,679.3	32.064	ES
EXIST VERT BATES 1 - Wellbore #1 - Wellbore #1	11,000.0	6,672.7	2,018.7	1,945.8	27.692	SF
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,249.7	6,725.7	1,580.4	1,502.3	20.227	CC
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,300.0	6,728.4	1,581.2	1,502.1	19.990	ES
EXIST VERT BATES C #3-2 - Wellbore #1 - Wellbore #1	11,900.0	6,763.4	1,708.6	1,617.9	18.841	SF
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	11,237.1	6,652.8	2,894.9	2,817.5	37.365	CC
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	11,300.0	6,651.1	2,895.6	2,816.9	36.800	ES
EXIST VERT BRANCH 1-3 - Wellbore #1 - Wellbore #1	12,204.0	6,624.7	3,052.0	2,956.3	31.886	SF
EXIST VERT ECKHARDT 34-34 - Wellbore #1 - Wellbor	12,204.0	6,475.0	2,045.3	1,950.1	21.469	CC, ES, SF
EXIST VERT ECKHARDT 44-34 - Wellbore #1 - Wellbor	12,204.0	6,300.0	3,199.0	3,103.8	33.626	CC, ES, SF
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	9,945.1	6,650.0	369.2	316.7	7.036	CC, ES
EXIST VERT FLACK 1 - Wellbore #1 - Wellbore #1	10,000.0	6,650.0	373.3	319.8	6.981	SF
EXIST VERT FLACK 5 - Wellbore #1 - Wellbore #1	10,548.4	6,700.0	133.9	69.6	2.083	CC, ES, SF
EXIST VERT GALE C 3-25 - Wellbore #1 - Wellbore #1	7,920.2	6,700.0	117.1	94.6	5.188	CC, ES, SF
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	9,909.8	6,750.0	2,988.8	2,936.3	56.962	CC
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	10,000.0	6,750.0	2,990.2	2,936.0	55.240	ES
EXIST VERT KAISER 8-3 - Wellbore #1 - Wellbore #1	12,200.0	6,750.0	3,765.5	3,669.8	39.344	SF
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	804.7	778.8	1,140.8	1,138.6	517.496	CC, ES
EXIST VERT KISSLER #3-1 - Wellbore #1 - Wellbore #1	12,100.0	6,700.0	5,065.0	4,970.6	53.660	SF
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	100.0	46.5	2,556.6	2,556.5	10,000.000	CC, ES
EXIST VERT KISSLER 3-2 - Wellbore #1 - Wellbore #1	12,100.0	6,800.0	4,539.8	4,445.4	48.115	SF
EXIST VERT MURPHY 1 - Wellbore #1 - Wellbore #1	2,729.1	2,642.9	45.8	33.7	3.794	CC, ES, SF
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	100.0	61.4	1,417.4	1,417.2	9,332.014	CC
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	500.0	463.0	1,418.3	1,417.0	1,077.321	ES
EXIST VERT OSTER 3-1014 - Wellbore #1 - Wellbore #1	10,200.0	6,675.9	2,045.2	1,987.6	35.498	SF
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	216.8	159.8	2,608.0	2,607.5	4,943.444	CC
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	600.8	544.1	2,608.3	2,606.8	1,666.756	ES
EXIST VERT OSTER 3-1614 - Wellbore #1 - Wellbore #1	12,204.0	6,600.0	5,682.1	5,586.3	59.358	SF
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	679.6	672.6	1,745.0	1,743.1	941.609	CC
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	700.0	692.3	1,745.0	1,743.1	917.147	ES
EXIST VERT OSTER 3-23 - Wellbore #1 - Wellbore #1	12,100.0	6,500.0	4,651.0	4,557.3	49.613	SF
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	8,653.0	6,700.0	377.6	347.0	12.343	CC, ES
EXIST VERT WELD 2 - Wellbore #1 - Wellbore #1	8,700.0	6,700.0	380.6	349.3	12.160	SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well POPHAM 7N
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 7N	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	8,533.1	6,714.1	400.2	238.8	2.480	CC, ES, SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	3,874.9	3,619.6	1,379.5	1,353.6	53.424	CC
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	6,250.0	6,200.6	1,391.9	1,349.4	32.787	SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	6,600.0	6,523.1	1,383.8	1,343.1	33.974	ES
EXIST HZ CHESNUT 27G-203 - Wellbore #1 - Wellbore	12,204.0	13,769.0	1,346.2	1,112.5	5.761	CC, ES, SF
EXIST HZ CHESNUT 27G-423 - Wellbore #1 - Wellbore	12,204.0	13,972.0	984.4	751.8	4.232	CC, ES, SF
EXIST HZ CHESNUT 27Q-203 - Wellbore #1 - Wellbore	12,204.0	13,900.0	321.9	94.6	1.416	Level 3, CC, ES, SF
EXIST HZ CHESNUT 27K-323 - Wellbore #1 - Wellbore	12,204.0	14,120.0	350.1	128.2	1.578	CC, ES, SF
EXIST HZ CHESNUT 27K-343 - Wellbore #1 - Wellbore	12,204.0	13,920.0	656.1	421.9	2.802	CC, ES, SF
EXIST HZ CHESNUT 27K-403 - Wellbore #1 - Wellbore	12,204.0	14,160.0	173.9	71.5	1.697	CC, ES, SF
EXIST HZ CHESNUT 27Q-243 - Wellbore #1 - Wellbore	12,204.0	14,066.0	691.9	470.8	3.129	CC, ES, SF
EXIST HZ CHESNUT 27Q-303 - Wellbore #1 - Wellbore	12,204.0	14,196.0	1,005.4	782.2	4.504	CC, ES, SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,650.0	8,103.9	251.0	197.1	4.661	SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Well	6,671.7	8,104.8	249.7	197.0	4.737	CC, ES
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	6,800.0	6,582.7	932.4	906.8	36.473	SF
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - We	7,312.6	6,734.5	797.5	776.2	37.396	CC, ES
EXIST VERT BAILEY 14-34 - Wellbore #1 - Wellbore #1	12,204.0	6,525.0	935.2	840.0	9.822	CC, ES, SF
EXIST VERT BAILEY 24-34 - Wellbore #1 - Wellbore #1	12,204.0	6,500.0	652.7	561.6	7.163	CC, ES, SF
EXIST VERT BAILEY 5 - Wellbore #1 - Wellbore #1	12,204.0	6,685.1	897.2	801.3	9.362	CC, ES, SF
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	8,590.5	6,733.4	962.8	932.9	32.246	CC
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	8,600.0	6,733.3	962.8	932.8	32.102	ES
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	9,100.0	6,727.6	1,089.2	1,051.3	28.712	SF
EXIST VERT ECKHARDT 1 - Wellbore #1 - Design #1	12,204.0	6,703.0	2,088.5	1,860.9	9.174	CC, ES, SF
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	11,382.1	6,698.4	597.0	384.8	2.813	CC
EXIST VERT FLACK 21-3 - Wellbore #1 - Design #1	11,400.0	6,698.4	597.2	384.7	2.810	ES, SF
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	9,652.1	6,730.8	1,183.4	1,135.6	24.805	CC, ES
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	10,200.0	6,727.6	1,304.0	1,246.3	22.570	SF
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	11,007.3	6,707.5	958.0	885.1	13.131	CC, ES
EXIST VERT MILLEGE 1 - Wellbore #1 - Wellbore #1	11,200.0	6,706.7	977.2	900.6	12.749	SF
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	9,893.6	6,525.0	2,220.2	2,168.0	42.556	CC
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	9,900.0	6,525.0	2,220.2	2,167.9	42.462	ES
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	11,700.0	6,525.0	2,862.1	2,775.8	33.168	SF
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	11,304.4	6,721.8	2,055.7	1,844.8	9.746	CC, ES
EXIST VERT SITZMAN 4-114 - Wellbore #1 - Design #1	11,700.0	6,720.1	2,093.4	1,874.9	9.580	SF
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	7,279.8	6,744.5	2,312.0	2,290.5	107.227	CC, ES
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	12,100.0	6,760.0	5,345.7	5,251.6	56.764	SF
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	8,681.6	6,769.3	2,145.7	2,114.3	68.428	CC
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	8,700.0	6,768.8	2,145.7	2,114.1	67.835	ES
EXIST VERT WILMOTH 4-914 - Wellbore #1 - Wellbore #	11,900.0	6,700.0	3,867.3	3,776.9	42.804	SF
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	7,852.0	6,722.8	1,786.2	1,764.7	83.152	CC, ES
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	12,100.0	6,714.8	4,608.0	4,514.3	49.181	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	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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-179.29	-45.0	-0.6	45.0				
100.0	100.0	100.0	100.0	0.1	0.1	-179.29	-45.0	-0.6	45.0	44.8	0.17	259.984	
200.0	200.0	200.0	200.0	0.3	0.3	-179.29	-45.0	-0.6	45.0	44.4	0.62	72.270	
300.0	300.0	300.0	300.0	0.5	0.5	-179.29	-45.0	-0.6	45.0	43.9	1.07	41.968	CC, ES

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