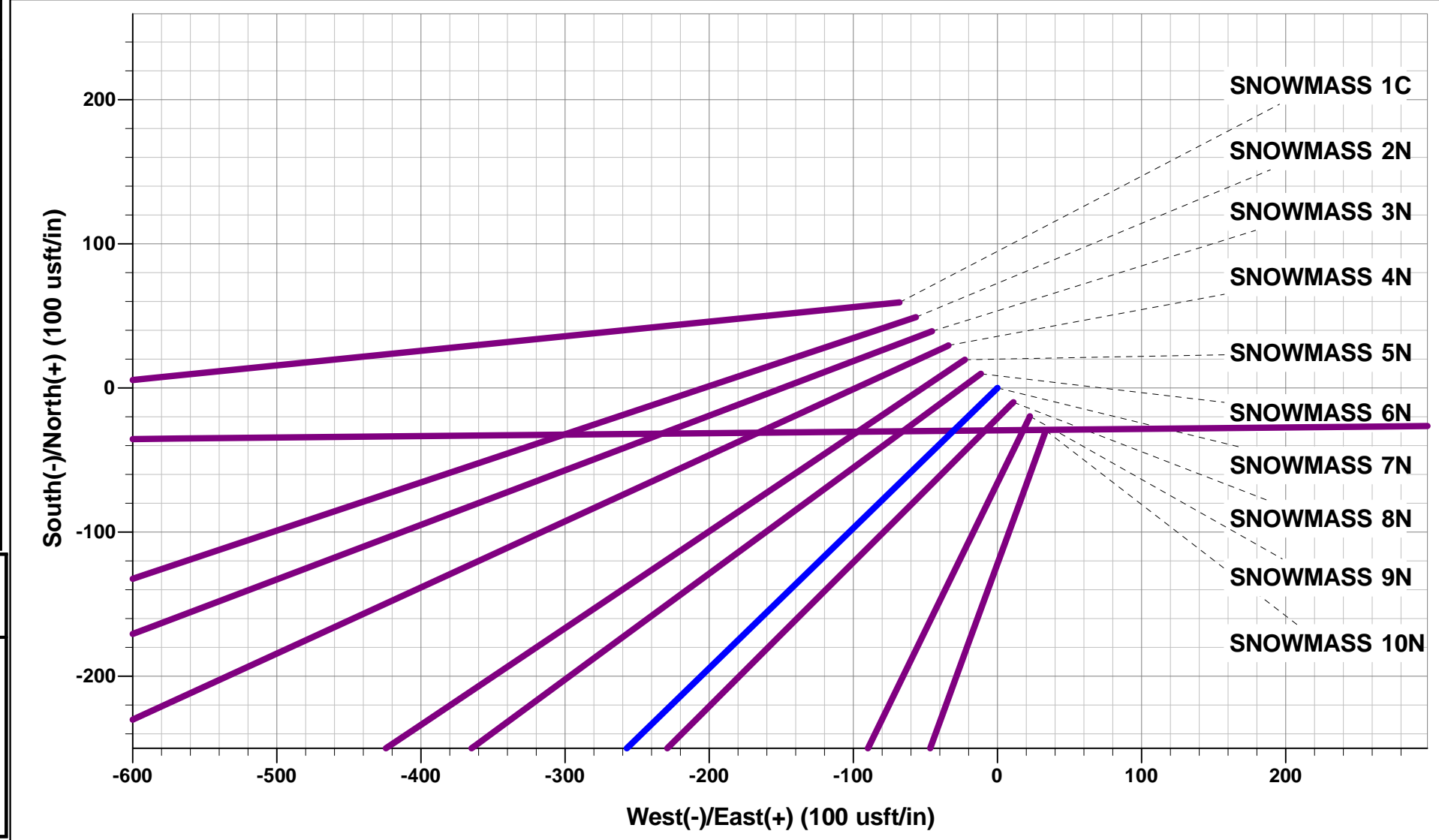




Project: WELD COUNTY, COLORADO
Site: NW NE SEC. 5 T5N R64W 6th P.M.
Well: SNOWMASS 7N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation		
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 148ft FNL & 1764ft FEL of Sec 5		
900.0	900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)		
2026.4	2077.5	29.44	225.81	-206.3	-212.1	-166.5	295.9	EOB TO 29.44° INC		
4845.5	5314.5	29.44	225.81	-1315.3	-1352.8	-1061.8	1886.8	END OF TANGENT		
5971.8	6491.9	0.00	225.81	-1521.5	-1564.9	-1228.3	2182.6	EOD TO VERTICAL		
6001.8	6521.9	0.00	0.00	-1521.5	-1564.9	-1228.3	2182.6	KOP (8°/100ft BUR)		
6718.0	7652.3	90.43	89.48	-1515.0	-843.4	-522.8	2904.2	HZ LP *NEW*: 1665ft FNL & 2588ft FWL of Sec 5		
6658.0	15556.6	90.44	89.49	-1443.8	7060.3	7206.5	10808.2	BHL: 1665ft FNL & 0ft FEL of Sec 4		

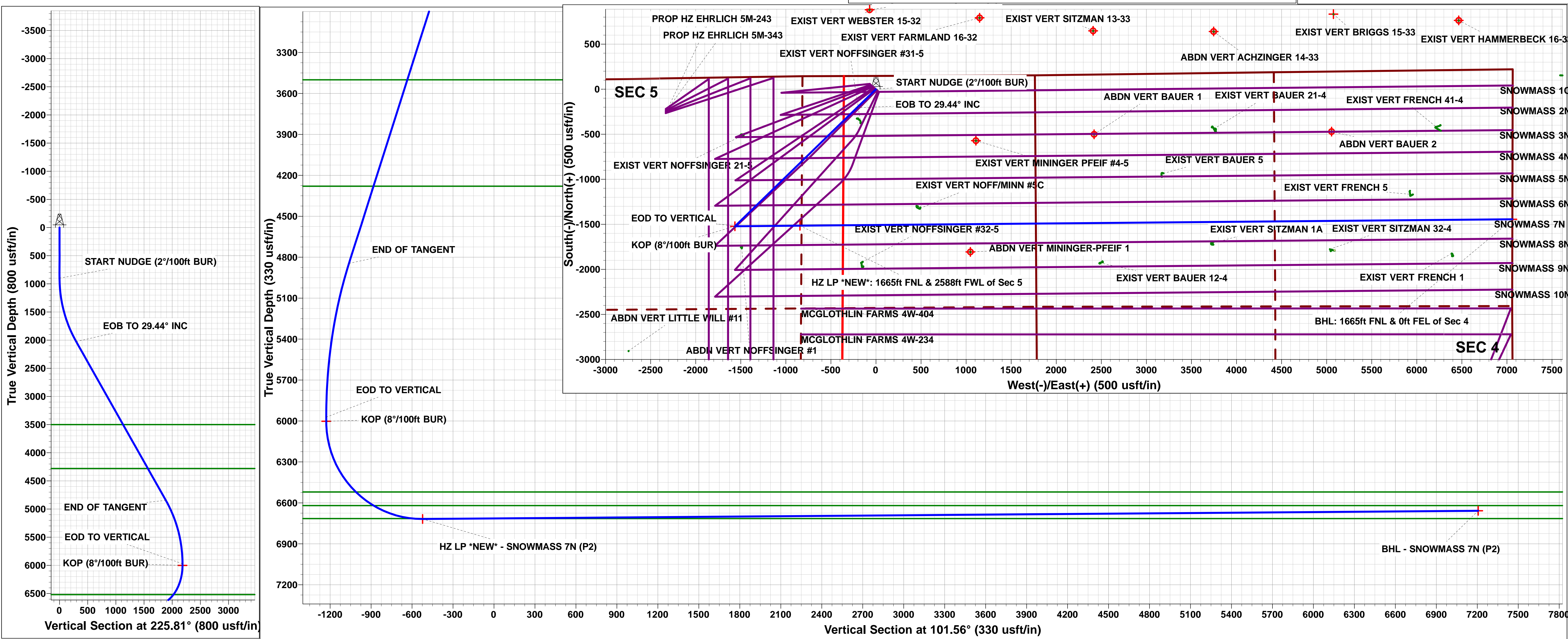
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - SNOWMASS 7N (P2)	6001.8	-1521.5	-1564.9	40.430700	-104.576743
BHL - SNOWMASS 7N (P2)	6658.0	-1443.8	7060.3	40.430911	-104.545761
HZ LP *NEW* - SNOWMASS 7N (P2)	6718.0	-1515.0	-843.4	40.430718	-104.574152



PROPOSED LOCAL COORDINATES:
SHL: 148ft FNL & 1764ft FEL of Sec 5
HZ LP *NEW*: 1665ft FNL & 2588ft FWL of Sec 5
BHL: 1665ft FNL & 0ft FEL of Sec 4

Azimuths to True North
Magnetic North: 8.16°

Magnetic Field
Strength: 52480.6snT
Dip Angle: 66.92°
Date: 13/01/2017
Model: IGRF2015



PDC ENERGY

**WELD COUNTY, COLORADO
NW NE SEC. 5 T5N R64W 6th P.M.
SNOWMASS 7N**

**ORIGINAL WELLBORE
PROPOSAL #2**

Anticollision Report

08 March, 2017



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well SNOWMASS 7N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Reference Site:	NW NE SEC. 5 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SNOWMASS 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 #2	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #2		
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 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	08/03/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	15,556.6	PROPOSAL #2 (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
Offet Well - Wellbore - Design						
NW NE SEC. 5 T5N R64W 6th P.M.						
ABDN VERT ACHZINGER 14-33 - Wellbore #1 - Design	12,261.0	6,663.2	2,114.2	1,839.2	7.688	CC
ABDN VERT ACHZINGER 14-33 - Wellbore #1 - Design	12,300.0	6,662.9	2,114.5	1,838.5	7.660	ES
ABDN VERT ACHZINGER 14-33 - Wellbore #1 - Design	12,700.0	6,659.8	2,159.3	1,872.3	7.525	SF
ABDN VERT BAUER 1 - Wellbore #1 - Design #1	10,924.8	6,714.3	985.3	745.9	4.115	CC, ES
ABDN VERT BAUER 1 - Wellbore #1 - Design #1	11,000.0	6,713.7	988.2	746.7	4.093	SF
ABDN VERT BAUER 2 - Wellbore #1 - Design #1	13,559.6	6,653.3	991.6	681.1	3.193	CC
ABDN VERT BAUER 2 - Wellbore #1 - Design #1	13,600.0	6,653.0	992.4	680.8	3.185	ES, SF
EXIST HZ LUCCI STATE B3-69HNL - Wellbore #1 - Wel	15,556.6	17,000.0	1,683.8	1,155.5	3.187	CC, ES, SF
EXIST VERT BAUER 21-4 - Wellbore #1 - Wellbore #1	12,233.3	6,500.0	1,060.6	919.6	7.521	CC, ES
EXIST VERT BAUER 21-4 - Wellbore #1 - Wellbore #1	12,500.0	6,500.0	1,093.6	945.4	7.377	SF
EXIST VERT BAUER 5 - Wellbore #1 - Wellbore #1	11,691.1	6,655.2	544.7	417.0	4.264	CC
EXIST VERT BAUER 5 - Wellbore #1 - Wellbore #1	11,700.0	6,655.1	544.8	416.8	4.256	ES
EXIST VERT BAUER 5 - Wellbore #1 - Wellbore #1	11,800.0	6,654.8	555.5	424.8	4.250	SF
EXIST VERT BRIGGS 15-33 - Wellbore #1 - Design #1	13,592.1	6,658.0	2,295.2	1,983.8	7.370	CC
EXIST VERT BRIGGS 15-33 - Wellbore #1 - Design #1	13,700.0	6,657.2	2,297.7	1,983.3	7.308	ES
EXIST VERT BRIGGS 15-33 - Wellbore #1 - Design #1	14,100.0	6,654.2	2,350.7	2,025.3	7.224	SF
EXIST VERT FARMLAND 16-32 - Wellbore #1 - Design #	900.0	889.0	1,396.5	1,377.5	73.434	CC
EXIST VERT FARMLAND 16-32 - Wellbore #1 - Design #	1,000.0	989.0	1,398.7	1,377.4	65.932	ES
EXIST VERT FARMLAND 16-32 - Wellbore #1 - Design #	10,300.0	6,687.0	2,375.7	2,153.0	10.667	SF
EXIST VERT FRENCH 41-4 - Wellbore #1 - Wellbore #1	14,763.8	6,400.0	1,072.3	864.4	5.159	CC
EXIST VERT FRENCH 41-4 - Wellbore #1 - Wellbore #1	14,800.0	6,400.0	1,072.9	864.0	5.138	ES
EXIST VERT FRENCH 41-4 - Wellbore #1 - Wellbore #1	14,900.0	6,400.0	1,080.9	869.3	5.110	SF
EXIST VERT FRENCH 5 - Wellbore #1 - Wellbore #1	14,424.1	6,628.0	326.1	123.2	1.607	CC, ES, SF
EXIST VERT GRANADOS #4-3 - Wellbore #1 - Design #	15,556.6	6,633.0	1,093.6	728.1	2.992	CC, ES, SF
EXIST VERT HAMMERBECK 16-33 - Wellbore #1 - Des	14,981.1	6,647.4	2,213.2	1,863.4	6.329	CC
EXIST VERT HAMMERBECK 16-33 - Wellbore #1 - Des	15,000.0	6,647.3	2,213.2	1,863.0	6.319	ES
EXIST VERT HAMMERBECK 16-33 - Wellbore #1 - Des	15,400.0	6,644.2	2,252.5	1,891.2	6.235	SF
EXIST VERT MININGER PFEIF #4-5 - Wellbore #1 - Des	9,612.7	6,686.2	926.4	721.2	4.515	CC, ES
EXIST VERT MININGER PFEIF #4-5 - Wellbore #1 - Des	9,700.0	6,685.6	930.5	723.1	4.487	SF
EXIST VERT NOFFSINGER/MINN #5C - Wellbore #1 - V	8,963.2	6,684.9	203.2	145.6	3.525	CC, ES, SF
EXIST VERT SITZMAN 13-33 - Wellbore #1 - Design #1	10,924.1	6,673.3	2,133.7	1,894.7	8.927	CC
EXIST VERT SITZMAN 13-33 - Wellbore #1 - Design #1	11,000.0	6,672.7	2,135.0	1,894.0	8.858	ES
EXIST VERT SITZMAN 13-33 - Wellbore #1 - Design #1	11,400.0	6,669.7	2,186.1	1,934.4	8.685	SF
EXIST VERT WEBSTER 15-32 - Wellbore #1 - Design #	900.0	886.0	885.2	866.2	46.622	CC
EXIST VERT WEBSTER 15-32 - Wellbore #1 - Design #	1,000.0	986.0	886.6	865.4	41.830	ES
EXIST VERT WEBSTER 15-32 - Wellbore #1 - Design #	9,200.0	6,692.3	2,506.0	2,310.8	12.837	SF
SNOWMASS 10N - ORIGINAL WELLBORE - PROPOSAL	300.0	300.0	44.8	43.7	41.769	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 SNOWMASS 7N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Reference Site:	NW NE SEC. 5 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SNOWMASS 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 #2	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
NW NE SEC. 5 T5N R64W 6th P.M.						
SNOWMASS 10N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	16,156.5	783.3	315.2	1.673 SF	
SNOWMASS 1C - ORIGINAL WELLBORE - PROPOSAL	300.0	300.0	90.2	89.1	84.149 CC, ES	
SNOWMASS 1C - ORIGINAL WELLBORE - PROPOSAL	15,556.6	14,770.2	1,496.1	1,047.9	3.338 SF	
SNOWMASS 2N - ORIGINAL WELLBORE - PROPOSAL	400.0	400.0	74.9	73.4	49.233 CC, ES	
SNOWMASS 2N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	14,715.7	1,242.9	792.7	2.761 SF	
SNOWMASS 3N - ORIGINAL WELLBORE - PROPOSAL	500.0	500.0	60.1	58.1	30.468 CC, ES	
SNOWMASS 3N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	15,288.6	990.3	525.7	2.131 SF	
SNOWMASS 4N - ORIGINAL WELLBORE - PROPOSAL	600.0	600.0	45.0	42.6	18.586 CC, ES	
SNOWMASS 4N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	15,728.5	754.8	285.8	1.609 SF	
SNOWMASS 5N - ORIGINAL WELLBORE - PROPOSAL	700.0	700.0	29.9	27.1	10.426 CC, ES	
SNOWMASS 5N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	15,401.2	510.4	45.6	1.098 Level 2, SF	
SNOWMASS 6N - ORIGINAL WELLBORE - PROPOSAL	800.0	800.0	15.1	11.7	4.539 CC	
SNOWMASS 6N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	15,876.2	245.1	-201.9	0.548 Level 1, ES, SF	
SNOWMASS 8N - ORIGINAL WELLBORE - PROPOSAL	900.0	900.0	14.9	11.1	3.942 CC	
SNOWMASS 8N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	16,001.5	226.7	-221.3	0.506 Level 1, ES, SF	
SNOWMASS 9N - ORIGINAL WELLBORE - PROPOSAL	400.0	400.0	29.9	28.4	19.665 CC	
SNOWMASS 9N - ORIGINAL WELLBORE - PROPOSAL	15,556.6	15,692.3	484.9	20.8	1.045 Level 2, ES, SF	
NW NW SEC. 5 T5N R64W 6th P.M.						
ABDN VERT LITTLE WILL #11 - Wellbore #1 - Design #1	6,521.9	5,960.8	1,818.5	1,654.3	11.075 CC, ES, SF	
ABDN VERT NOFFSINGER #1 - Wellbore #1 - Wellbore	6,550.0	6,000.5	240.4	198.2	5.708 SF	
ABDN VERT NOFFSINGER #1 - Wellbore #1 - Wellbore	6,800.0	6,243.8	229.3	192.1	6.174 ES	
ABDN VERT NOFFSINGER #1 - Wellbore #1 - Wellbore	6,840.3	6,280.3	228.6	193.1	6.437 CC	
EHRlich 5J-223 - ORIGINAL WELLBORE - PROPOSAL	7,000.0	8,154.2	363.5	311.3	6.967 SF	
EHRlich 5J-223 - ORIGINAL WELLBORE - PROPOSAL	7,050.0	8,153.7	357.7	307.9	7.179 ES	
EHRlich 5J-223 - ORIGINAL WELLBORE - PROPOSAL	7,052.7	8,153.6	357.7	308.0	7.198 CC	
EHRlich 5J-323 - ORIGINAL WELLBORE - PROPOSAL	6,850.0	8,207.7	608.3	550.4	10.503 SF	
EHRlich 5J-323 - ORIGINAL WELLBORE - PROPOSAL	7,000.0	8,206.1	571.9	520.1	11.049 ES	
EHRlich 5J-323 - ORIGINAL WELLBORE - PROPOSAL	7,004.9	8,206.0	571.9	520.3	11.097 CC	
EHRlich 5M-243 - ORIGINAL WELLBORE - PROPOSAL	7,375.9	8,338.7	63.9	28.3	1.794 CC, ES, SF	
EHRlich 5M-343 - ORIGINAL WELLBORE - PROPOSAL	7,150.0	8,302.6	267.3	221.7	5.867 SF	
EHRlich 5M-343 - ORIGINAL WELLBORE - PROPOSAL	7,220.7	8,301.8	254.3	212.4	6.065 CC, ES	
EXIST VERT NOFFSINGER #21-5 - Wellbore #1 - Wellbore	4,418.9	4,056.7	676.7	644.6	21.087 CC, ES	
EXIST VERT NOFFSINGER #21-5 - Wellbore #1 - Wellbore	4,800.0	4,391.2	700.4	665.4	19.986 SF	
EXIST VERT NOFFSINGER #31-5 - Wellbore #1 - Wellbore	2,230.1	2,137.3	94.3	84.8	9.900 CC, ES, SF	
EXIST VERT NOFFSINGER #32-5 - Wellbore #1 - Wellbore	8,343.2	6,691.2	407.9	362.9	9.065 CC, ES	
EXIST VERT NOFFSINGER #32-5 - Wellbore #1 - Wellbore	8,400.0	6,689.9	411.8	365.8	8.946 SF	
EXIST VERT PLUMB #B5-11 - Wellbore #1 - Wellbore #	6,750.0	6,240.7	1,602.4	1,568.3	46.967 ES	
EXIST VERT PLUMB #B5-11 - Wellbore #1 - Wellbore #	6,770.5	6,258.6	1,602.4	1,568.4	47.164 CC	
EXIST VERT PLUMB #B5-11 - Wellbore #1 - Wellbore #	15,556.6	6,555.1	8,868.6	8,634.6	37.887 SF	
EXIST VERT PLUMB B5-14 - Wellbore #1 - Wellbore #1	6,460.5	5,863.4	2,776.3	2,739.1	74.782 CC, ES	
EXIST VERT PLUMB B5-14 - Wellbore #1 - Wellbore #1	15,556.6	6,544.2	8,977.7	8,743.4	38.323 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 SNOWMASS 7N
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Reference Site:	NW NE SEC. 5 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4657.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	SNOWMASS 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 #2	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 SE SEC. 4 T5N R64W 6th P.M.						
ABDN VERT ACHZIGER B5-9 - Wellbore #1 - Wellbore #	9,630.0	6,690.6	1,549.8	1,476.4	21.113	CC
ABDN VERT ACHZIGER B5-9 - Wellbore #1 - Wellbore #	9,700.0	6,688.8	1,551.4	1,476.2	20.641	ES
ABDN VERT ACHZIGER B5-9 - Wellbore #1 - Wellbore #	10,500.0	6,667.5	1,777.2	1,681.3	18.543	SF
ABDN VERT MININGER-PFEIF 1 - Wellbore #1 - Design	9,540.4	6,688.8	308.0	106.6	1.529	CC, ES, SF
EXIST DD MILLAGE 13-3D - Wellbore #1 - Wellbore #1	15,556.6	6,658.0	1,655.5	1,409.1	6.720	CC, ES, SF
EXIST VERT ACHZINGER 1 - Wellbore #1 - Wellbore #1	10,671.6	6,659.7	1,570.6	1,470.2	15.645	CC
EXIST VERT ACHZINGER 1 - Wellbore #1 - Wellbore #1	10,700.0	6,659.4	1,570.8	1,469.7	15.532	ES
EXIST VERT ACHZINGER 1 - Wellbore #1 - Wellbore #1	11,300.0	6,650.7	1,691.6	1,574.4	14.435	SF
EXIST VERT BAUER 12-4 - Wellbore #1 - Design #1	11,006.5	6,674.7	435.2	193.8	1.803	CC, ES, SF
EXIST VERT BAUER 12-4 - Wellbore #1 - Wellbore #1	10,976.1	6,528.0	466.2	360.5	4.410	CC, ES
EXIST VERT BAUER 12-4 - Wellbore #1 - Wellbore #1	11,000.0	6,528.0	466.8	360.5	4.391	SF
EXIST VERT FLACK 5-3 - Wellbore #1 - Design #1	15,556.6	6,627.0	736.0	370.4	2.013	CC, ES, SF
EXIST VERT FRENCH 1 - Wellbore #1 - Wellbore #1	14,883.4	6,628.3	401.4	185.6	1.861	CC
EXIST VERT FRENCH 1 - Wellbore #1 - Wellbore #1	14,900.0	6,628.2	401.7	185.5	1.858	ES, SF
EXIST VERT OGRADY 1 - Wellbore #1 - Wellbore #1	13,511.3	6,649.7	1,663.1	1,485.4	9.361	CC
EXIST VERT OGRADY 1 - Wellbore #1 - Wellbore #1	13,600.0	6,649.7	1,665.5	1,485.4	9.247	ES
EXIST VERT OGRADY 1 - Wellbore #1 - Wellbore #1	13,900.0	6,649.8	1,707.9	1,519.5	9.065	SF
EXIST VERT OGRADY 43-4 - Wellbore #1 - Wellbore #1	14,875.4	6,612.0	1,801.5	1,586.1	8.363	CC
EXIST VERT OGRADY 43-4 - Wellbore #1 - Wellbore #1	14,900.0	6,612.1	1,801.7	1,585.6	8.338	ES
EXIST VERT OGRADY 43-4 - Wellbore #1 - Wellbore #1	15,300.0	6,613.0	1,850.8	1,623.6	8.146	SF
EXIST VERT SITZMAN 1A - Wellbore #1 - Wellbore #1	12,235.2	6,659.7	252.0	109.2	1.765	CC, ES, SF
EXIST VERT SITZMAN 23-4 - Wellbore #1 - Wellbore #1	12,411.2	6,600.0	1,656.1	1,508.6	11.227	CC
EXIST VERT SITZMAN 23-4 - Wellbore #1 - Wellbore #1	12,500.0	6,600.0	1,658.5	1,508.5	11.060	ES
EXIST VERT SITZMAN 23-4 - Wellbore #1 - Wellbore #1	12,900.0	6,600.0	1,726.7	1,565.8	10.730	SF
EXIST VERT SITZMAN 32-4 - Wellbore #1 - Design #1	13,582.0	6,650.1	325.0	13.7	1.044	Level 2, CC, ES
EXIST VERT SITZMAN 32-4 - Wellbore #1 - Design #1	13,600.0	6,650.0	325.5	13.7	1.044	Level 2, SF
EXIST VERT SITZMAN 32-4 - Wellbore #1 - Wellbore #1	13,530.2	6,475.0	359.6	198.5	2.232	CC, ES, SF
MCGLOTHLIN FARMS 4W-234 - ORIGINAL WELLBORI	7,652.7	14,507.5	1,207.8	958.6	4.848	CC, ES, SF
MCGLOTHLIN FARMS 4W-404 - ORIGINAL WELLBORI	7,655.9	14,720.3	928.2	681.2	3.757	CC, ES, SF

Offset Design		NW NE SEC. 5 T5N R64W 6th P.M. - ABDN VERT ACHZINGER 14-33 - Wellbore #1 - Design #1										Offset Site Error:		0.0 usft		
Survey Program: 0-INC														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		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)								
0.0	0.0	0.0	0.0	0.0	0.0	80.29	640.7	3,746.0	3,800.5							
100.0	100.0	80.0	80.0	0.1	0.7	80.29	640.7	3,746.0	3,800.4	3,799.7	0.76	5,016.813				
200.0	200.0	180.0	180.0	0.3	2.7	80.29	640.7	3,746.0	3,800.4	3,797.4	3.05	1,245.362				
300.0	300.0	280.0	280.0	0.5	4.9	80.29	640.7	3,746.0	3,800.4	3,795.0	5.42	701.517				
400.0	400.0	380.0	380.0	0.8	6.9	80.29	640.7	3,746.0	3,800.4	3,792.7	7.69	494.037				
500.0	500.0	480.0	480.0	1.0	9.0	80.29	640.7	3,746.0	3,800.4	3,790.5	9.95	381.993				
600.0	600.0	580.0	580.0	1.2	11.0	80.29	640.7	3,746.0	3,800.4	3,788.2	12.20	311.575				
700.0	700.0	680.0	680.0	1.4	13.0	80.29	640.7	3,746.0	3,800.4	3,786.0	14.44	263.152				
800.0	800.0	780.0	780.0	1.7	15.0	80.29	640.7	3,746.0	3,800.4	3,783.8	16.68	227.788				
900.0	900.0	880.0	880.0	1.9	17.0	80.29	640.7	3,746.0	3,800.4	3,781.5	18.92	200.819				
1,000.0	1,000.0	980.0	980.0	2.1	19.1	-145.51	640.7	3,746.0	3,802.2	3,781.1	21.13	179.975				
1,100.0	1,099.7	1,079.7	1,079.7	2.3	21.1	-145.48	640.7	3,746.0	3,807.6	3,784.4	23.28	163.586				
1,200.0	1,199.1	1,179.1	1,179.1	2.5	23.1	-145.45	640.7	3,746.0	3,816.6	3,791.2	25.39	150.316				
1,300.0	1,298.0	1,278.0	1,278.0	2.7	25.1	-145.40	640.7	3,746.0	3,829.2	3,801.7	27.46	139.421				
1,400.0	1,396.0	1,376.0	1,376.0	3.0	27.0	-145.33	640.7	3,746.0	3,845.3	3,815.8	29.50	130.372				

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