

PDC ENERGY

**WELD COUNTY, COLORADO
NW SW SEC. 27 T5N R65W 6th P.M.
BOULTER FARMS 27G-332**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

11 March, 2016



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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 98.4usft	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	11/03/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,613.0	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
NW SW SEC. 27 T5N R65W 6th P.M.						
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	1,150.0	1,136.0	1,297.8	1,273.4	53.283	CC
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	1,200.0	1,186.0	1,298.2	1,272.7	50.968	ES
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	7,972.4	6,926.4	1,950.8	1,778.5	11.319	SF
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	1,037.1	1,037.1	14.6	10.2	3.324	CC
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	14,613.0	14,544.6	210.6	-204.2	0.508	Level 1, ES, SF
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	1,150.0	1,150.0	14.6	9.7	2.978	CC
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	14,613.0	14,562.4	204.3	-212.8	0.490	Level 1, ES, SF
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	1,150.0	1,151.0	76.5	71.6	15.628	CC, ES
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	14,613.0	14,528.6	1,150.8	719.0	2.665	SF
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	1,150.0	1,150.0	47.4	42.5	9.679	CC, ES
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	14,613.0	14,542.2	665.3	233.3	1.540	SF
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	1,150.0	1,151.0	105.6	100.8	21.581	CC, ES
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	14,613.0	14,584.5	1,636.0	1,203.3	3.780	SF
BOULTER FARMS 27H-302 - ORIGINAL WELLBORE -	1,150.0	1,151.0	61.9	57.0	12.651	CC, ES
BOULTER FARMS 27H-302 - ORIGINAL WELLBORE -	14,613.0	14,583.8	903.5	470.1	2.085	SF
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	1,150.0	1,150.0	32.8	27.9	6.701	CC
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	14,613.0	14,589.4	415.3	-18.2	0.958	Level 1, ES, SF
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	1,150.0	1,151.0	91.1	86.2	18.605	CC, ES
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	14,613.0	14,619.1	1,395.6	962.9	3.225	SF
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	1,133.0	1,134.0	134.8	130.0	27.972	CC
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	1,150.0	1,150.0	134.8	129.9	27.548	ES
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	14,613.0	14,668.7	2,062.4	1,629.7	4.766	SF
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	1,036.2	1,037.2	153.0	148.6	34.904	CC
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	1,082.7	1,082.0	153.2	148.6	33.448	ES
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	14,613.0	14,793.3	2,269.7	1,837.0	5.246	SF
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	1,150.0	1,151.0	120.2	115.3	24.559	CC, ES
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	14,613.0	14,691.3	1,854.4	1,421.7	4.285	SF
EXIST VERT BARKER -PM F #26-10 - Wellbore #1 - De	14,613.0	6,856.0	630.0	276.4	1.781	CC, ES, SF
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,323.3	6,814.8	1,626.6	1,500.1	12.853	CC
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,400.0	6,812.4	1,628.4	1,499.7	12.654	ES
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,909.4	6,800.0	1,728.9	1,586.1	12.106	SF
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	10,114.0	6,873.0	1,852.9	1,760.1	19.960	CC
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	10,137.8	6,872.9	1,853.0	1,759.6	19.822	ES
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	11,122.0	6,865.3	2,109.3	1,988.6	17.468	SF
EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #	10,030.1	6,881.7	268.3	177.8	2.966	CC
EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #	10,039.3	6,881.8	268.4	177.7	2.960	ES, SF
EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #	10,702.6	6,350.0	1,112.3	1,014.6	11.386	CC

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

Anticollision Report



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Reference Well:	BOULTER FARMS 27G-332	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						
NW SW SEC. 27 T5N R65W 6th P.M.						
EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #	10,728.3	6,350.0	1,112.6	1,014.2	11.316	ES
EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #	11,023.6	6,350.0	1,157.7	1,052.1	10.969	SF
EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1	11,262.9	6,867.5	281.6	157.1	2.263	CC, ES, SF
EXIST VERT FOLKOSKI 2 - Wellbore #1 - Design #1	13,905.3	6,867.9	357.2	23.1	1.069	Level 2, CC, ES, SF
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Design #1	12,637.7	6,880.5	1,683.6	1,384.7	5.633	CC
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Design #1	12,696.8	6,880.0	1,684.7	1,384.1	5.606	ES
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Design #1	12,900.0	6,878.3	1,703.9	1,397.8	5.565	SF
EXIST VERT FOLKOWSKI 24-26 - Wellbore #1 - Design	13,844.3	6,868.4	1,493.9	1,161.5	4.494	CC
EXIST VERT FOLKOWSKI 24-26 - Wellbore #1 - Design	13,877.9	6,868.1	1,494.3	1,160.9	4.483	ES
EXIST VERT FOLKOWSKI 24-26 - Wellbore #1 - Design	14,000.0	6,867.1	1,502.0	1,165.2	4.460	SF
EXIST VERT FORD PM-F #26-16 - Wellbore #1 - Design	14,613.0	6,871.0	2,790.2	2,436.3	7.884	CC, ES, SF
EXIST VERT HERBSTER F #35-27 - Wellbore #1 - Design	14,613.0	6,868.0	2,251.7	1,897.8	6.363	CC, ES, SF
EXIST VERT HERBSTER PM F #26-15 - Wellbore #1 - Design	14,613.0	6,860.0	1,619.9	1,266.1	4.579	CC, ES, SF
EXIST VERT HOECHER 2 - Wellbore #1 - Design #1	12,637.4	6,880.5	361.2	62.3	1.208	Level 2, CC, ES, SF
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design	11,182.6	6,881.6	822.6	564.1	3.183	CC
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design	11,200.0	6,881.5	822.7	563.8	3.178	ES
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design	11,220.4	6,881.3	823.4	563.9	3.173	SF
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	9,981.6	6,906.6	968.1	742.6	4.293	CC
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	10,000.0	6,906.5	968.3	742.3	4.284	ES
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	10,100.0	6,905.6	975.3	746.6	4.264	SF
EXIST VERT KEATON #8-26 - Wellbore #1 - Design #1	14,613.0	6,858.0	2,099.5	1,745.9	5.937	CC, ES, SF
EXIST VERT KERBEL 12-26 - Wellbore #1 - Design #1	13,155.9	6,874.1	1,002.2	689.0	3.199	CC
EXIST VERT KERBEL 12-26 - Wellbore #1 - Design #1	13,188.9	6,873.9	1,002.8	688.6	3.192	ES
EXIST VERT KERBEL 12-26 - Wellbore #1 - Design #1	13,287.4	6,873.0	1,010.8	693.9	3.190	SF
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	7,359.5	6,925.9	880.5	721.2	5.526	CC
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	7,381.9	6,927.6	880.8	721.1	5.514	ES
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	7,432.4	6,929.0	883.5	722.9	5.500	SF
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design	8,680.3	6,925.5	1,128.3	937.9	5.925	CC
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design	8,700.0	6,925.4	1,128.5	937.5	5.909	ES
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design	8,858.2	6,924.0	1,142.2	947.1	5.853	SF
EXIST VERT MINERAL-FUELCO #1 - Wellbore #1 - Design	14,613.0	6,862.0	2,115.7	1,762.0	5.982	CC, ES, SF
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	2,050.2	2,018.4	351.1	345.2	59.449	CC
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	2,066.9	2,034.7	351.1	345.2	58.795	ES
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	7,432.4	6,894.0	404.7	380.5	16.769	SF
EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #	8,742.4	6,873.6	408.4	352.8	7.340	CC
EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #	8,759.8	6,873.5	408.8	352.7	7.286	ES
EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #	8,800.0	6,873.2	412.5	355.3	7.215	SF
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore	8,561.7	6,897.0	1,515.1	1,464.0	29.628	CC
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore	8,600.0	6,896.8	1,515.6	1,463.5	29.065	ES
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore	9,800.0	6,890.0	1,956.8	1,872.1	23.122	SF
EXIST VERT VETTING PM F #26-7 - Wellbore #1 - Design	14,613.0	6,857.0	1,251.6	897.9	3.538	CC, ES, SF

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1											
Survey Program: 0-INC											
Reference											
Offset											
Semi Major Axis											
Reference											
Offset											
Highside Toolface (°)											
Offset Wellbore Centre											
+N/-S (usft)											
+E/-W (usft)											
Distance											
Between Centres (usft)											
Between Ellipses (usft)											
Minimum Separation (usft)											
Separation Factor											
Warning											
0.0	0.0	0.0	0.0	0.0	0.0	165.58	-1,256.9	323.3	1,297.8		
98.4	98.4	84.4	84.4	0.1	0.4	165.58	-1,256.9	323.3	1,297.8	1,297.3	0.47 2,779.392
100.0	100.0	86.0	86.0	0.1	0.4	165.58	-1,256.9	323.3	1,297.8	1,297.3	0.48 2,727.408
196.8	196.8	182.8	182.8	0.3	2.5	165.58	-1,256.9	323.3	1,297.8	1,294.9	2.82 459.983

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

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Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
200.0	200.0	186.0	186.0	0.3	2.6	165.58	-1,256.9	323.3	1,297.8	1,294.9	2.91	446.442	
295.3	295.3	281.3	281.3	0.5	4.6	165.58	-1,256.9	323.3	1,297.8	1,292.6	5.16	251.574	
300.0	300.0	286.0	286.0	0.5	4.7	165.58	-1,256.9	323.3	1,297.8	1,292.5	5.27	246.378	
393.7	393.7	379.7	379.7	0.7	6.6	165.58	-1,256.9	323.3	1,297.8	1,290.4	7.39	175.514	
400.0	400.0	386.0	386.0	0.8	6.8	165.58	-1,256.9	323.3	1,297.8	1,290.2	7.54	172.193	
492.1	492.1	478.1	478.1	1.0	8.6	165.58	-1,256.9	323.3	1,297.8	1,288.2	9.61	135.008	
500.0	500.0	486.0	486.0	1.0	8.8	165.58	-1,256.9	323.3	1,297.8	1,288.0	9.79	132.563	
590.5	590.5	576.5	576.5	1.2	10.6	165.58	-1,256.9	323.3	1,297.8	1,285.9	11.82	109.756	
600.0	600.0	586.0	586.0	1.2	10.8	165.58	-1,256.9	323.3	1,297.8	1,285.7	12.04	107.821	
689.0	689.0	675.0	675.0	1.4	12.6	165.58	-1,256.9	323.3	1,297.8	1,283.7	14.03	92.486	
700.0	700.0	686.0	686.0	1.4	12.8	165.58	-1,256.9	323.3	1,297.8	1,283.5	14.28	90.884	
787.4	787.4	773.4	773.4	1.6	14.6	165.58	-1,256.9	323.3	1,297.8	1,281.5	16.24	79.921	
800.0	800.0	786.0	786.0	1.7	14.9	165.58	-1,256.9	323.3	1,297.8	1,281.2	16.52	78.556	
885.8	885.8	871.8	871.8	1.9	16.6	165.58	-1,256.9	323.3	1,297.8	1,279.3	18.44	70.368	
900.0	900.0	886.0	886.0	1.9	16.9	165.58	-1,256.9	323.3	1,297.8	1,279.0	18.76	69.177	
984.2	984.2	970.2	970.2	2.1	18.6	165.58	-1,256.9	323.3	1,297.8	1,277.1	20.65	62.857	
1,000.0	1,000.0	986.0	986.0	2.1	18.9	165.58	-1,256.9	323.3	1,297.8	1,276.8	21.00	61.801	
1,082.7	1,082.7	1,068.7	1,068.7	2.3	20.6	165.58	-1,256.9	323.3	1,297.8	1,274.9	22.85	56.796	
1,100.0	1,100.0	1,086.0	1,086.0	2.3	20.9	165.58	-1,256.9	323.3	1,297.8	1,274.5	23.24	55.849	
1,150.0	1,150.0	1,136.0	1,136.0	2.4	21.9	165.58	-1,256.9	323.3	1,297.8	1,273.4	24.36	53.283 CC	
1,181.1	1,181.1	1,167.1	1,167.1	2.5	22.5	-161.74	-1,256.9	323.3	1,297.9	1,272.9	25.05	51.813	
1,200.0	1,200.0	1,186.0	1,186.0	2.6	22.9	-161.74	-1,256.9	323.3	1,298.2	1,272.7	25.47	50.968 ES	
1,279.5	1,279.5	1,265.5	1,265.5	2.7	24.5	-161.76	-1,256.9	323.3	1,300.5	1,273.3	27.23	47.769	
1,300.0	1,299.9	1,285.9	1,285.9	2.8	24.9	-161.77	-1,256.9	323.3	1,301.5	1,273.8	27.67	47.030	
1,377.9	1,377.7	1,363.7	1,363.7	3.0	26.5	-161.81	-1,256.9	323.3	1,306.4	1,277.0	29.37	44.487	
1,400.0	1,399.7	1,385.7	1,385.7	3.0	26.9	-161.82	-1,256.9	323.3	1,308.1	1,278.3	29.84	43.840	
1,476.4	1,475.7	1,461.7	1,461.7	3.2	28.5	-161.88	-1,256.9	323.3	1,315.4	1,284.0	31.46	41.810	
1,500.0	1,499.1	1,485.1	1,485.1	3.2	28.9	-161.90	-1,256.9	323.3	1,318.1	1,286.1	31.96	41.245	
1,574.8	1,573.2	1,559.2	1,559.2	3.4	30.4	-161.98	-1,256.9	323.3	1,327.7	1,294.2	33.51	39.623	
1,600.0	1,598.2	1,584.2	1,584.2	3.5	30.9	-162.00	-1,256.9	323.3	1,331.3	1,297.3	34.02	39.132	
1,673.2	1,670.3	1,656.3	1,656.3	3.7	32.4	-162.09	-1,256.9	323.3	1,343.1	1,307.6	35.49	37.840	
1,700.0	1,696.6	1,682.6	1,682.6	3.8	32.9	-162.13	-1,256.9	323.3	1,347.9	1,311.8	36.02	37.416	
1,749.9	1,745.5	1,731.5	1,731.5	3.9	33.9	-162.20	-1,256.9	323.3	1,357.3	1,320.3	37.00	36.688	
1,771.6	1,766.8	1,752.8	1,752.8	4.0	34.3	-162.26	-1,256.9	323.3	1,361.7	1,324.2	37.47	36.339	
1,800.0	1,794.5	1,780.5	1,780.5	4.1	34.9	-162.33	-1,256.9	323.3	1,367.3	1,329.2	38.09	35.899	
1,870.1	1,863.1	1,849.1	1,849.1	4.3	36.3	-162.51	-1,256.9	323.3	1,381.2	1,341.6	39.61	34.866	
1,900.0	1,892.3	1,878.3	1,878.3	4.4	36.8	-162.59	-1,256.9	323.3	1,387.1	1,346.9	40.26	34.450	
1,968.5	1,959.4	1,945.4	1,945.4	4.7	38.2	-162.77	-1,256.9	323.3	1,400.8	1,359.0	41.76	33.542	
2,000.0	1,990.2	1,976.2	1,976.2	4.8	38.8	-162.84	-1,256.9	323.3	1,407.0	1,364.6	42.45	33.147	
2,066.9	2,055.6	2,041.6	2,041.6	5.1	40.1	-163.01	-1,256.9	323.3	1,420.3	1,376.4	43.91	32.347	
2,100.0	2,088.0	2,074.0	2,074.0	5.2	40.8	-163.09	-1,256.9	323.3	1,426.9	1,382.3	44.63	31.970	
2,165.3	2,151.9	2,137.9	2,137.9	5.4	42.1	-163.25	-1,256.9	323.3	1,440.0	1,393.9	46.06	31.261	
2,200.0	2,185.8	2,171.8	2,171.8	5.6	42.7	-163.33	-1,256.9	323.3	1,446.9	1,400.0	46.82	30.902	
2,263.8	2,248.2	2,234.2	2,234.2	5.8	44.0	-163.48	-1,256.9	323.3	1,459.6	1,411.4	48.22	30.271	
2,300.0	2,283.6	2,269.6	2,269.6	6.0	44.7	-163.56	-1,256.9	323.3	1,466.8	1,417.8	49.01	29.928	
2,362.2	2,344.5	2,330.5	2,330.5	6.2	45.9	-163.70	-1,256.9	323.3	1,479.3	1,428.9	50.37	29.365	
2,400.0	2,381.4	2,367.4	2,367.4	6.4	46.7	-163.79	-1,256.9	323.3	1,486.8	1,435.6	51.20	29.037	
2,460.6	2,440.7	2,426.7	2,426.7	6.6	47.9	-163.92	-1,256.9	323.3	1,498.9	1,446.4	52.53	28.533	
2,500.0	2,479.2	2,465.2	2,465.2	6.8	48.7	-164.01	-1,256.9	323.3	1,506.8	1,453.4	53.40	28.219	
2,559.0	2,537.0	2,523.0	2,523.0	7.0	49.8	-164.14	-1,256.9	323.3	1,518.6	1,463.9	54.69	27.767	
2,600.0	2,577.1	2,563.1	2,563.1	7.2	50.6	-164.22	-1,256.9	323.3	1,526.8	1,471.3	55.59	27.466	
2,657.5	2,633.3	2,619.3	2,619.3	7.4	51.8	-164.34	-1,256.9	323.3	1,538.4	1,481.5	56.85	27.059	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,700.0	2,674.9	2,660.9	2,660.9	7.6	52.6	-164.43	-1,256.9	323.3	1,546.9	1,489.1	57.79	26.770	
2,755.9	2,729.6	2,715.6	2,715.6	7.9	53.7	-164.55	-1,256.9	323.3	1,558.1	1,499.1	59.01	26.403	
2,800.0	2,772.7	2,758.7	2,758.7	8.0	54.6	-164.64	-1,256.9	323.3	1,567.0	1,507.0	59.98	26.124	
2,854.3	2,825.8	2,811.8	2,811.8	8.3	55.6	-164.74	-1,256.9	323.3	1,577.9	1,516.7	61.17	25.793	
2,900.0	2,870.5	2,856.5	2,856.5	8.5	56.5	-164.83	-1,256.9	323.3	1,587.0	1,524.9	62.18	25.525	
2,952.7	2,922.1	2,908.1	2,908.1	8.7	57.6	-164.94	-1,256.9	323.3	1,597.6	1,534.3	63.34	25.225	
3,000.0	2,968.3	2,954.3	2,954.3	8.9	58.5	-165.03	-1,256.9	323.3	1,607.1	1,542.8	64.37	24.966	
3,051.2	3,018.4	3,004.4	3,004.4	9.1	59.5	-165.12	-1,256.9	323.3	1,617.4	1,551.9	65.50	24.695	
3,100.0	3,066.1	3,052.1	3,052.1	9.3	60.5	-165.22	-1,256.9	323.3	1,627.3	1,560.7	66.57	24.444	
3,149.6	3,114.7	3,100.7	3,100.7	9.5	61.4	-165.31	-1,256.9	323.3	1,637.2	1,569.6	67.66	24.198	
3,200.0	3,164.0	3,150.0	3,150.0	9.8	62.4	-165.40	-1,256.9	323.3	1,647.4	1,578.6	68.77	23.956	
3,248.0	3,210.9	3,196.9	3,196.9	10.0	63.4	-165.49	-1,256.9	323.3	1,657.1	1,587.2	69.82	23.733	
3,300.0	3,261.8	3,247.8	3,247.8	10.2	64.4	-165.58	-1,256.9	323.3	1,667.5	1,596.6	70.96	23.499	
3,346.4	3,307.2	3,293.2	3,293.2	10.4	65.3	-165.66	-1,256.9	323.3	1,676.9	1,604.9	71.98	23.296	
3,400.0	3,359.6	3,345.6	3,345.6	10.6	66.4	-165.76	-1,256.9	323.3	1,687.7	1,614.5	73.16	23.069	
3,444.9	3,403.5	3,389.5	3,389.5	10.8	67.2	-165.83	-1,256.9	323.3	1,696.8	1,622.6	74.15	22.884	
3,500.0	3,457.4	3,443.4	3,443.4	11.1	68.3	-165.93	-1,256.9	323.3	1,707.9	1,632.5	75.36	22.664	
3,543.3	3,499.8	3,485.8	3,485.8	11.3	69.2	-166.00	-1,256.9	323.3	1,716.6	1,640.3	76.31	22.496	
3,600.0	3,555.2	3,541.2	3,541.2	11.5	70.3	-166.09	-1,256.9	323.3	1,728.1	1,650.5	77.55	22.282	
3,641.7	3,596.0	3,582.0	3,582.0	11.7	71.1	-166.16	-1,256.9	323.3	1,736.5	1,658.0	78.47	22.129	
3,700.0	3,653.0	3,639.0	3,639.0	11.9	72.3	-166.26	-1,256.9	323.3	1,748.3	1,668.5	79.75	21.922	
3,740.1	3,692.3	3,678.3	3,678.3	12.1	73.0	-166.32	-1,256.9	323.3	1,756.4	1,675.8	80.63	21.783	
3,800.0	3,750.8	3,736.8	3,736.8	12.4	74.2	-166.42	-1,256.9	323.3	1,768.5	1,686.6	81.95	21.581	
3,838.6	3,788.6	3,774.6	3,774.6	12.6	75.0	-166.48	-1,256.9	323.3	1,776.3	1,693.5	82.80	21.454	
3,900.0	3,848.7	3,834.7	3,834.7	12.8	76.2	-166.57	-1,256.9	323.3	1,788.7	1,704.6	84.14	21.258	
3,937.0	3,884.9	3,870.9	3,870.9	13.0	76.9	-166.63	-1,256.9	323.3	1,796.2	1,711.3	84.96	21.143	
4,000.0	3,946.5	3,932.5	3,932.5	13.3	78.2	-166.73	-1,256.9	323.3	1,809.0	1,722.7	86.34	20.952	
4,035.4	3,981.1	3,967.1	3,967.1	13.4	78.9	-166.78	-1,256.9	323.3	1,816.2	1,729.1	87.12	20.847	
4,100.0	4,044.3	4,030.3	4,030.3	13.7	80.1	-166.88	-1,256.9	323.3	1,829.3	1,740.7	88.54	20.661	
4,133.8	4,077.4	4,063.4	4,063.4	13.9	80.8	-166.93	-1,256.9	323.3	1,836.1	1,746.8	89.28	20.565	
4,200.0	4,142.1	4,128.1	4,128.1	14.2	82.1	-167.02	-1,256.9	323.3	1,849.5	1,758.8	90.73	20.384	
4,232.3	4,173.7	4,159.7	4,159.7	14.3	82.7	-167.07	-1,256.9	323.3	1,856.1	1,764.6	91.44	20.298	
4,300.0	4,239.9	4,225.9	4,225.9	14.6	84.1	-167.16	-1,256.9	323.3	1,869.8	1,776.9	92.93	20.120	
4,330.7	4,270.0	4,256.0	4,256.0	14.7	84.7	-167.21	-1,256.9	323.3	1,876.0	1,782.4	93.61	20.042	
4,400.0	4,337.7	4,323.7	4,323.7	15.0	86.0	-167.30	-1,256.9	323.3	1,890.1	1,795.0	95.13	19.869	
4,429.1	4,366.2	4,352.2	4,352.2	15.2	86.6	-167.34	-1,256.9	323.3	1,896.0	1,800.2	95.77	19.798	
4,500.0	4,435.6	4,421.6	4,421.6	15.5	88.0	-167.44	-1,256.9	323.3	1,910.4	1,813.1	97.32	19.629	
4,527.5	4,462.5	4,448.5	4,448.5	15.6	88.5	-167.48	-1,256.9	323.3	1,916.0	1,818.1	97.93	19.565	
4,600.0	4,533.4	4,519.4	4,519.4	15.9	90.0	-167.58	-1,256.9	323.3	1,930.7	1,831.2	99.52	19.400	
4,626.0	4,558.8	4,544.8	4,544.8	16.0	90.5	-167.61	-1,256.9	323.3	1,936.0	1,835.9	100.09	19.343	
4,673.6	4,605.3	4,591.3	4,591.3	16.3	91.4	-167.67	-1,256.9	323.3	1,945.7	1,844.5	101.13	19.238	
4,700.0	4,631.2	4,617.2	4,617.2	16.4	91.9	-167.73	-1,256.9	323.3	1,950.9	1,849.1	101.87	19.150	
4,724.4	4,655.1	4,641.1	4,641.1	16.4	92.4	-167.78	-1,256.9	323.3	1,955.6	1,853.0	102.54	19.070	
4,800.0	4,729.5	4,715.5	4,715.5	16.7	93.9	-167.92	-1,256.9	323.3	1,968.7	1,864.1	104.59	18.823	
4,822.8	4,752.1	4,738.1	4,738.1	16.7	94.4	-167.95	-1,256.9	323.3	1,972.3	1,867.1	105.20	18.748	
4,900.0	4,828.4	4,814.4	4,814.4	17.0	95.9	-168.07	-1,256.9	323.3	1,983.1	1,875.9	107.22	18.497	
4,921.2	4,849.5	4,835.5	4,835.5	17.0	96.3	-168.09	-1,256.9	323.3	1,985.7	1,878.0	107.76	18.428	
5,000.0	4,927.8	4,913.8	4,913.8	17.2	97.9	-168.18	-1,256.9	323.3	1,994.1	1,884.4	109.74	18.172	
5,019.7	4,947.4	4,933.4	4,933.4	17.2	98.3	-168.20	-1,256.9	323.3	1,995.9	1,885.7	110.22	18.109	
5,100.0	5,027.5	5,013.5	5,013.5	17.4	99.9	-168.26	-1,256.9	323.3	2,001.8	1,889.6	112.14	17.851	
5,118.1	5,045.6	5,031.6	5,031.6	17.4	100.3	-168.27	-1,256.9	323.3	2,002.8	1,890.2	112.56	17.793	
5,200.0	5,127.4	5,113.4	5,113.4	17.6	101.9	-168.30	-1,256.9	323.3	2,006.0	1,891.6	114.42	17.532	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,216.5	5,143.9	5,129.9	5,129.9	17.6	102.2	-168.30	-1,256.9	323.3	2,006.4	1,891.6	114.78	17.479	
5,273.4	5,200.8	5,186.8	5,186.8	17.7	103.4	159.00	-1,256.9	323.3	2,006.9	1,886.1	120.84	16.609	
5,300.0	5,227.4	5,213.4	5,213.4	17.7	103.9	159.00	-1,256.9	323.3	2,006.9	1,885.5	121.40	16.531	
5,314.9	5,242.3	5,228.3	5,228.3	17.7	104.2	159.00	-1,256.9	323.3	2,006.9	1,885.2	121.73	16.487	
5,400.0	5,327.4	5,313.4	5,313.4	17.8	105.9	159.00	-1,256.9	323.3	2,006.9	1,883.3	123.56	16.243	
5,413.4	5,340.8	5,326.8	5,326.8	17.9	106.2	159.00	-1,256.9	323.3	2,006.9	1,883.1	123.85	16.205	
5,500.0	5,427.4	5,413.4	5,413.4	18.0	107.9	159.00	-1,256.9	323.3	2,006.9	1,881.2	125.71	15.964	
5,511.8	5,439.2	5,425.2	5,425.2	18.0	108.2	159.00	-1,256.9	323.3	2,006.9	1,880.9	125.97	15.932	
5,600.0	5,527.4	5,513.4	5,513.4	18.1	110.0	159.00	-1,256.9	323.3	2,006.9	1,879.0	127.87	15.695	
5,610.2	5,537.6	5,523.6	5,523.6	18.1	110.2	159.00	-1,256.9	323.3	2,006.9	1,878.8	128.09	15.668	
5,700.0	5,627.4	5,613.4	5,613.4	18.3	112.0	159.00	-1,256.9	323.3	2,006.9	1,876.9	130.02	15.435	
5,708.6	5,636.0	5,622.0	5,622.0	18.3	112.1	159.00	-1,256.9	323.3	2,006.9	1,876.7	130.21	15.413	
5,800.0	5,727.4	5,713.4	5,713.4	18.4	114.0	159.00	-1,256.9	323.3	2,006.9	1,874.7	132.18	15.183	
5,807.1	5,734.5	5,720.5	5,720.5	18.4	114.1	159.00	-1,256.9	323.3	2,006.9	1,874.6	132.34	15.165	
5,900.0	5,827.4	5,813.4	5,813.4	18.6	116.0	159.00	-1,256.9	323.3	2,006.9	1,872.6	134.34	14.939	
5,905.5	5,832.9	5,818.9	5,818.9	18.6	116.1	159.00	-1,256.9	323.3	2,006.9	1,872.4	134.46	14.925	
6,000.0	5,927.4	5,913.4	5,913.4	18.7	118.0	159.00	-1,256.9	323.3	2,006.9	1,870.4	136.51	14.702	
6,003.9	5,931.3	5,917.3	5,917.3	18.7	118.1	159.00	-1,256.9	323.3	2,006.9	1,870.3	136.59	14.693	
6,100.0	6,027.4	6,013.4	6,013.4	18.9	120.0	159.00	-1,256.9	323.3	2,006.9	1,868.2	138.67	14.473	
6,102.3	6,029.7	6,015.7	6,015.7	18.9	120.1	159.00	-1,256.9	323.3	2,006.9	1,868.2	138.72	14.467	
6,200.0	6,127.4	6,113.4	6,113.4	19.0	122.0	159.00	-1,256.9	323.3	2,006.9	1,866.1	140.83	14.250	
6,200.8	6,128.2	6,114.2	6,114.2	19.0	122.0	159.00	-1,256.9	323.3	2,006.9	1,866.1	140.85	14.248	
6,299.2	6,226.6	6,212.6	6,212.6	19.2	124.0	159.00	-1,256.9	323.3	2,006.9	1,863.9	142.98	14.036	
6,301.4	6,228.8	6,214.8	6,214.8	19.2	124.1	159.00	-1,256.9	323.3	2,006.9	1,863.9	143.03	14.031	
6,350.0	6,277.4	6,263.4	6,263.4	19.3	125.0	69.09	-1,256.9	323.3	2,006.3	1,866.6	139.73	14.359	
6,397.6	6,324.7	6,310.7	6,310.7	19.3	126.0	69.35	-1,256.9	323.3	2,004.6	1,864.0	140.62	14.256	
6,400.0	6,327.1	6,313.1	6,313.1	19.3	126.0	69.37	-1,256.9	323.3	2,004.5	1,863.8	140.66	14.251	
6,450.0	6,376.3	6,362.3	6,362.3	19.3	127.0	69.82	-1,256.9	323.3	2,001.5	1,859.9	141.52	14.143	
6,496.0	6,421.1	6,407.1	6,407.1	19.3	127.9	70.40	-1,256.9	323.3	1,997.6	1,855.4	142.25	14.043	
6,500.0	6,424.9	6,410.9	6,410.9	19.3	128.0	70.45	-1,256.9	323.3	1,997.3	1,854.9	142.32	14.034	
6,550.0	6,472.4	6,458.4	6,458.4	19.3	129.0	71.25	-1,256.9	323.3	1,992.0	1,848.9	143.09	13.922	
6,594.5	6,513.8	6,499.8	6,499.8	19.3	129.8	72.09	-1,256.9	323.3	1,986.5	1,842.7	143.77	13.818	
6,600.0	6,518.8	6,504.8	6,504.8	19.3	129.9	72.21	-1,256.9	323.3	1,985.7	1,841.9	143.85	13.804	
6,650.0	6,563.8	6,549.8	6,549.8	19.3	130.8	73.30	-1,256.9	323.3	1,978.6	1,834.0	144.64	13.680	
6,692.9	6,601.1	6,587.1	6,587.1	19.2	131.5	74.34	-1,256.9	323.3	1,971.9	1,826.6	145.36	13.566	
6,700.0	6,607.1	6,593.1	6,593.1	19.2	131.7	74.52	-1,256.9	323.3	1,970.8	1,825.3	145.48	13.547	
6,750.0	6,648.6	6,634.6	6,634.6	19.2	132.5	75.85	-1,256.9	323.3	1,962.3	1,815.9	146.38	13.405	
6,791.3	6,681.4	6,667.4	6,667.4	19.1	133.2	77.00	-1,256.9	323.3	1,955.0	1,807.8	147.19	13.282	
6,800.0	6,688.1	6,674.1	6,674.1	19.1	133.3	77.25	-1,256.9	323.3	1,953.4	1,806.0	147.36	13.256	
6,850.0	6,725.3	6,711.3	6,711.3	19.1	134.0	78.71	-1,256.9	323.3	1,944.2	1,795.8	148.40	13.101	
6,889.7	6,753.2	6,739.2	6,739.2	19.0	134.6	79.89	-1,256.9	323.3	1,936.9	1,787.6	149.28	12.975	
6,900.0	6,760.1	6,746.1	6,746.1	19.0	134.7	80.19	-1,256.9	323.3	1,935.0	1,785.4	149.50	12.943	
6,950.0	6,792.3	6,778.3	6,778.3	19.0	135.4	81.66	-1,256.9	323.3	1,925.8	1,775.1	150.64	12.784	
6,988.2	6,815.1	6,801.1	6,801.1	18.9	135.8	82.76	-1,256.9	323.3	1,918.9	1,767.4	151.53	12.664	
7,000.0	6,821.8	6,807.8	6,807.8	18.9	136.0	83.10	-1,256.9	323.3	1,916.8	1,765.0	151.79	12.628	
7,050.0	6,848.3	6,834.3	6,834.3	18.9	136.5	84.46	-1,256.9	323.3	1,908.3	1,755.4	152.94	12.478	
7,086.6	6,865.9	6,851.9	6,851.9	18.9	136.9	85.40	-1,256.9	323.3	1,902.5	1,748.7	153.77	12.372	
7,100.0	6,871.9	6,857.9	6,857.9	18.9	137.0	85.73	-1,256.9	323.3	1,900.5	1,746.4	154.06	12.336	
7,150.0	6,892.3	6,878.3	6,878.3	18.8	137.4	86.87	-1,256.9	323.3	1,893.4	1,738.2	155.15	12.204	
7,185.0	6,904.7	6,890.7	6,890.7	18.8	137.7	87.58	-1,256.9	323.3	1,888.9	1,733.0	155.90	12.116	
7,200.0	6,909.5	6,895.5	6,895.5	18.9	137.7	87.86	-1,256.9	323.3	1,887.2	1,731.0	156.20	12.082	
7,250.0	6,923.4	6,909.4	6,909.4	19.3	138.0	88.68	-1,256.9	323.3	1,882.1	1,724.8	157.22	11.971	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,283.4	6,930.8	6,916.8	6,916.8	19.8	138.2	89.12	-1,256.9	323.3	1,879.3	1,721.4	157.89	11.903	
7,300.0	6,933.9	6,919.9	6,919.9	20.0	138.2	89.31	-1,256.9	323.3	1,878.1	1,719.9	158.20	11.871	
7,350.0	6,940.9	6,926.9	6,926.9	20.8	138.4	89.74	-1,256.9	323.3	1,875.3	1,716.2	159.16	11.783	
7,381.9	6,943.6	6,929.6	6,929.6	21.4	138.4	89.91	-1,256.9	323.3	1,874.3	1,714.5	159.76	11.732	
7,400.0	6,944.5	6,930.5	6,930.5	21.7	138.5	89.97	-1,256.9	323.3	1,873.9	1,713.8	160.08	11.706	
7,429.3	6,945.0	6,931.0	6,931.0	22.2	138.5	90.00	-1,256.9	323.3	1,873.7	1,713.1	160.61	11.666	
7,432.4	6,945.0	6,931.0	6,931.0	22.3	138.5	90.00	-1,256.9	323.3	1,873.7	1,713.0	160.67	11.662	
7,480.3	6,944.6	6,930.6	6,930.6	23.2	138.5	89.99	-1,256.9	323.3	1,874.4	1,712.8	161.55	11.602	
7,500.0	6,944.4	6,930.4	6,930.4	23.6	138.5	89.98	-1,256.9	323.3	1,875.0	1,713.1	161.92	11.580	
7,578.7	6,943.7	6,929.7	6,929.7	25.2	138.4	89.96	-1,256.9	323.3	1,879.6	1,716.1	163.49	11.497	
7,600.0	6,943.6	6,929.6	6,929.6	25.6	138.4	89.96	-1,256.9	323.3	1,881.4	1,717.5	163.91	11.478	
7,677.1	6,942.9	6,928.9	6,928.9	27.3	138.4	89.94	-1,256.9	323.3	1,890.0	1,724.4	165.56	11.416	
7,700.0	6,942.7	6,928.7	6,928.7	27.8	138.4	89.93	-1,256.9	323.3	1,893.1	1,727.1	166.05	11.401	
7,775.6	6,942.1	6,928.1	6,928.1	29.5	138.4	89.91	-1,256.9	323.3	1,905.4	1,737.7	167.74	11.359	
7,800.0	6,941.9	6,927.9	6,927.9	30.1	138.4	89.91	-1,256.9	323.3	1,910.0	1,741.7	168.29	11.350	
7,874.0	6,941.3	6,927.3	6,927.3	31.8	138.4	89.89	-1,256.9	323.3	1,925.7	1,755.7	170.01	11.327	
7,900.0	6,941.1	6,927.1	6,927.1	32.4	138.4	89.88	-1,256.9	323.3	1,931.9	1,761.3	170.61	11.323	
7,972.4	6,940.4	6,926.4	6,926.4	34.2	138.4	89.86	-1,256.9	323.3	1,950.8	1,778.5	172.35	11.319 SF	
8,000.0	6,940.2	6,926.2	6,926.2	34.9	138.4	89.85	-1,256.9	323.3	1,958.7	1,785.6	173.01	11.321	
8,070.8	6,939.6	6,925.6	6,925.6	36.6	138.4	89.84	-1,256.9	323.3	1,980.5	1,805.7	174.75	11.333	
8,100.0	6,939.4	6,925.4	6,925.4	37.3	138.3	89.83	-1,256.9	323.3	1,990.1	1,814.6	175.46	11.342	
8,169.3	6,938.8	6,924.8	6,924.8	39.1	138.3	89.81	-1,256.9	323.3	2,014.5	1,837.3	177.19	11.369	
8,200.0	6,938.5	6,924.5	6,924.5	39.8	138.3	89.80	-1,256.9	323.3	2,026.0	1,848.0	177.96	11.385	
8,267.7	6,938.0	6,924.0	6,924.0	41.6	138.3	89.79	-1,256.9	323.3	2,052.7	1,873.0	179.68	11.424	
8,300.0	6,937.7	6,923.7	6,923.7	42.4	138.3	89.78	-1,256.9	323.3	2,066.1	1,885.6	180.49	11.447	
8,366.1	6,937.2	6,923.2	6,923.2	44.1	138.3	89.76	-1,256.9	323.3	2,094.8	1,912.6	182.19	11.498	
8,400.0	6,936.9	6,922.9	6,922.9	45.0	138.3	89.75	-1,256.9	323.3	2,110.2	1,927.1	183.06	11.527	
8,464.5	6,936.3	6,922.3	6,922.3	46.6	138.3	89.74	-1,256.9	323.3	2,140.6	1,955.9	184.73	11.588	
8,500.0	6,936.0	6,922.0	6,922.0	47.6	138.3	89.73	-1,256.9	323.3	2,158.0	1,972.4	185.65	11.624	
8,563.0	6,935.5	6,921.5	6,921.5	49.2	138.3	89.71	-1,256.9	323.3	2,189.9	2,002.6	187.30	11.692	
8,600.0	6,935.2	6,921.2	6,921.2	50.2	138.3	89.70	-1,256.9	323.3	2,209.3	2,021.1	188.26	11.735	
8,661.4	6,934.7	6,920.7	6,920.7	51.8	138.3	89.68	-1,256.9	323.3	2,242.5	2,052.6	189.88	11.810	
8,700.0	6,934.4	6,920.4	6,920.4	52.8	138.2	89.67	-1,256.9	323.3	2,263.9	2,073.0	190.89	11.859	
8,759.8	6,933.9	6,919.9	6,919.9	54.4	138.2	89.66	-1,256.9	323.3	2,298.0	2,105.5	192.48	11.939	
8,800.0	6,933.5	6,919.5	6,919.5	55.5	138.2	89.65	-1,256.9	323.3	2,321.5	2,128.0	193.54	11.995	
8,858.2	6,933.0	6,919.0	6,919.0	57.1	138.2	89.63	-1,256.9	323.3	2,356.4	2,161.3	195.09	12.078	
8,900.0	6,932.7	6,918.7	6,918.7	58.2	138.2	89.62	-1,256.9	323.3	2,381.9	2,185.7	196.20	12.140	
8,956.7	6,932.2	6,918.2	6,918.2	59.7	138.2	89.61	-1,256.9	323.3	2,417.3	2,219.6	197.72	12.226	
9,000.0	6,931.8	6,917.8	6,917.8	60.9	138.2	89.60	-1,256.9	323.3	2,444.9	2,246.1	198.88	12.294	
9,055.1	6,931.4	6,917.4	6,917.4	62.4	138.2	89.58	-1,256.9	323.3	2,480.7	2,280.3	200.35	12.382	
9,100.0	6,931.0	6,917.0	6,917.0	63.6	138.2	89.57	-1,256.9	323.3	2,510.3	2,308.8	201.56	12.455	
9,153.5	6,930.6	6,916.6	6,916.6	65.0	138.2	89.56	-1,256.9	323.3	2,546.3	2,343.3	203.00	12.543	
9,200.0	6,930.2	6,916.2	6,916.2	66.3	138.2	89.55	-1,256.9	323.3	2,578.0	2,373.7	204.25	12.622	
9,251.9	6,929.7	6,915.7	6,915.7	67.7	138.2	89.53	-1,256.9	323.3	2,613.9	2,408.3	205.65	12.710	
9,300.0	6,929.3	6,915.3	6,915.3	69.0	138.1	89.52	-1,256.9	323.3	2,647.6	2,440.7	206.95	12.794	
9,350.4	6,928.9	6,914.9	6,914.9	70.4	138.1	89.51	-1,256.9	323.3	2,683.5	2,475.2	208.31	12.882	
9,400.0	6,928.5	6,914.5	6,914.5	71.7	138.1	89.50	-1,256.9	323.3	2,719.2	2,509.6	209.66	12.970	
9,448.8	6,928.1	6,914.1	6,914.1	73.0	138.1	89.48	-1,256.9	323.3	2,754.8	2,543.8	210.98	13.057	
9,500.0	6,927.7	6,913.7	6,913.7	74.4	138.1	89.47	-1,256.9	323.3	2,792.5	2,580.2	212.37	13.149	
9,547.2	6,927.3	6,913.3	6,913.3	75.7	138.1	89.46	-1,256.9	323.3	2,827.7	2,614.1	213.65	13.235	
9,600.0	6,926.8	6,912.8	6,912.8	77.2	138.1	89.44	-1,256.9	323.3	2,867.5	2,652.4	215.09	13.332	
9,645.6	6,926.4	6,912.4	6,912.4	78.4	138.1	89.43	-1,256.9	323.3	2,902.2	2,685.8	216.33	13.415	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,700.0	6,926.0	6,912.0	6,912.0	79.9	138.1	89.42	-1,256.9	323.3	2,943.9	2,726.1	217.81	13.516	
9,744.1	6,925.6	6,911.6	6,911.6	81.1	138.1	89.41	-1,256.9	323.3	2,978.0	2,759.0	219.01	13.597	
9,800.0	6,925.2	6,911.2	6,911.2	82.6	138.1	89.39	-1,256.9	323.3	3,021.7	2,801.2	220.54	13.701	
9,842.5	6,924.8	6,910.8	6,910.8	83.8	138.1	89.38	-1,256.9	323.3	3,055.1	2,833.4	221.70	13.780	
9,900.0	6,924.3	6,910.3	6,910.3	85.4	138.0	89.37	-1,256.9	323.3	3,100.8	2,877.5	223.27	13.888	
9,940.9	6,924.0	6,910.0	6,910.0	86.5	138.0	89.36	-1,256.9	323.3	3,133.5	2,909.1	224.39	13.964	
10,000.0	6,923.5	6,909.5	6,909.5	88.1	138.0	89.34	-1,256.9	323.3	3,181.0	2,955.0	226.01	14.075	
10,039.3	6,923.2	6,909.2	6,909.2	89.2	138.0	89.33	-1,256.9	323.3	3,212.9	2,985.8	227.09	14.148	
10,100.0	6,922.6	6,908.6	6,908.6	90.9	138.0	89.32	-1,256.9	323.3	3,262.4	3,033.6	228.75	14.262	
10,137.8	6,922.3	6,908.3	6,908.3	91.9	138.0	89.31	-1,256.9	323.3	3,293.3	3,063.6	229.78	14.332	
10,200.0	6,921.8	6,907.8	6,907.8	93.7	138.0	89.29	-1,256.9	323.3	3,344.7	3,113.2	231.49	14.449	
10,236.2	6,921.5	6,907.5	6,907.5	94.7	138.0	89.28	-1,256.9	323.3	3,374.8	3,142.3	232.48	14.516	
10,300.0	6,921.0	6,907.0	6,907.0	96.4	138.0	89.27	-1,256.9	323.3	3,428.0	3,193.8	234.23	14.635	
10,334.6	6,920.7	6,906.7	6,906.7	97.4	138.0	89.26	-1,256.9	323.3	3,457.0	3,221.9	235.19	14.699	
10,400.0	6,920.1	6,906.1	6,906.1	99.2	138.0	89.24	-1,256.9	323.3	3,512.2	3,275.2	236.98	14.820	
10,433.0	6,919.9	6,905.9	6,905.9	100.1	138.0	89.23	-1,256.9	323.3	3,540.2	3,302.3	237.89	14.881	
10,500.0	6,919.3	6,905.3	6,905.3	101.9	137.9	89.22	-1,256.9	323.3	3,597.1	3,357.4	239.73	15.005	
10,531.5	6,919.0	6,905.0	6,905.0	102.8	137.9	89.21	-1,256.9	323.3	3,624.0	3,383.4	240.60	15.063	
10,600.0	6,918.5	6,904.5	6,904.5	104.7	137.9	89.19	-1,256.9	323.3	3,682.9	3,440.4	242.48	15.188	
10,629.9	6,918.2	6,904.2	6,904.2	105.5	137.9	89.18	-1,256.9	323.3	3,708.6	3,465.3	243.31	15.243	
10,700.0	6,917.6	6,903.6	6,903.6	107.5	137.9	89.16	-1,256.9	323.3	3,769.3	3,524.1	245.24	15.370	
10,728.3	6,917.4	6,903.4	6,903.4	108.3	137.9	89.16	-1,256.9	323.3	3,793.9	3,547.9	246.02	15.421	
10,800.0	6,916.8	6,902.8	6,902.8	110.3	137.9	89.14	-1,256.9	323.3	3,856.4	3,608.4	247.99	15.550	
10,826.7	6,916.6	6,902.6	6,902.6	111.0	137.9	89.13	-1,256.9	323.3	3,879.8	3,631.1	248.73	15.598	
10,900.0	6,916.0	6,902.0	6,902.0	113.0	137.9	89.11	-1,256.9	323.3	3,944.1	3,693.3	250.75	15.729	
10,925.2	6,915.8	6,901.8	6,901.8	113.7	137.9	89.11	-1,256.9	323.3	3,966.3	3,714.8	251.44	15.774	
11,000.0	6,915.1	6,901.1	6,901.1	115.8	137.9	89.09	-1,256.9	323.3	4,032.4	3,778.8	253.51	15.906	
11,023.6	6,914.9	6,900.9	6,900.9	116.5	137.9	89.08	-1,256.9	323.3	4,053.3	3,799.1	254.16	15.948	
11,100.0	6,914.3	6,900.3	6,900.3	118.6	137.8	89.06	-1,256.9	323.3	4,121.2	3,864.9	256.27	16.081	
11,122.0	6,914.1	6,900.1	6,900.1	119.2	137.8	89.06	-1,256.9	323.3	4,140.8	3,883.9	256.88	16.120	
11,200.0	6,913.5	6,899.5	6,899.5	121.4	137.8	89.04	-1,256.9	323.3	4,210.5	3,951.4	259.03	16.255	
11,220.4	6,913.3	6,899.3	6,899.3	121.9	137.8	89.03	-1,256.9	323.3	4,228.8	3,969.2	259.60	16.290	
11,300.0	6,912.6	6,898.6	6,898.6	124.1	137.8	89.01	-1,256.9	323.3	4,300.3	4,038.5	261.79	16.426	
11,318.9	6,912.5	6,898.5	6,898.5	124.7	137.8	89.01	-1,256.9	323.3	4,317.3	4,054.9	262.32	16.458	
11,400.0	6,911.8	6,897.8	6,897.8	126.9	137.8	88.99	-1,256.9	323.3	4,390.5	4,125.9	264.56	16.596	
11,417.3	6,911.6	6,897.6	6,897.6	127.4	137.8	88.98	-1,256.9	323.3	4,406.1	4,141.1	265.04	16.625	
11,500.0	6,911.0	6,897.0	6,897.0	129.7	137.8	88.96	-1,256.9	323.3	4,481.1	4,213.8	267.32	16.763	
11,515.7	6,910.8	6,896.8	6,896.8	130.2	137.8	88.96	-1,256.9	323.3	4,495.4	4,227.6	267.76	16.789	
11,600.0	6,910.1	6,896.1	6,896.1	132.5	137.8	88.94	-1,256.9	323.3	4,572.1	4,302.1	270.09	16.928	
11,614.1	6,910.0	6,896.0	6,896.0	132.9	137.8	88.93	-1,256.9	323.3	4,585.1	4,314.6	270.48	16.952	
11,700.0	6,909.3	6,895.3	6,895.3	135.3	137.7	88.91	-1,256.9	323.3	4,663.5	4,390.7	272.85	17.092	
11,712.6	6,909.2	6,895.2	6,895.2	135.6	137.7	88.91	-1,256.9	323.3	4,675.1	4,401.9	273.20	17.112	
11,800.0	6,908.5	6,894.5	6,894.5	138.1	137.7	88.88	-1,256.9	323.3	4,755.3	4,479.7	275.62	17.253	
11,811.0	6,908.4	6,894.4	6,894.4	138.4	137.7	88.88	-1,256.9	323.3	4,765.4	4,489.5	275.93	17.270	
11,900.0	6,907.6	6,893.6	6,893.6	140.9	137.7	88.86	-1,256.9	323.3	4,847.3	4,569.0	278.39	17.412	
11,909.4	6,907.5	6,893.5	6,893.5	141.1	137.7	88.86	-1,256.9	323.3	4,856.0	4,577.4	278.65	17.427	
12,000.0	6,906.8	6,892.8	6,892.8	143.6	137.7	88.83	-1,256.9	323.3	4,939.7	4,658.6	281.16	17.569	
12,007.8	6,906.7	6,892.7	6,892.7	143.9	137.7	88.83	-1,256.9	323.3	4,947.0	4,665.6	281.38	17.581	
12,100.0	6,905.9	6,891.9	6,891.9	146.4	137.7	88.81	-1,256.9	323.3	5,032.4	4,748.5	283.93	17.724	
12,106.3	6,905.9	6,891.9	6,891.9	146.6	137.7	88.81	-1,256.9	323.3	5,038.2	4,754.1	284.10	17.734	
12,200.0	6,905.1	6,891.1	6,891.1	149.2	137.7	88.78	-1,256.9	323.3	5,125.3	4,838.6	286.70	17.877	
12,204.7	6,905.1	6,891.1	6,891.1	149.4	137.7	88.78	-1,256.9	323.3	5,129.7	4,842.9	286.83	17.884	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,300.0	6,904.3	6,890.3	6,890.3	152.0	137.6	88.76	-1,256.9	323.3	5,218.5	4,929.1	289.47	18.028	
12,303.1	6,904.3	6,890.3	6,890.3	152.1	137.6	88.76	-1,256.9	323.3	5,221.4	4,931.9	289.56	18.033	
12,400.0	6,903.4	6,889.4	6,889.4	154.8	137.6	88.73	-1,256.9	323.3	5,312.0	5,019.7	292.24	18.177	
12,401.5	6,903.4	6,889.4	6,889.4	154.8	137.6	88.73	-1,256.9	323.3	5,313.4	5,021.1	292.28	18.179	
12,500.0	6,902.6	6,888.6	6,888.6	157.6	137.6	88.71	-1,256.9	323.3	5,405.7	5,110.7	295.01	18.323	
12,598.4	6,901.8	6,887.8	6,887.8	160.3	137.6	88.68	-1,256.9	323.3	5,498.1	5,200.3	297.74	18.466	
12,600.0	6,901.8	6,887.8	6,887.8	160.4	137.6	88.68	-1,256.9	323.3	5,499.6	5,201.8	297.79	18.468	
12,696.8	6,901.0	6,887.0	6,887.0	163.1	137.6	88.66	-1,256.9	323.3	5,590.7	5,290.2	300.47	18.606	
12,700.0	6,900.9	6,886.9	6,886.9	163.2	137.6	88.66	-1,256.9	323.3	5,593.7	5,293.1	300.56	18.611	
12,795.2	6,900.1	6,886.1	6,886.1	165.8	137.6	88.63	-1,256.9	323.3	5,683.5	5,380.3	303.20	18.745	
12,800.0	6,900.1	6,886.1	6,886.1	166.0	137.6	88.63	-1,256.9	323.3	5,688.0	5,384.7	303.33	18.752	
12,893.7	6,899.3	6,885.3	6,885.3	168.6	137.5	88.61	-1,256.9	323.3	5,776.5	5,470.6	305.93	18.882	
12,900.0	6,899.3	6,885.3	6,885.3	168.8	137.5	88.61	-1,256.9	323.3	5,782.5	5,476.4	306.11	18.891	
12,992.1	6,898.5	6,884.5	6,884.5	171.3	137.5	88.58	-1,256.9	323.3	5,869.7	5,561.1	308.66	19.017	
13,000.0	6,898.4	6,884.4	6,884.4	171.6	137.5	88.58	-1,256.9	323.3	5,877.2	5,568.3	308.88	19.027	
13,090.5	6,897.7	6,883.7	6,883.7	174.1	137.5	88.56	-1,256.9	323.3	5,963.1	5,651.7	311.39	19.150	
13,100.0	6,897.6	6,883.6	6,883.6	174.4	137.5	88.55	-1,256.9	323.3	5,972.1	5,660.4	311.65	19.162	
13,188.9	6,896.9	6,882.9	6,882.9	176.8	137.5	88.53	-1,256.9	323.3	6,056.6	5,742.5	314.12	19.281	
13,200.0	6,896.8	6,882.8	6,882.8	177.2	137.5	88.53	-1,256.9	323.3	6,067.1	5,752.7	314.43	19.296	
13,287.4	6,896.0	6,882.0	6,882.0	179.6	137.5	88.51	-1,256.9	323.3	6,150.3	5,833.4	316.85	19.410	
13,300.0	6,895.9	6,881.9	6,881.9	180.0	137.5	88.50	-1,256.9	323.3	6,162.3	5,845.1	317.20	19.427	
13,385.8	6,895.2	6,881.2	6,881.2	182.4	137.5	88.48	-1,256.9	323.3	6,244.1	5,924.5	319.59	19.538	
13,400.0	6,895.1	6,881.1	6,881.1	182.7	137.5	88.48	-1,256.9	323.3	6,257.6	5,937.6	319.98	19.556	
13,484.2	6,894.4	6,880.4	6,880.4	185.1	137.4	88.46	-1,256.9	323.3	6,338.0	6,015.7	322.32	19.664	
13,500.0	6,894.3	6,880.3	6,880.3	185.5	137.4	88.45	-1,256.9	323.3	6,353.1	6,030.4	322.76	19.684	
13,582.6	6,893.6	6,879.6	6,879.6	187.9	137.4	88.43	-1,256.9	323.3	6,432.1	6,107.1	325.05	19.788	
13,600.0	6,893.4	6,879.4	6,879.4	188.3	137.4	88.43	-1,256.9	323.3	6,448.7	6,123.2	325.53	19.810	
13,681.1	6,892.8	6,878.8	6,878.8	190.6	137.4	88.41	-1,256.9	323.3	6,526.3	6,198.6	327.78	19.911	
13,700.0	6,892.6	6,878.6	6,878.6	191.1	137.4	88.40	-1,256.9	323.3	6,544.5	6,216.2	328.31	19.934	
13,779.5	6,891.9	6,877.9	6,877.9	193.4	137.4	88.38	-1,256.9	323.3	6,620.7	6,290.2	330.51	20.031	
13,800.0	6,891.8	6,877.8	6,877.8	193.9	137.4	88.38	-1,256.9	323.3	6,640.3	6,309.3	331.08	20.056	
13,877.9	6,891.1	6,877.1	6,877.1	196.1	137.4	88.36	-1,256.9	323.3	6,715.1	6,381.9	333.25	20.151	
13,900.0	6,890.9	6,876.9	6,876.9	196.7	137.4	88.35	-1,256.9	323.3	6,736.3	6,402.5	333.86	20.177	
13,976.3	6,890.3	6,876.3	6,876.3	198.9	137.4	88.33	-1,256.9	323.3	6,809.7	6,473.7	335.98	20.268	
14,000.0	6,890.1	6,876.1	6,876.1	199.5	137.4	88.33	-1,256.9	323.3	6,832.4	6,495.8	336.64	20.296	
14,074.8	6,889.5	6,875.5	6,875.5	201.6	137.3	88.31	-1,256.9	323.3	6,904.4	6,565.7	338.71	20.384	
14,100.0	6,889.3	6,875.3	6,875.3	202.3	137.3	88.30	-1,256.9	323.3	6,928.7	6,589.2	339.41	20.414	
14,173.2	6,888.7	6,874.7	6,874.7	204.4	137.3	88.28	-1,256.9	323.3	6,999.2	6,657.7	341.45	20.499	
14,200.0	6,888.4	6,874.4	6,874.4	205.1	137.3	88.28	-1,256.9	323.3	7,025.0	6,682.8	342.19	20.529	
14,271.6	6,887.8	6,873.8	6,873.8	207.1	137.3	88.26	-1,256.9	323.3	7,094.0	6,749.9	344.18	20.611	
14,300.0	6,887.6	6,873.6	6,873.6	207.9	137.3	88.25	-1,256.9	323.3	7,121.4	6,776.4	344.97	20.644	
14,370.0	6,887.0	6,873.0	6,873.0	209.9	137.3	88.23	-1,256.9	323.3	7,189.0	6,842.1	346.91	20.723	
14,400.0	6,886.8	6,872.8	6,872.8	210.7	137.3	88.23	-1,256.9	323.3	7,217.9	6,870.2	347.74	20.756	
14,468.5	6,886.2	6,872.2	6,872.2	212.6	137.3	88.21	-1,256.9	323.3	7,284.1	6,934.4	349.65	20.833	
14,500.0	6,885.9	6,871.9	6,871.9	213.5	137.3	88.20	-1,256.9	323.3	7,314.5	6,964.0	350.52	20.868	
14,566.9	6,885.4	6,871.4	6,871.4	215.4	137.3	88.18	-1,256.9	323.3	7,379.2	7,026.8	352.38	20.941	
14,600.0	6,885.1	6,871.1	6,871.1	216.3	137.3	88.17	-1,256.9	323.3	7,411.2	7,057.9	353.30	20.977	
14,613.0	6,885.0	6,871.0	6,871.0	216.7	137.3	88.17	-1,256.9	323.3	7,423.8	7,070.2	353.66	20.991	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+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	0.00	14.6	0.0	14.6				
98.4	98.4	98.4	98.4	0.1	0.1	0.00	14.6	0.0	14.6	14.4	0.17	85.800	
100.0	100.0	100.0	100.0	0.1	0.1	0.00	14.6	0.0	14.6	14.4	0.17	84.247	
196.8	196.8	196.8	196.8	0.3	0.3	0.00	14.6	0.0	14.6	14.0	0.61	23.964	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.6	0.0	14.6	14.0	0.62	23.419	
295.3	295.3	295.3	295.3	0.5	0.5	0.00	14.6	0.0	14.6	13.5	1.05	13.874	
300.0	300.0	300.0	300.0	0.5	0.5	0.00	14.6	0.0	14.6	13.5	1.07	13.600	
393.7	393.7	393.7	393.7	0.7	0.7	0.00	14.6	0.0	14.6	13.1	1.49	9.764	
400.0	400.0	400.0	400.0	0.8	0.8	0.00	14.6	0.0	14.6	13.1	1.52	9.582	
492.1	492.1	492.1	492.1	1.0	1.0	0.00	14.6	0.0	14.6	12.6	1.94	7.532	
500.0	500.0	500.0	500.0	1.0	1.0	0.00	14.6	0.0	14.6	12.6	1.97	7.397	
590.5	590.5	590.5	590.5	1.2	1.2	0.00	14.6	0.0	14.6	12.2	2.38	6.131	
600.0	600.0	600.0	600.0	1.2	1.2	0.00	14.6	0.0	14.6	12.2	2.42	6.023	
689.0	689.0	689.0	689.0	1.4	1.4	0.00	14.6	0.0	14.6	11.8	2.82	5.169	
700.0	700.0	700.0	700.0	1.4	1.4	0.00	14.6	0.0	14.6	11.7	2.87	5.080	
787.4	787.4	787.4	787.4	1.6	1.6	0.00	14.6	0.0	14.6	11.3	3.26	4.468	
800.0	800.0	800.0	800.0	1.7	1.7	0.00	14.6	0.0	14.6	11.3	3.32	4.392	
885.8	885.8	885.8	885.8	1.9	1.9	0.00	14.6	0.0	14.6	10.9	3.71	3.935	
900.0	900.0	900.0	900.0	1.9	1.9	0.00	14.6	0.0	14.6	10.8	3.77	3.868	
984.2	984.2	984.2	984.2	2.1	2.1	0.00	14.6	0.0	14.6	10.4	4.15	3.515	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	0.00	14.6	0.0	14.6	10.4	4.22	3.456	
1,037.1	1,037.1	1,037.1	1,037.1	2.2	2.2	0.00	14.6	0.0	14.6	10.2	4.39	3.324 CC	
1,082.7	1,082.7	1,082.5	1,082.5	2.3	2.3	-0.32	14.7	-0.1	14.7	10.2	4.59	3.213	
1,100.0	1,100.0	1,099.8	1,099.8	2.3	2.3	-0.73	15.0	-0.2	15.0	10.3	4.67	3.208	
1,150.0	1,150.0	1,149.5	1,149.5	2.4	2.4	-2.71	16.1	-0.8	16.2	11.3	4.89	3.304	
1,181.1	1,181.1	1,180.4	1,180.4	2.5	2.5	28.59	17.2	-1.3	17.2	12.1	5.03	3.412	
1,200.0	1,200.0	1,199.2	1,199.1	2.6	2.6	27.88	18.1	-1.7	17.8	12.7	5.11	3.478	
1,279.5	1,279.5	1,278.2	1,277.9	2.7	2.7	25.77	22.7	-4.0	20.5	15.0	5.46	3.745	
1,300.0	1,299.9	1,298.5	1,298.2	2.8	2.8	25.42	24.2	-4.8	21.2	15.6	5.55	3.812	
1,377.9	1,377.7	1,375.8	1,375.1	3.0	3.0	24.60	31.2	-8.2	23.9	18.0	5.90	4.055	
1,400.0	1,399.7	1,397.7	1,396.8	3.0	3.0	24.49	33.5	-9.3	24.7	18.7	6.00	4.122	
1,476.4	1,475.7	1,473.4	1,471.8	3.2	3.2	24.46	42.6	-13.8	27.5	21.2	6.34	4.339	
1,500.0	1,499.1	1,496.8	1,494.9	3.2	3.3	24.54	45.8	-15.4	28.4	21.9	6.44	4.404	
1,574.8	1,573.2	1,570.8	1,567.9	3.4	3.5	25.01	56.9	-20.9	31.2	24.4	6.78	4.597	
1,600.0	1,598.2	1,595.7	1,592.4	3.5	3.6	25.23	61.1	-22.9	32.1	25.2	6.89	4.660	
1,673.2	1,670.3	1,668.3	1,663.5	3.7	3.8	26.05	74.1	-29.4	34.9	27.7	7.24	4.822	
1,700.0	1,696.6	1,695.0	1,689.7	3.8	3.9	26.55	79.1	-31.8	35.7	28.3	7.37	4.844	
1,749.9	1,745.5	1,744.9	1,738.4	3.9	4.0	27.91	88.4	-36.4	36.5	28.9	7.62	4.798	
1,771.6	1,766.8	1,766.7	1,759.7	4.0	4.1	28.63	92.5	-38.4	36.8	29.0	7.74	4.752	
1,800.0	1,794.5	1,795.0	1,787.4	4.1	4.2	29.55	97.8	-41.0	37.1	29.2	7.89	4.695	
1,870.1	1,863.1	1,865.1	1,856.0	4.3	4.5	31.76	110.8	-47.5	37.8	29.5	8.30	4.557	
1,900.0	1,892.3	1,895.0	1,885.2	4.4	4.6	32.68	116.4	-50.2	38.2	29.7	8.47	4.505	
1,968.5	1,959.4	1,963.5	1,952.2	4.7	4.8	34.72	129.2	-56.5	39.0	30.1	8.89	4.385	
2,000.0	1,990.2	1,994.9	1,983.0	4.8	5.0	35.63	135.1	-59.4	39.4	30.3	9.09	4.334	
2,066.9	2,055.6	2,061.8	2,048.5	5.1	5.2	37.50	147.6	-65.6	40.3	30.7	9.52	4.228	
2,100.0	2,088.0	2,094.9	2,080.8	5.2	5.4	38.39	153.7	-68.6	40.7	31.0	9.74	4.179	
2,165.3	2,151.9	2,160.2	2,144.7	5.4	5.6	40.10	165.9	-74.6	41.6	31.4	10.18	4.085	
2,200.0	2,185.8	2,194.9	2,178.6	5.6	5.8	40.98	172.4	-77.8	42.1	31.7	10.42	4.039	
2,263.8	2,248.2	2,258.6	2,241.0	5.8	6.0	42.54	184.3	-83.7	43.0	32.2	10.88	3.957	
2,300.0	2,283.6	2,294.9	2,276.4	6.0	6.2	43.39	191.0	-87.0	43.6	32.4	11.14	3.913	
2,362.2	2,344.5	2,357.0	2,337.2	6.2	6.4	44.81	202.6	-92.7	44.5	32.9	11.60	3.840	
2,400.0	2,381.4	2,394.8	2,374.2	6.4	6.6	45.64	209.7	-96.2	45.1	33.3	11.88	3.799	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-202 - ORIGINAL WELLBORE - PROPC												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,460.6	2,440.7	2,455.4	2,433.5	6.6	6.8	46.93	221.0	-101.8	46.1	33.8	12.34	3.736	
2,500.0	2,479.2	2,494.8	2,472.0	6.8	7.0	47.74	228.3	-105.4	46.8	34.1	12.65	3.697	
2,559.0	2,537.0	2,553.8	2,529.7	7.0	7.2	48.91	239.3	-110.8	47.7	34.6	13.11	3.641	
2,600.0	2,577.1	2,594.8	2,569.7	7.2	7.4	49.70	247.0	-114.6	48.4	35.0	13.44	3.605	
2,657.5	2,633.3	2,652.2	2,625.9	7.4	7.7	50.76	257.7	-119.9	49.4	35.5	13.90	3.556	
2,700.0	2,674.9	2,694.8	2,667.5	7.6	7.8	51.52	265.6	-123.8	50.2	35.9	14.24	3.522	
2,755.9	2,729.6	2,750.6	2,722.2	7.9	8.1	52.49	276.0	-128.9	51.1	36.4	14.70	3.479	
2,800.0	2,772.7	2,794.7	2,765.3	8.0	8.3	53.22	284.3	-133.0	51.9	36.9	15.06	3.448	
2,854.3	2,825.8	2,849.0	2,818.4	8.3	8.5	54.10	294.4	-138.0	52.9	37.4	15.52	3.410	
2,900.0	2,870.5	2,894.7	2,863.1	8.5	8.7	54.81	302.9	-142.2	53.8	37.9	15.90	3.381	
2,952.7	2,922.1	2,947.4	2,914.7	8.7	8.9	55.60	312.8	-147.0	54.7	38.4	16.35	3.348	
3,000.0	2,968.3	2,994.7	2,960.9	8.9	9.1	56.29	321.6	-151.4	55.6	38.9	16.75	3.321	
3,051.2	3,018.4	3,045.8	3,010.9	9.1	9.3	57.01	331.1	-156.1	56.6	39.4	17.19	3.292	
3,100.0	3,066.1	3,094.6	3,058.7	9.3	9.6	57.67	340.2	-160.6	57.5	39.9	17.61	3.267	
3,149.6	3,114.7	3,144.2	3,107.2	9.5	9.8	58.33	349.5	-165.1	58.5	40.4	18.03	3.242	
3,200.0	3,164.0	3,194.6	3,156.5	9.8	10.0	58.97	358.9	-169.8	59.4	41.0	18.47	3.218	
3,248.0	3,210.9	3,242.6	3,203.4	10.0	10.2	59.56	367.8	-174.2	60.4	41.5	18.89	3.196	
3,300.0	3,261.8	3,294.6	3,254.2	10.2	10.4	60.18	377.5	-179.0	61.4	42.0	19.34	3.174	
3,346.4	3,307.2	3,341.0	3,299.7	10.4	10.6	60.72	386.2	-183.3	62.3	42.6	19.75	3.154	
3,400.0	3,359.6	3,394.6	3,352.0	10.6	10.9	61.32	396.2	-188.2	63.4	43.1	20.22	3.134	
3,444.9	3,403.5	3,439.4	3,395.9	10.8	11.1	61.81	404.5	-192.3	64.3	43.6	20.62	3.117	
3,500.0	3,457.4	3,494.5	3,449.8	11.1	11.3	62.39	414.8	-197.4	65.4	44.3	21.11	3.097	
3,543.3	3,499.8	3,537.8	3,492.2	11.3	11.5	62.83	422.9	-201.4	66.2	44.8	21.49	3.083	
3,600.0	3,555.2	3,594.5	3,547.6	11.5	11.7	63.40	433.5	-206.6	67.4	45.4	21.99	3.064	
3,641.7	3,596.0	3,636.2	3,588.4	11.7	11.9	63.80	441.2	-210.4	68.2	45.9	22.37	3.051	
3,700.0	3,653.0	3,694.5	3,645.4	11.9	12.2	64.34	452.1	-215.8	69.4	46.6	22.88	3.034	
3,740.1	3,692.3	3,734.6	3,684.7	12.1	12.4	64.71	459.6	-219.5	70.3	47.0	23.24	3.023	
3,800.0	3,750.8	3,794.5	3,743.2	12.4	12.6	65.24	470.8	-225.0	71.5	47.7	23.78	3.007	
3,838.6	3,788.6	3,833.0	3,780.9	12.6	12.8	65.57	478.0	-228.5	72.3	48.2	24.13	2.997	
3,900.0	3,848.7	3,894.4	3,841.0	12.8	13.1	66.08	489.4	-234.2	73.6	48.9	24.68	2.982	
3,937.0	3,884.9	3,931.4	3,877.1	13.0	13.2	66.38	496.3	-237.6	74.3	49.3	25.01	2.973	
4,000.0	3,946.5	3,994.4	3,938.7	13.3	13.5	66.87	508.1	-243.4	75.7	50.1	25.58	2.959	
4,035.4	3,981.1	4,029.8	3,973.4	13.4	13.7	67.14	514.7	-246.6	76.4	50.5	25.89	2.951	
4,100.0	4,044.3	4,094.4	4,036.5	13.7	13.9	67.63	526.7	-252.6	77.8	51.3	26.48	2.938	
4,133.8	4,077.4	4,128.2	4,069.6	13.9	14.1	67.87	533.0	-255.7	78.5	51.7	26.78	2.931	
4,200.0	4,142.1	4,194.3	4,134.3	14.2	14.4	68.34	545.4	-261.8	79.9	52.5	27.38	2.918	
4,232.3	4,173.7	4,226.6	4,165.9	14.3	14.5	68.56	551.4	-264.7	80.6	52.9	27.67	2.912	
4,300.0	4,239.9	4,294.3	4,232.1	14.6	14.8	69.01	564.0	-271.0	82.0	53.7	28.28	2.900	
4,330.7	4,270.0	4,325.0	4,262.1	14.7	15.0	69.21	569.7	-273.8	82.7	54.1	28.56	2.895	
4,400.0	4,337.7	4,394.3	4,329.9	15.0	15.3	69.66	582.7	-280.1	84.2	55.0	29.19	2.884	
4,429.1	4,366.2	4,423.4	4,358.4	15.2	15.4	69.84	588.1	-282.8	84.8	55.3	29.45	2.879	
4,500.0	4,435.6	4,494.3	4,427.7	15.5	15.7	70.27	601.3	-289.3	86.3	56.2	30.09	2.869	
4,527.5	4,462.5	4,521.8	4,454.6	15.6	15.8	70.43	606.4	-291.9	86.9	56.6	30.34	2.865	
4,600.0	4,533.4	4,594.2	4,525.5	15.9	16.2	70.84	620.0	-298.5	88.5	57.5	31.00	2.854	
4,626.0	4,558.8	4,620.2	4,550.9	16.0	16.3	70.99	624.8	-300.9	89.0	57.8	31.23	2.851	
4,673.6	4,605.3	4,667.8	4,597.4	16.3	16.5	71.25	633.7	-305.3	90.1	58.4	31.66	2.845	
4,700.0	4,631.2	4,694.2	4,623.3	16.4	16.6	71.34	638.6	-307.7	90.7	58.8	31.88	2.844	
4,724.4	4,655.1	4,718.6	4,647.1	16.4	16.7	71.28	643.2	-310.0	91.3	59.3	32.06	2.849	
4,800.0	4,729.5	4,794.1	4,721.0	16.7	17.1	70.37	657.3	-316.9	93.7	61.2	32.51	2.884	
4,822.8	4,752.1	4,816.9	4,743.3	16.7	17.2	69.88	661.5	-319.0	94.6	62.0	32.61	2.901	
4,900.0	4,828.4	4,893.9	4,818.6	17.0	17.5	67.59	675.9	-326.1	98.1	65.2	32.86	2.985	
4,921.2	4,849.5	4,915.1	4,839.3	17.0	17.6	66.79	679.8	-328.1	99.2	66.3	32.90	3.016	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,993.4	4,915.9	17.2	17.9	63.35	694.4	-335.3	104.2	71.3	32.92	3.165	
5,019.7	4,947.4	5,013.0	4,935.1	17.2	18.0	62.39	698.1	-337.1	105.6	72.7	32.89	3.211	
5,100.0	5,027.5	5,092.6	5,012.9	17.4	18.4	58.14	712.9	-344.4	112.6	79.9	32.68	3.446	
5,118.1	5,045.6	5,110.5	5,030.4	17.4	18.5	57.13	716.3	-346.0	114.4	81.8	32.60	3.510	
5,200.0	5,127.4	5,191.2	5,109.3	17.6	18.8	52.47	731.3	-353.5	124.0	91.8	32.18	3.853	
5,216.5	5,143.9	5,207.4	5,125.2	17.6	18.9	51.52	734.3	-354.9	126.2	94.1	32.07	3.934	
5,273.4	5,200.8	5,263.2	5,179.8	17.7	19.1	15.60	744.7	-360.1	134.5	103.2	31.31	4.295	
5,300.0	5,227.4	5,289.2	5,205.2	17.7	19.3	14.09	749.6	-362.5	138.7	106.9	31.75	4.368	
5,314.9	5,242.3	5,303.8	5,219.5	17.7	19.3	13.28	752.3	-363.8	141.1	109.1	31.99	4.411	
5,400.0	5,327.4	5,388.7	5,302.6	17.8	19.7	9.13	767.9	-371.5	155.1	121.8	33.25	4.664	
5,413.4	5,340.8	5,402.4	5,316.1	17.9	19.7	8.56	770.3	-372.7	157.2	123.8	33.43	4.703	
5,500.0	5,427.4	5,492.0	5,404.3	18.0	20.0	5.52	784.3	-379.6	169.9	135.5	34.39	4.941	
5,511.8	5,439.2	5,504.3	5,416.4	18.0	20.1	5.18	786.1	-380.5	171.5	137.0	34.50	4.970	
5,600.0	5,527.4	5,596.6	5,507.8	18.1	20.3	3.06	797.6	-386.1	182.1	146.9	35.26	5.165	
5,610.2	5,537.6	5,607.3	5,518.5	18.1	20.3	2.86	798.8	-386.7	183.2	147.9	35.33	5.185	
5,700.0	5,627.4	5,702.1	5,612.7	18.3	20.5	1.43	807.5	-391.0	191.4	155.4	35.93	5.325	
5,708.6	5,636.0	5,711.2	5,621.8	18.3	20.6	1.32	808.2	-391.4	192.0	156.0	35.98	5.336	
5,800.0	5,727.4	5,808.3	5,718.6	18.4	20.7	0.45	814.0	-394.2	197.4	161.0	36.45	5.416	
5,807.1	5,734.5	5,815.8	5,726.2	18.4	20.8	0.41	814.3	-394.4	197.7	161.2	36.48	5.420	
5,900.0	5,827.4	5,914.8	5,825.2	18.6	20.9	0.03	817.0	-395.7	200.2	163.4	36.84	5.434	
5,905.5	5,832.9	5,920.7	5,831.0	18.6	20.9	0.02	817.0	-395.7	200.3	163.4	36.86	5.433	
6,000.0	5,927.4	6,017.1	5,927.4	18.7	21.0	0.00	817.2	-395.8	200.4	163.2	37.14	5.395	
6,003.9	5,931.3	6,021.0	5,931.3	18.7	21.0	0.00	817.2	-395.8	200.4	163.2	37.15	5.394	
6,100.0	6,027.4	6,117.1	6,027.4	18.9	21.2	0.00	817.2	-395.8	200.4	162.9	37.44	5.352	
6,102.3	6,029.7	6,119.4	6,029.7	18.9	21.2	0.00	817.2	-395.8	200.4	162.9	37.45	5.351	
6,200.0	6,127.4	6,217.1	6,127.4	19.0	21.3	0.00	817.2	-395.8	200.4	162.6	37.74	5.309	
6,200.8	6,128.2	6,217.9	6,128.2	19.0	21.3	0.00	817.2	-395.8	200.4	162.6	37.75	5.308	
6,236.9	6,164.3	6,254.0	6,164.3	19.1	21.3	0.08	817.2	-395.5	200.4	162.5	37.84	5.295	
6,299.2	6,226.6	6,315.9	6,226.0	19.2	21.4	1.35	817.2	-391.1	200.4	162.6	37.82	5.300	
6,301.4	6,228.8	6,318.1	6,228.2	19.2	21.4	1.43	817.2	-390.8	200.4	162.6	37.81	5.301	
6,350.0	6,277.4	6,365.8	6,275.4	19.3	21.4	-86.96	817.2	-383.6	200.7	167.5	33.15	6.054	
6,397.6	6,324.7	6,412.3	6,320.7	19.3	21.4	-85.40	817.2	-373.6	201.0	167.5	33.50	6.000	
6,400.0	6,327.1	6,414.6	6,323.0	19.3	21.4	-85.32	817.2	-373.0	201.1	167.5	33.52	5.998	
6,450.0	6,376.3	6,462.9	6,369.3	19.3	21.4	-83.72	817.2	-359.4	201.6	167.8	33.84	5.957	
6,496.0	6,421.1	6,507.2	6,410.9	19.3	21.4	-82.28	817.2	-344.1	202.2	168.2	34.09	5.933	
6,500.0	6,424.9	6,510.9	6,414.4	19.3	21.4	-82.16	817.2	-342.7	202.3	168.2	34.10	5.932	
6,550.0	6,472.4	6,558.6	6,457.9	19.3	21.4	-80.65	817.2	-323.3	203.1	168.8	34.30	5.921	
6,594.5	6,513.8	6,600.0	6,494.5	19.3	21.4	-79.38	817.2	-304.0	203.9	169.5	34.43	5.923	
6,600.0	6,518.8	6,606.0	6,499.7	19.3	21.4	-79.20	817.2	-301.1	204.0	169.6	34.44	5.924	
6,650.0	6,563.8	6,653.0	6,539.8	19.3	21.3	-77.82	817.2	-276.4	205.0	170.5	34.53	5.938	
6,692.9	6,601.1	6,693.2	6,572.6	19.2	21.3	-76.68	817.2	-253.3	206.0	171.4	34.57	5.959	
6,700.0	6,607.1	6,700.0	6,578.0	19.2	21.3	-76.50	817.2	-249.2	206.1	171.6	34.57	5.963	
6,750.0	6,648.6	6,746.3	6,613.9	19.2	21.2	-75.26	817.2	-219.9	207.2	172.7	34.58	5.994	
6,791.3	6,681.4	6,784.5	6,642.1	19.1	21.2	-74.30	817.2	-194.1	208.2	173.6	34.58	6.021	
6,800.0	6,688.1	6,792.5	6,647.8	19.1	21.2	-74.11	817.2	-188.5	208.4	173.8	34.58	6.027	
6,850.0	6,725.3	6,838.6	6,679.4	19.1	21.1	-73.03	817.2	-155.0	209.6	175.0	34.59	6.058	
6,889.7	6,753.2	6,875.0	6,702.9	19.0	21.1	-72.23	817.2	-127.2	210.5	175.8	34.63	6.077	
6,900.0	6,760.1	6,884.4	6,708.7	19.0	21.1	-72.04	817.2	-119.8	210.7	176.1	34.64	6.082	
6,950.0	6,792.3	6,930.0	6,735.6	19.0	21.0	-71.13	817.2	-83.0	211.8	177.1	34.76	6.094	
6,988.2	6,815.1	6,964.7	6,754.4	18.9	21.0	-70.50	817.2	-53.8	212.6	177.7	34.91	6.090	
7,000.0	6,821.8	6,975.4	6,760.0	18.9	21.0	-70.32	817.2	-44.7	212.9	177.9	34.97	6.088	
7,050.0	6,848.3	7,020.7	6,781.8	18.9	20.9	-69.59	817.2	-5.0	213.8	178.5	35.30	6.059	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,865.9	7,053.8	6,796.1	18.9	20.9	-69.11	817.2	24.8	214.5	178.9	35.63	6.021	
7,100.0	6,871.9	7,065.9	6,801.0	18.9	20.9	-68.95	817.2	35.8	214.7	179.0	35.77	6.004	
7,150.0	6,892.3	7,110.9	6,817.6	18.8	20.8	-68.40	817.2	77.7	215.5	179.1	36.40	5.922	
7,185.0	6,904.7	7,142.4	6,827.6	18.8	20.8	-68.07	817.2	107.5	216.0	179.1	36.95	5.846	
7,200.0	6,909.5	7,155.8	6,831.5	18.9	20.8	-67.95	817.2	120.4	216.2	179.0	37.20	5.812	
7,250.0	6,923.4	7,200.0	6,842.5	19.3	20.8	-67.58	817.2	163.2	216.8	178.6	38.18	5.677	
7,283.4	6,930.8	7,230.6	6,848.6	19.8	20.9	-67.39	817.2	193.2	217.1	178.1	38.97	5.570	
7,300.0	6,933.9	7,245.4	6,851.1	20.0	20.9	-67.30	817.2	207.8	217.2	177.8	39.36	5.519	
7,350.0	6,940.9	7,290.2	6,856.7	20.8	21.4	-67.12	817.2	252.2	217.5	176.8	40.69	5.345	
7,381.9	6,943.6	7,318.7	6,858.9	21.4	21.9	-67.05	817.2	280.6	217.6	176.0	41.63	5.227	
7,400.0	6,944.5	7,334.9	6,859.6	21.7	22.1	-67.03	817.2	296.8	217.6	175.5	42.18	5.160	
7,432.4	6,945.0	7,364.0	6,860.0	22.3	22.6	-67.01	817.2	325.9	217.7	174.4	43.22	5.036	
7,480.3	6,944.6	7,411.9	6,859.7	23.2	23.5	-67.05	817.2	373.8	217.6	172.7	44.86	4.850	
7,500.0	6,944.4	7,431.6	6,859.6	23.6	23.9	-67.06	817.2	393.5	217.6	172.0	45.56	4.776	
7,578.7	6,943.7	7,510.3	6,859.2	25.2	25.5	-67.11	817.2	472.2	217.5	169.0	48.46	4.489	
7,600.0	6,943.6	7,531.6	6,859.0	25.6	25.9	-67.13	817.2	493.5	217.5	168.2	49.27	4.414	
7,677.1	6,942.9	7,608.8	6,858.6	27.3	27.6	-67.18	817.2	570.7	217.4	165.1	52.31	4.156	
7,700.0	6,942.7	7,631.6	6,858.5	27.8	28.1	-67.20	817.2	593.5	217.4	164.1	53.24	4.083	
7,775.6	6,942.1	7,707.2	6,858.1	29.5	29.8	-67.25	817.2	669.1	217.3	160.9	56.37	3.854	
7,800.0	6,941.9	7,731.6	6,857.9	30.1	30.3	-67.26	817.2	693.5	217.3	159.9	57.41	3.785	
7,874.0	6,941.3	7,805.6	6,857.5	31.8	32.0	-67.31	817.2	767.5	217.2	156.6	60.60	3.584	
7,900.0	6,941.1	7,831.6	6,857.4	32.4	32.7	-67.33	817.2	793.5	217.2	155.4	61.74	3.517	
7,972.4	6,940.4	7,904.0	6,857.0	34.2	34.4	-67.38	817.2	865.9	217.1	152.1	64.97	3.341	
8,000.0	6,940.2	7,931.6	6,856.8	34.9	35.1	-67.40	817.2	893.5	217.0	150.8	66.21	3.278	
8,070.8	6,939.6	8,002.5	6,856.4	36.6	36.8	-67.45	817.2	964.4	217.0	147.5	69.45	3.124	
8,100.0	6,939.4	8,031.6	6,856.3	37.3	37.5	-67.47	817.2	993.5	216.9	146.2	70.79	3.065	
8,169.3	6,938.8	8,100.9	6,855.9	39.1	39.2	-67.52	817.2	1,062.8	216.9	142.8	74.02	2.930	
8,200.0	6,938.5	8,131.6	6,855.7	39.8	40.0	-67.54	817.2	1,093.5	216.8	141.4	75.46	2.873	
8,267.7	6,938.0	8,199.3	6,855.3	41.6	41.7	-67.58	817.2	1,161.2	216.8	138.1	78.67	2.755	
8,300.0	6,937.7	8,231.6	6,855.1	42.4	42.6	-67.60	817.2	1,193.5	216.7	136.5	80.21	2.702	
8,366.1	6,937.2	8,297.7	6,854.8	44.1	44.2	-67.65	817.2	1,259.6	216.7	133.3	83.38	2.598	
8,400.0	6,936.9	8,331.6	6,854.6	45.0	45.1	-67.67	817.2	1,293.5	216.6	131.6	85.02	2.548	
8,464.5	6,936.3	8,396.1	6,854.2	46.6	46.8	-67.72	817.2	1,358.0	216.6	128.4	88.15	2.457	
8,500.0	6,936.0	8,431.6	6,854.0	47.6	47.7	-67.74	817.2	1,393.5	216.5	126.6	89.88	2.409	
8,563.0	6,935.5	8,494.6	6,853.7	49.2	49.4	-67.78	817.2	1,456.5	216.4	123.5	92.97	2.328	
8,600.0	6,935.2	8,531.6	6,853.5	50.2	50.3	-67.81	817.2	1,493.5	216.4	121.6	94.80	2.283	
8,661.4	6,934.7	8,593.0	6,853.1	51.8	51.9	-67.85	817.2	1,554.9	216.3	118.5	97.84	2.211	
8,700.0	6,934.4	8,631.6	6,852.9	52.8	53.0	-67.88	817.2	1,593.5	216.3	116.6	99.75	2.168	
8,759.8	6,933.9	8,691.4	6,852.6	54.4	54.5	-67.92	817.2	1,653.3	216.2	113.5	102.73	2.105	
8,800.0	6,933.5	8,731.6	6,852.3	55.5	55.6	-67.95	817.2	1,693.5	216.2	111.5	104.74	2.064	
8,858.2	6,933.0	8,789.8	6,852.0	57.1	57.2	-67.99	817.2	1,751.7	216.1	108.5	107.66	2.008	
8,900.0	6,932.7	8,831.6	6,851.8	58.2	58.3	-68.01	817.2	1,793.5	216.1	106.3	109.76	1.969	
8,956.7	6,932.2	8,888.3	6,851.5	59.7	59.8	-68.05	817.2	1,850.2	216.0	103.4	112.62	1.918	
9,000.0	6,931.8	8,931.6	6,851.2	60.9	61.0	-68.08	817.2	1,893.5	216.0	101.2	114.81	1.881	
9,055.1	6,931.4	8,986.7	6,850.9	62.4	62.4	-68.12	817.2	1,948.6	215.9	98.3	117.60	1.836	
9,100.0	6,931.0	9,031.6	6,850.7	63.6	63.6	-68.15	817.2	1,993.5	215.9	96.0	119.88	1.801	
9,153.5	6,930.6	9,085.1	6,850.4	65.0	65.1	-68.19	817.2	2,047.0	215.8	93.2	122.61	1.760	
9,200.0	6,930.2	9,131.6	6,850.1	66.3	66.3	-68.22	817.2	2,093.5	215.8	90.8	124.98	1.727	
9,251.9	6,929.7	9,183.5	6,849.8	67.7	67.8	-68.26	817.2	2,145.4	215.7	88.1	127.64	1.690	
9,300.0	6,929.3	9,231.6	6,849.6	69.0	69.1	-68.29	817.2	2,193.5	215.7	85.6	130.10	1.658	
9,350.4	6,928.9	9,282.0	6,849.3	70.4	70.4	-68.32	817.2	2,243.9	215.6	82.9	132.68	1.625	
9,400.0	6,928.5	9,331.6	6,849.0	71.7	71.8	-68.36	817.2	2,293.5	215.6	80.3	135.23	1.594	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-202 - ORIGINAL WELLBORE - PROPC												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,380.4	6,848.7	73.0	73.1	-68.39	817.2	2,342.3	215.5	77.8	137.75	1.565	
9,500.0	6,927.7	9,431.6	6,848.4	74.4	74.5	-68.43	817.2	2,393.5	215.5	75.1	140.39	1.535	
9,547.2	6,927.3	9,478.8	6,848.2	75.7	75.8	-68.46	817.2	2,440.7	215.4	72.6	142.82	1.508	
9,600.0	6,926.8	9,531.6	6,847.9	77.2	77.2	-68.50	817.2	2,493.5	215.4	69.8	145.55	1.480 Level 3	
9,645.6	6,926.4	9,577.2	6,847.6	78.4	78.5	-68.53	817.2	2,539.1	215.3	67.4	147.92	1.456 Level 3	
9,700.0	6,926.0	9,631.6	6,847.3	79.9	80.0	-68.57	817.2	2,593.5	215.3	64.5	150.74	1.428 Level 3	
9,744.1	6,925.6	9,675.7	6,847.1	81.1	81.2	-68.60	817.2	2,637.5	215.2	62.2	153.03	1.406 Level 3	
9,800.0	6,925.2	9,731.6	6,846.8	82.6	82.7	-68.63	817.2	2,693.5	215.2	59.2	155.93	1.380 Level 3	
9,842.5	6,924.8	9,774.1	6,846.5	83.8	83.9	-68.66	817.2	2,736.0	215.1	57.0	158.15	1.360 Level 3	
9,900.0	6,924.3	9,831.6	6,846.2	85.4	85.4	-68.70	817.2	2,793.5	215.1	53.9	161.14	1.335 Level 3	
9,940.9	6,924.0	9,872.5	6,846.0	86.5	86.6	-68.73	817.2	2,834.4	215.0	51.7	163.28	1.317 Level 3	
10,000.0	6,923.5	9,931.6	6,845.7	88.1	88.2	-68.77	817.2	2,893.5	215.0	48.6	166.36	1.292 Level 3	
10,039.3	6,923.2	9,970.9	6,845.4	89.2	89.3	-68.80	817.2	2,932.8	214.9	46.5	168.42	1.276 Level 3	
10,100.0	6,922.6	10,031.6	6,845.1	90.9	90.9	-68.84	817.2	2,993.5	214.9	43.3	171.59	1.252 Level 3	
10,137.8	6,922.3	10,069.4	6,844.9	91.9	92.0	-68.87	817.2	3,031.2	214.8	41.3	173.57	1.238 Level 2	
10,200.0	6,921.8	10,131.6	6,844.5	93.7	93.7	-68.91	817.2	3,093.5	214.8	37.9	176.84	1.214 Level 2	
10,236.2	6,921.5	10,167.8	6,844.3	94.7	94.7	-68.94	817.2	3,129.7	214.7	36.0	178.74	1.201 Level 2	
10,300.0	6,921.0	10,231.6	6,844.0	96.4	96.4	-68.98	817.2	3,193.5	214.7	32.6	182.09	1.179 Level 2	
10,334.6	6,920.7	10,266.2	6,843.8	97.4	97.4	-69.00	817.2	3,228.1	214.6	30.7	183.91	1.167 Level 2	
10,400.0	6,920.1	10,331.6	6,843.4	99.2	99.2	-69.05	817.2	3,293.5	214.6	27.2	187.35	1.145 Level 2	
10,433.0	6,919.9	10,364.6	6,843.2	100.1	100.1	-69.07	817.2	3,326.5	214.5	25.4	189.09	1.135 Level 2	
10,500.0	6,919.3	10,431.6	6,842.9	101.9	102.0	-69.12	817.2	3,393.5	214.5	21.8	192.62	1.113 Level 2	
10,531.5	6,919.0	10,463.1	6,842.7	102.8	102.8	-69.14	817.2	3,424.9	214.4	20.1	194.28	1.104 Level 2	
10,600.0	6,918.5	10,531.6	6,842.3	104.7	104.7	-69.19	817.2	3,493.5	214.4	16.5	197.90	1.083 Level 2	
10,629.9	6,918.2	10,561.5	6,842.1	105.5	105.6	-69.21	817.2	3,523.4	214.3	14.9	199.48	1.074 Level 2	
10,700.0	6,917.6	10,631.6	6,841.8	107.5	107.5	-69.26	817.2	3,593.5	214.3	11.1	203.19	1.055 Level 2	
10,728.3	6,917.4	10,659.9	6,841.6	108.3	108.3	-69.28	817.2	3,621.8	214.2	9.5	204.69	1.047 Level 2	
10,800.0	6,916.8	10,731.6	6,841.2	110.3	110.3	-69.33	817.2	3,693.5	214.2	5.7	208.49	1.027 Level 2	
10,826.7	6,916.6	10,758.3	6,841.0	111.0	111.0	-69.35	817.2	3,720.2	214.1	4.2	209.91	1.020 Level 2	
10,900.0	6,916.0	10,831.6	6,840.6	113.0	113.0	-69.40	817.2	3,793.4	214.1	0.3	213.79	1.001 Level 2	
10,925.2	6,915.8	10,856.8	6,840.5	113.7	113.7	-69.42	817.2	3,818.6	214.0	-1.1	215.13	0.995 Level 1	
11,000.0	6,915.1	10,931.6	6,840.1	115.8	115.8	-69.47	817.2	3,893.4	214.0	-5.1	219.10	0.977 Level 1	
11,023.6	6,914.9	10,955.2	6,840.0	116.5	116.5	-69.48	817.2	3,917.0	213.9	-6.4	220.36	0.971 Level 1	
11,100.0	6,914.3	11,031.6	6,839.5	118.6	118.6	-69.54	817.2	3,993.4	213.9	-10.5	224.42	0.953 Level 1	
11,122.0	6,914.1	11,053.6	6,839.4	119.2	119.2	-69.55	817.2	4,015.5	213.9	-11.7	225.59	0.948 Level 1	
11,200.0	6,913.5	11,131.6	6,839.0	121.4	121.4	-69.61	817.2	4,093.4	213.8	-16.0	229.75	0.930 Level 1	
11,220.4	6,913.3	11,152.0	6,838.9	121.9	121.9	-69.62	817.2	4,113.9	213.8	-17.1	230.84	0.926 Level 1	
11,300.0	6,912.6	11,231.6	6,838.4	124.1	124.1	-69.68	817.2	4,193.4	213.7	-21.4	235.08	0.909 Level 1	
11,318.9	6,912.5	11,250.5	6,838.3	124.7	124.7	-69.69	817.2	4,212.3	213.7	-22.4	236.09	0.905 Level 1	
11,400.0	6,911.8	11,331.6	6,837.9	126.9	126.9	-69.75	817.2	4,293.4	213.6	-26.8	240.42	0.888 Level 1	
11,417.3	6,911.6	11,348.9	6,837.8	127.4	127.4	-69.76	817.2	4,310.7	213.6	-27.8	241.34	0.885 Level 1	
11,500.0	6,911.0	11,431.6	6,837.3	129.7	129.7	-69.82	817.2	4,393.4	213.5	-32.3	245.77	0.869 Level 1	
11,515.7	6,910.8	11,447.3	6,837.2	130.2	130.1	-69.83	817.2	4,409.2	213.5	-33.1	246.61	0.866 Level 1	
11,600.0	6,910.1	11,531.6	6,836.7	132.5	132.5	-69.89	817.2	4,493.4	213.4	-37.7	251.12	0.850 Level 1	
11,614.1	6,910.0	11,545.7	6,836.7	132.9	132.9	-69.90	817.2	4,507.6	213.4	-38.5	251.87	0.847 Level 1	
11,700.0	6,909.3	11,631.6	6,836.2	135.3	135.3	-69.96	817.2	4,593.4	213.3	-43.2	256.47	0.832 Level 1	
11,712.6	6,909.2	11,644.2	6,836.1	135.6	135.6	-69.97	817.2	4,606.0	213.3	-43.9	257.15	0.829 Level 1	
11,800.0	6,908.5	11,731.6	6,835.6	138.1	138.1	-70.03	817.2	4,693.4	213.2	-48.6	261.84	0.814 Level 1	
11,811.0	6,908.4	11,742.6	6,835.6	138.4	138.4	-70.04	817.2	4,704.4	213.2	-49.2	262.43	0.812 Level 1	
11,900.0	6,907.6	11,831.6	6,835.1	140.9	140.8	-70.10	817.2	4,793.4	213.1	-54.1	267.21	0.798 Level 1	
11,909.4	6,907.5	11,841.0	6,835.0	141.1	141.1	-70.11	817.2	4,802.9	213.1	-54.6	267.72	0.796 Level 1	
12,000.0	6,906.8	11,931.6	6,834.5	143.6	143.6	-70.17	817.2	4,893.4	213.0	-59.6	272.58	0.781 Level 1	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	11,939.4	6,834.5	143.9	143.8	-70.17	817.2	4,901.3	213.0	-60.0	273.01	0.780	Level 1
12,100.0	6,905.9	12,031.6	6,834.0	146.4	146.4	-70.24	817.2	4,993.4	212.9	-65.1	277.97	0.766	Level 1
12,106.3	6,905.9	12,037.9	6,833.9	146.6	146.6	-70.24	817.2	4,999.7	212.9	-65.4	278.30	0.765	Level 1
12,200.0	6,905.1	12,131.6	6,833.4	149.2	149.2	-70.31	817.2	5,093.4	212.8	-70.5	283.35	0.751	Level 1
12,204.7	6,905.1	12,136.3	6,833.4	149.4	149.3	-70.31	817.2	5,098.1	212.8	-70.8	283.61	0.750	Level 1
12,300.0	6,904.3	12,231.6	6,832.9	152.0	152.0	-70.38	817.2	5,193.4	212.7	-76.0	288.74	0.737	Level 1
12,303.1	6,904.3	12,234.7	6,832.8	152.1	152.1	-70.38	817.2	5,196.5	212.7	-76.2	288.91	0.736	Level 1
12,400.0	6,903.4	12,331.6	6,832.3	154.8	154.8	-70.45	817.2	5,293.4	212.6	-81.5	294.14	0.723	Level 1
12,401.5	6,903.4	12,333.1	6,832.3	154.8	154.8	-70.45	817.2	5,295.0	212.6	-81.6	294.23	0.723	Level 1
12,500.0	6,902.6	12,431.6	6,831.7	157.6	157.6	-70.52	817.2	5,393.4	212.5	-87.0	299.54	0.710	Level 1
12,598.4	6,901.8	12,530.0	6,831.2	160.3	160.3	-70.59	817.2	5,491.8	212.4	-92.4	304.87	0.697	Level 1
12,600.0	6,901.8	12,531.6	6,831.2	160.4	160.4	-70.59	817.2	5,493.4	212.4	-92.5	304.95	0.697	Level 1
12,696.8	6,901.0	12,628.4	6,830.6	163.1	163.1	-70.66	817.2	5,590.2	212.4	-97.8	310.19	0.685	Level 1
12,700.0	6,900.9	12,631.6	6,830.6	163.2	163.2	-70.66	817.2	5,593.4	212.4	-98.0	310.37	0.684	Level 1
12,795.2	6,900.1	12,726.8	6,830.1	165.8	165.8	-70.73	817.2	5,688.7	212.3	-103.3	315.53	0.673	Level 1
12,800.0	6,900.1	12,731.6	6,830.1	166.0	165.9	-70.73	817.2	5,693.4	212.3	-103.5	315.78	0.672	Level 1
12,893.7	6,899.3	12,825.3	6,829.6	168.6	168.6	-70.80	817.2	5,787.1	212.2	-108.7	320.86	0.661	Level 1
12,900.0	6,899.3	12,831.6	6,829.5	168.8	168.7	-70.80	817.2	5,793.4	212.2	-109.0	321.21	0.661	Level 1
12,992.1	6,898.5	12,923.7	6,829.0	171.3	171.3	-70.87	817.2	5,885.5	212.1	-114.1	326.20	0.650	Level 1
13,000.0	6,898.4	12,931.6	6,829.0	171.6	171.5	-70.88	817.2	5,893.4	212.1	-114.6	326.63	0.649	Level 1
13,090.5	6,897.7	13,022.1	6,828.5	174.1	174.1	-70.94	817.2	5,983.9	212.0	-119.6	331.55	0.639	Level 1
13,100.0	6,897.6	13,031.6	6,828.4	174.4	174.3	-70.95	817.2	5,993.4	212.0	-120.1	332.07	0.638	Level 1
13,188.9	6,896.9	13,120.5	6,827.9	176.8	176.8	-71.01	817.2	6,082.4	211.9	-125.0	336.90	0.629	Level 1
13,200.0	6,896.8	13,131.6	6,827.8	177.2	177.1	-71.02	817.2	6,093.4	211.9	-125.6	337.50	0.628	Level 1
13,287.4	6,896.0	13,219.0	6,827.4	179.6	179.6	-71.08	817.2	6,180.8	211.8	-130.4	342.26	0.619	Level 1
13,300.0	6,895.9	13,231.6	6,827.3	180.0	179.9	-71.09	817.2	6,193.4	211.8	-131.1	342.95	0.618	Level 1
13,385.8	6,895.2	13,317.4	6,826.8	182.4	182.3	-71.15	817.2	6,279.2	211.7	-135.9	347.62	0.609	Level 1
13,400.0	6,895.1	13,331.6	6,826.7	182.7	182.7	-71.16	817.2	6,293.4	211.7	-136.7	348.39	0.608	Level 1
13,484.2	6,894.4	13,415.8	6,826.3	185.1	185.1	-71.22	817.2	6,377.6	211.6	-141.3	352.98	0.600	Level 1
13,500.0	6,894.3	13,431.6	6,826.2	185.5	185.5	-71.23	817.2	6,393.4	211.6	-142.2	353.84	0.598	Level 1
13,582.6	6,893.6	13,514.2	6,825.7	187.9	187.8	-71.29	817.2	6,476.0	211.6	-146.8	358.35	0.590	Level 1
13,600.0	6,893.4	13,531.6	6,825.6	188.3	188.3	-71.30	817.2	6,493.4	211.5	-147.8	359.30	0.589	Level 1
13,681.1	6,892.8	13,612.7	6,825.2	190.6	190.6	-71.36	817.2	6,574.5	211.5	-152.3	363.72	0.581	Level 1
13,700.0	6,892.6	13,631.6	6,825.1	191.1	191.1	-71.37	817.2	6,593.4	211.4	-153.3	364.76	0.580	Level 1
13,779.5	6,891.9	13,711.1	6,824.6	193.4	193.3	-71.43	817.2	6,672.9	211.4	-157.7	369.10	0.573	Level 1
13,800.0	6,891.8	13,731.6	6,824.5	193.9	193.9	-71.45	817.2	6,693.4	211.4	-158.9	370.22	0.571	Level 1
13,877.9	6,891.1	13,809.5	6,824.1	196.1	196.1	-71.50	817.2	6,771.3	211.3	-163.2	374.48	0.564	Level 1
13,900.0	6,890.9	13,831.6	6,824.0	196.7	196.7	-71.52	817.2	6,793.4	211.3	-164.4	375.69	0.562	Level 1
13,976.3	6,890.3	13,907.9	6,823.5	198.9	198.8	-71.57	817.2	6,869.7	211.2	-168.7	379.87	0.556	Level 1
14,000.0	6,890.1	13,931.6	6,823.4	199.5	199.5	-71.59	817.2	6,893.4	211.2	-170.0	381.16	0.554	Level 1
14,074.8	6,889.5	14,006.4	6,823.0	201.6	201.6	-71.64	817.2	6,968.2	211.1	-174.1	385.26	0.548	Level 1
14,100.0	6,889.3	14,031.6	6,822.8	202.3	202.3	-71.66	817.2	6,993.4	211.1	-175.5	386.64	0.546	Level 1
14,173.2	6,888.7	14,104.8	6,822.4	204.4	204.3	-71.71	817.2	7,066.6	211.0	-179.6	390.65	0.540	Level 1
14,200.0	6,888.4	14,131.6	6,822.3	205.1	205.1	-71.73	817.2	7,093.4	211.0	-181.1	392.12	0.538	Level 1
14,271.6	6,887.8	14,203.2	6,821.9	207.1	207.1	-71.78	817.2	7,165.0	210.9	-185.1	396.05	0.533	Level 1
14,300.0	6,887.6	14,231.6	6,821.7	207.9	207.9	-71.80	817.2	7,193.4	210.9	-186.7	397.61	0.530	Level 1
14,370.0	6,887.0	14,301.6	6,821.4	209.9	209.8	-71.85	817.2	7,263.4	210.9	-190.6	401.45	0.525	Level 1
14,400.0	6,886.8	14,331.6	6,821.2	210.7	210.7	-71.87	817.2	7,293.4	210.8	-192.3	403.10	0.523	Level 1
14,468.5	6,886.2	14,400.1	6,820.8	212.6	212.6	-71.92	817.2	7,361.9	210.8	-196.1	406.86	0.518	Level 1
14,500.0	6,885.9	14,431.6	6,820.6	213.5	213.5	-71.95	817.2	7,393.4	210.7	-197.8	408.59	0.516	Level 1
14,566.9	6,885.4	14,498.5	6,820.3	215.4	215.4	-71.99	817.2	7,460.3	210.7	-201.6	412.27	0.511	Level 1
14,600.0	6,885.1	14,531.6	6,820.1	216.3	216.3	-72.02	817.2	7,493.4	210.7	-203.4	414.09	0.509	Level 1

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-202 - ORIGINAL WELLBORE - PROP												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	14,544.6	6,820.0	216.7	216.7	-72.03	817.2	7,506.4	210.6	-204.2	414.80	0.508	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+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	-180.00	-14.6	0.0	14.6				
98.4	98.4	98.4	98.4	0.1	0.1	-180.00	-14.6	0.0	14.6	14.4	0.17	85.752	
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-14.6	0.0	14.6	14.4	0.17	84.199	
196.8	196.8	196.8	196.8	0.3	0.3	-180.00	-14.6	0.0	14.6	14.0	0.61	23.950	
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-14.6	0.0	14.6	13.9	0.62	23.406	
295.3	295.3	295.3	295.3	0.5	0.5	-180.00	-14.6	0.0	14.6	13.5	1.05	13.867	
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-14.6	0.0	14.6	13.5	1.07	13.592	
393.7	393.7	393.7	393.7	0.7	0.7	-180.00	-14.6	0.0	14.6	13.1	1.49	9.758	
400.0	400.0	400.0	400.0	0.8	0.8	-180.00	-14.6	0.0	14.6	13.1	1.52	9.577	
492.1	492.1	492.1	492.1	1.0	1.0	-180.00	-14.6	0.0	14.6	12.6	1.94	7.528	
500.0	500.0	500.0	500.0	1.0	1.0	-180.00	-14.6	0.0	14.6	12.6	1.97	7.393	
590.5	590.5	590.5	590.5	1.2	1.2	-180.00	-14.6	0.0	14.6	12.2	2.38	6.127	
600.0	600.0	600.0	600.0	1.2	1.2	-180.00	-14.6	0.0	14.6	12.2	2.42	6.020	
689.0	689.0	689.0	689.0	1.4	1.4	-180.00	-14.6	0.0	14.6	11.8	2.82	5.166	
700.0	700.0	700.0	700.0	1.4	1.4	-180.00	-14.6	0.0	14.6	11.7	2.87	5.077	
787.4	787.4	787.4	787.4	1.6	1.6	-180.00	-14.6	0.0	14.6	11.3	3.26	4.466	
800.0	800.0	800.0	800.0	1.7	1.7	-180.00	-14.6	0.0	14.6	11.3	3.32	4.390	
885.8	885.8	885.8	885.8	1.9	1.9	-180.00	-14.6	0.0	14.6	10.9	3.71	3.933	
900.0	900.0	900.0	900.0	1.9	1.9	-180.00	-14.6	0.0	14.6	10.8	3.77	3.866	
984.2	984.2	984.2	984.2	2.1	2.1	-180.00	-14.6	0.0	14.6	10.4	4.15	3.513	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-180.00	-14.6	0.0	14.6	10.4	4.22	3.454	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	-180.00	-14.6	0.0	14.6	10.0	4.59	3.174	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-180.00	-14.6	0.0	14.6	9.9	4.67	3.121	
1,150.0	1,150.0	1,150.0	1,150.0	2.4	2.4	-180.00	-14.6	0.0	14.6	9.7	4.89	2.978 CC	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	-147.67	-14.6	0.0	14.7	9.7	5.03	2.924	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-148.21	-14.6	0.0	14.9	9.8	5.12	2.920	
1,279.5	1,279.5	1,279.6	1,279.6	2.7	2.7	-152.29	-14.5	-0.1	17.0	11.5	5.47	3.106	
1,300.0	1,299.9	1,300.2	1,300.2	2.8	2.8	-153.23	-14.2	-0.3	17.6	12.1	5.56	3.175	
1,377.9	1,377.7	1,378.5	1,378.5	3.0	3.0	-155.69	-12.4	-1.9	20.3	14.4	5.90	3.441	
1,400.0	1,399.7	1,400.7	1,400.6	3.0	3.0	-156.11	-11.6	-2.7	21.1	15.1	5.99	3.518	
1,476.4	1,475.7	1,477.5	1,477.3	3.2	3.2	-156.88	-7.9	-6.1	23.9	17.6	6.33	3.778	
1,500.0	1,499.1	1,501.3	1,501.0	3.2	3.2	-156.94	-6.4	-7.4	24.8	18.4	6.43	3.859	
1,574.8	1,573.2	1,576.6	1,575.9	3.4	3.4	-156.69	-0.8	-12.5	27.8	21.0	6.76	4.107	
1,600.0	1,598.2	1,602.0	1,601.1	3.5	3.5	-156.48	1.4	-14.5	28.8	21.9	6.87	4.190	
1,673.2	1,670.3	1,675.8	1,674.2	3.7	3.7	-155.60	8.8	-21.3	31.9	24.7	7.21	4.423	
1,700.0	1,696.6	1,702.8	1,700.9	3.8	3.7	-155.20	11.8	-24.0	33.0	25.7	7.33	4.507	
1,749.9	1,745.5	1,753.1	1,750.5	3.9	3.9	-154.36	18.0	-29.7	35.3	27.7	7.57	4.658	
1,771.6	1,766.8	1,775.1	1,772.2	4.0	3.9	-153.91	20.9	-32.3	36.2	28.5	7.68	4.708	
1,800.0	1,794.5	1,803.7	1,800.3	4.1	4.0	-153.13	24.9	-35.9	37.2	29.3	7.83	4.745	
1,870.1	1,863.1	1,874.2	1,869.3	4.3	4.2	-150.36	35.4	-45.5	38.8	30.6	8.24	4.711	
1,900.0	1,892.3	1,904.2	1,898.6	4.4	4.3	-149.10	40.0	-49.7	39.4	31.0	8.41	4.683	
1,968.5	1,959.4	1,972.6	1,965.6	4.7	4.6	-146.37	50.6	-59.3	40.8	32.0	8.84	4.620	
2,000.0	1,990.2	2,004.1	1,996.3	4.8	4.7	-145.18	55.4	-63.7	41.5	32.5	9.04	4.594	
2,066.9	2,055.6	2,071.0	2,061.8	5.1	4.9	-142.78	65.7	-73.1	43.0	33.6	9.48	4.540	
2,100.0	2,088.0	2,104.0	2,094.1	5.2	5.0	-141.65	70.8	-77.7	43.8	34.1	9.71	4.514	
2,165.3	2,151.9	2,169.3	2,158.0	5.4	5.3	-139.55	80.8	-86.9	45.4	35.2	10.17	4.466	
2,200.0	2,185.8	2,204.0	2,191.9	5.6	5.4	-138.49	86.1	-91.7	46.3	35.9	10.41	4.443	
2,263.8	2,248.2	2,267.7	2,254.2	5.8	5.7	-136.64	95.9	-100.6	47.9	37.0	10.88	4.401	
2,300.0	2,283.6	2,303.9	2,289.6	6.0	5.8	-135.65	101.5	-105.7	48.8	37.7	11.15	4.379	
2,362.2	2,344.5	2,366.1	2,350.4	6.2	6.0	-134.03	111.1	-114.4	50.5	38.9	11.63	4.342	
2,400.0	2,381.4	2,403.8	2,387.4	6.4	6.2	-133.10	116.9	-119.7	51.5	39.6	11.92	4.321	
2,460.6	2,440.7	2,464.4	2,446.6	6.6	6.4	-131.68	126.2	-128.2	53.2	40.8	12.40	4.289	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,503.8	2,485.1	6.8	6.6	-130.81	132.2	-133.7	54.3	41.6	12.72	4.270	
2,559.0	2,537.0	2,562.8	2,542.8	7.0	6.8	-129.56	141.3	-141.9	56.0	42.8	13.19	4.243	
2,600.0	2,577.1	2,603.7	2,582.9	7.2	7.0	-128.74	147.6	-147.7	57.2	43.6	13.53	4.225	
2,657.5	2,633.3	2,661.2	2,639.1	7.4	7.2	-127.64	156.4	-155.7	58.8	44.8	14.00	4.201	
2,700.0	2,674.9	2,703.7	2,680.6	7.6	7.4	-126.87	163.0	-161.7	60.1	45.7	14.35	4.185	
2,755.9	2,729.6	2,759.5	2,735.3	7.9	7.7	-125.91	171.6	-169.5	61.7	46.9	14.82	4.165	
2,800.0	2,772.7	2,803.6	2,778.4	8.0	7.8	-125.18	178.3	-175.6	63.1	47.9	15.19	4.150	
2,854.3	2,825.8	2,857.9	2,831.5	8.3	8.1	-124.32	186.7	-183.2	64.7	49.0	15.66	4.132	
2,900.0	2,870.5	2,903.5	2,876.1	8.5	8.3	-123.64	193.7	-189.6	66.1	50.0	16.05	4.118	
2,952.7	2,922.1	2,956.3	2,927.7	8.7	8.5	-122.88	201.8	-197.0	67.7	51.2	16.50	4.103	
3,000.0	2,968.3	3,003.5	2,973.9	8.9	8.7	-122.24	209.1	-203.6	69.2	52.2	16.91	4.091	
3,051.2	3,018.4	3,054.6	3,023.9	9.1	8.9	-121.56	216.9	-210.8	70.7	53.4	17.35	4.078	
3,100.0	3,066.1	3,103.4	3,071.6	9.3	9.1	-120.95	224.4	-217.6	72.3	54.5	17.77	4.066	
3,149.6	3,114.7	3,153.0	3,120.1	9.5	9.3	-120.36	232.1	-224.6	73.8	55.6	18.20	4.055	
3,200.0	3,164.0	3,203.4	3,169.4	9.8	9.5	-119.77	239.8	-231.6	75.4	56.8	18.64	4.044	
3,248.0	3,210.9	3,251.4	3,216.3	10.0	9.8	-119.24	247.2	-238.3	76.9	57.9	19.07	4.035	
3,300.0	3,261.8	3,303.3	3,267.2	10.2	10.0	-118.69	255.2	-245.6	78.6	59.1	19.52	4.025	
3,346.4	3,307.2	3,349.7	3,312.6	10.4	10.2	-118.22	262.3	-252.1	80.1	60.1	19.93	4.017	
3,400.0	3,359.6	3,403.2	3,364.9	10.6	10.4	-117.69	270.5	-259.6	81.8	61.4	20.40	4.008	
3,444.9	3,403.5	3,448.1	3,408.8	10.8	10.6	-117.27	277.4	-265.9	83.2	62.4	20.80	4.001	
3,500.0	3,457.4	3,503.2	3,462.7	11.1	10.8	-116.77	285.9	-273.6	85.0	63.7	21.29	3.993	
3,543.3	3,499.8	3,546.5	3,505.0	11.3	11.0	-116.39	292.5	-279.6	86.4	64.7	21.67	3.987	
3,600.0	3,555.2	3,603.1	3,560.4	11.5	11.3	-115.92	301.3	-287.6	88.2	66.1	22.18	3.979	
3,641.7	3,596.0	3,644.8	3,601.2	11.7	11.5	-115.58	307.7	-293.4	89.6	67.0	22.55	3.974	
3,700.0	3,653.0	3,703.1	3,658.2	11.9	11.7	-115.12	316.6	-301.6	91.5	68.4	23.06	3.967	
3,740.1	3,692.3	3,743.2	3,697.4	12.1	11.9	-114.82	322.8	-307.2	92.8	69.4	23.42	3.962	
3,800.0	3,750.8	3,803.0	3,755.9	12.4	12.2	-114.38	332.0	-315.5	94.8	70.8	23.96	3.956	
3,838.6	3,788.6	3,841.5	3,793.6	12.6	12.3	-114.11	337.9	-320.9	96.0	71.7	24.30	3.952	
3,900.0	3,848.7	3,902.9	3,853.7	12.8	12.6	-113.69	347.4	-329.5	98.1	73.2	24.85	3.946	
3,937.0	3,884.9	3,939.9	3,889.9	13.0	12.8	-113.45	353.0	-334.7	99.3	74.1	25.18	3.943	
4,000.0	3,946.5	4,002.9	3,951.4	13.3	13.0	-113.05	362.7	-343.5	101.4	75.6	25.75	3.937	
4,035.4	3,981.1	4,038.3	3,986.1	13.4	13.2	-112.83	368.2	-348.5	102.5	76.5	26.06	3.934	
4,100.0	4,044.3	4,102.6	4,049.0	13.7	13.5	-112.51	378.0	-357.4	104.7	78.1	26.62	3.934	
4,133.8	4,077.4	4,136.1	4,081.9	13.9	13.6	-112.59	382.7	-361.8	106.0	79.1	26.86	3.945	
4,200.0	4,142.1	4,201.6	4,146.4	14.2	13.8	-113.32	391.3	-369.5	108.7	81.4	27.30	3.981	
4,232.3	4,173.7	4,233.6	4,177.9	14.3	13.9	-113.94	395.0	-372.9	110.1	82.6	27.48	4.008	
4,300.0	4,239.9	4,300.0	4,243.7	14.6	14.1	-115.72	402.0	-379.3	113.5	85.7	27.81	4.083	
4,330.7	4,270.0	4,330.6	4,274.1	14.7	14.1	-116.76	404.8	-381.9	115.3	87.4	27.92	4.128	
4,400.0	4,337.7	4,398.7	4,341.7	15.0	14.3	-119.47	410.3	-386.8	119.7	91.6	28.13	4.257	
4,429.1	4,366.2	4,427.2	4,370.1	15.2	14.4	-120.76	412.2	-388.6	121.9	93.7	28.18	4.325	
4,500.0	4,435.6	4,496.2	4,438.9	15.5	14.5	-124.18	416.0	-392.0	127.8	99.6	28.23	4.527	
4,527.5	4,462.5	4,522.9	4,465.6	15.6	14.6	-125.60	417.1	-393.1	130.4	102.2	28.22	4.622	
4,600.0	4,533.4	4,592.8	4,535.4	15.9	14.7	-129.47	419.3	-395.0	138.3	110.2	28.14	4.917	
4,626.0	4,558.8	4,617.7	4,560.3	16.0	14.7	-130.89	419.7	-395.4	141.5	113.4	28.08	5.040	
4,673.6	4,605.3	4,663.1	4,605.7	16.3	14.8	-133.50	420.1	-395.8	147.9	120.0	27.96	5.291	
4,700.0	4,631.2	4,688.6	4,631.2	16.4	14.8	-134.99	420.1	-395.8	151.7	123.8	27.87	5.443	
4,724.4	4,655.1	4,712.5	4,655.1	16.4	14.8	-136.26	420.1	-395.8	155.1	127.4	27.79	5.583	
4,800.0	4,729.5	4,786.9	4,729.5	16.7	15.0	-139.59	420.1	-395.8	165.2	137.6	27.62	5.981	
4,822.8	4,752.1	4,809.5	4,752.1	16.7	15.0	-140.44	420.1	-395.8	168.0	140.4	27.58	6.092	
4,900.0	4,828.4	4,885.8	4,828.4	17.0	15.1	-142.82	420.1	-395.8	176.7	149.2	27.52	6.422	
4,921.2	4,849.5	4,906.9	4,849.5	17.0	15.1	-143.36	420.1	-395.8	178.9	151.3	27.51	6.501	
5,000.0	4,927.8	4,985.2	4,927.8	17.2	15.3	-145.02	420.1	-395.8	185.8	158.3	27.54	6.748	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	5,004.8	4,947.4	17.2	15.3	-145.35	420.1	-395.8	187.3	159.8	27.56	6.798	
5,100.0	5,027.5	5,084.9	5,027.5	17.4	15.4	-146.42	420.1	-395.8	192.3	164.6	27.66	6.953	
5,118.1	5,045.6	5,103.0	5,045.6	17.4	15.4	-146.60	420.1	-395.8	193.1	165.5	27.68	6.977	
5,200.0	5,127.4	5,184.8	5,127.4	17.6	15.6	-147.15	420.1	-395.8	195.9	168.0	27.84	7.036	
5,216.5	5,143.9	5,201.3	5,143.9	17.6	15.6	-147.22	420.1	-395.8	196.2	168.3	27.88	7.038	
5,273.4	5,200.8	5,258.2	5,200.8	17.7	15.7	180.00	420.1	-395.8	196.7	166.5	30.19	6.514	
5,300.0	5,227.4	5,284.8	5,227.4	17.7	15.7	180.00	420.1	-395.8	196.7	166.4	30.28	6.496	
5,314.9	5,242.3	5,299.7	5,242.3	17.7	15.8	180.00	420.1	-395.8	196.7	166.3	30.32	6.486	
5,400.0	5,327.4	5,384.8	5,327.4	17.8	15.9	180.00	420.1	-395.8	196.7	166.1	30.60	6.427	
5,413.4	5,340.8	5,398.2	5,340.8	17.9	15.9	180.00	420.1	-395.8	196.7	166.0	30.65	6.418	
5,500.0	5,427.4	5,484.8	5,427.4	18.0	16.0	180.00	420.1	-395.8	196.7	165.7	30.93	6.359	
5,511.8	5,439.2	5,496.6	5,439.2	18.0	16.1	180.00	420.1	-395.8	196.7	165.7	30.97	6.351	
5,600.0	5,527.4	5,584.8	5,527.4	18.1	16.2	180.00	420.1	-395.8	196.7	165.4	31.26	6.291	
5,610.2	5,537.6	5,595.0	5,537.6	18.1	16.2	180.00	420.1	-395.8	196.7	165.4	31.30	6.284	
5,700.0	5,627.4	5,684.8	5,627.4	18.3	16.4	180.00	420.1	-395.8	196.7	165.1	31.60	6.225	
5,708.6	5,636.0	5,693.4	5,636.0	18.3	16.4	180.00	420.1	-395.8	196.7	165.0	31.63	6.219	
5,800.0	5,727.4	5,784.8	5,727.4	18.4	16.5	180.00	420.1	-395.8	196.7	164.7	31.93	6.159	
5,807.1	5,734.5	5,791.9	5,734.5	18.4	16.6	180.00	420.1	-395.8	196.7	164.7	31.96	6.154	
5,900.0	5,827.4	5,884.8	5,827.4	18.6	16.7	180.00	420.1	-395.8	196.7	164.4	32.27	6.094	
5,905.5	5,832.9	5,890.3	5,832.9	18.6	16.7	180.00	420.1	-395.8	196.7	164.4	32.29	6.090	
6,000.0	5,927.4	5,984.8	5,927.4	18.7	16.9	180.00	420.1	-395.8	196.7	164.1	32.62	6.030	
6,003.9	5,931.3	5,988.7	5,931.3	18.7	16.9	180.00	420.1	-395.8	196.7	164.0	32.63	6.027	
6,100.0	6,027.4	6,084.8	6,027.4	18.9	17.0	180.00	420.1	-395.8	196.7	163.7	32.96	5.967	
6,102.3	6,029.7	6,087.1	6,029.7	18.9	17.0	180.00	420.1	-395.8	196.7	163.7	32.97	5.965	
6,200.0	6,127.4	6,184.8	6,127.4	19.0	17.2	180.00	420.1	-395.8	196.7	163.4	33.31	5.905	
6,200.8	6,128.2	6,185.6	6,128.2	19.0	17.2	180.00	420.1	-395.8	196.7	163.4	33.31	5.904	
6,259.8	6,187.2	6,244.6	6,187.2	19.1	17.3	180.00	420.1	-395.8	196.7	163.2	33.52	5.868	
6,299.2	6,226.6	6,284.0	6,226.6	19.2	17.4	179.78	420.1	-395.1	196.7	163.0	33.68	5.840	
6,301.4	6,228.8	6,286.2	6,228.8	19.2	17.4	179.75	420.1	-394.9	196.7	163.0	33.69	5.838	
6,350.0	6,277.4	6,334.6	6,277.0	19.3	17.4	89.06	420.1	-391.0	196.7	164.9	31.79	6.188	
6,397.6	6,324.7	6,381.8	6,323.7	19.3	17.5	88.39	420.1	-383.9	196.7	165.0	31.78	6.191	
6,400.0	6,327.1	6,384.2	6,326.0	19.3	17.5	88.36	420.1	-383.5	196.8	165.0	31.78	6.192	
6,450.0	6,376.3	6,433.7	6,374.3	19.3	17.5	87.67	420.1	-372.7	196.8	165.1	31.73	6.203	
6,496.0	6,421.1	6,479.1	6,417.9	19.3	17.5	87.04	420.1	-359.8	196.9	165.3	31.67	6.218	
6,500.0	6,424.9	6,483.0	6,421.6	19.3	17.5	86.99	420.1	-358.6	196.9	165.3	31.67	6.220	
6,550.0	6,472.4	6,532.1	6,467.6	19.3	17.5	86.32	420.1	-341.4	197.1	165.5	31.58	6.240	
6,594.5	6,513.8	6,575.7	6,507.4	19.3	17.4	85.75	420.1	-323.5	197.2	165.7	31.51	6.259	
6,600.0	6,518.8	6,581.1	6,512.2	19.3	17.4	85.68	420.1	-321.1	197.2	165.7	31.50	6.261	
6,650.0	6,563.8	6,630.0	6,555.2	19.3	17.4	85.06	420.1	-297.9	197.4	166.0	31.43	6.281	
6,692.9	6,601.1	6,671.8	6,590.7	19.2	17.4	84.54	420.1	-275.8	197.6	166.2	31.39	6.294	
6,700.0	6,607.1	6,678.7	6,596.4	19.2	17.4	84.46	420.1	-271.9	197.6	166.2	31.39	6.296	
6,750.0	6,648.6	6,727.3	6,635.6	19.2	17.3	83.89	420.1	-243.3	197.8	166.4	31.39	6.302	
6,791.3	6,681.4	6,767.4	6,666.5	19.1	17.3	83.44	420.1	-217.7	198.0	166.5	31.43	6.298	
6,800.0	6,688.1	6,775.8	6,672.7	19.1	17.3	83.35	420.1	-212.1	198.0	166.6	31.45	6.297	
6,850.0	6,725.3	6,824.2	6,707.6	19.1	17.3	82.85	420.1	-178.6	198.2	166.6	31.59	6.275	
6,889.7	6,753.2	6,862.5	6,733.6	19.0	17.3	82.47	420.1	-150.3	198.4	166.6	31.78	6.243	
6,900.0	6,760.1	6,872.4	6,740.0	19.0	17.3	82.38	420.1	-142.8	198.4	166.6	31.83	6.234	
6,950.0	6,792.3	6,920.6	6,769.9	19.0	17.3	81.94	420.1	-105.1	198.6	166.4	32.19	6.170	
6,988.2	6,815.1	6,957.3	6,790.9	18.9	17.3	81.64	420.1	-75.0	198.8	166.2	32.56	6.105	
7,000.0	6,821.8	6,968.6	6,797.1	18.9	17.3	81.55	420.1	-65.5	198.8	166.1	32.69	6.082	
7,050.0	6,848.3	7,016.6	6,821.6	18.9	17.4	81.19	420.1	-24.2	199.0	165.7	33.34	5.970	
7,086.6	6,865.9	7,051.7	6,837.7	18.9	17.6	80.96	420.1	6.9	199.1	165.2	33.91	5.874	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-232 - ORIGINAL WELLBORE - PROP												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,064.5	6,843.3	18.9	17.7	80.88	420.1	18.5	199.2	165.1	34.13	5.835	
7,150.0	6,892.3	7,112.4	6,862.0	18.8	18.0	80.61	420.1	62.5	199.3	164.3	35.09	5.681	
7,185.0	6,904.7	7,145.9	6,873.3	18.8	18.4	80.44	420.1	94.0	199.4	163.6	35.86	5.561	
7,200.0	6,909.5	7,160.2	6,877.7	18.9	18.6	80.38	420.1	107.6	199.5	163.3	36.21	5.510	
7,250.0	6,923.4	7,207.9	6,890.3	19.3	19.2	80.19	420.1	153.7	199.6	162.1	37.47	5.327	
7,283.4	6,930.8	7,239.9	6,897.1	19.8	19.7	80.10	420.1	184.9	199.6	161.2	38.40	5.199	
7,300.0	6,933.9	7,255.6	6,899.9	20.0	19.9	80.06	420.1	200.4	199.7	160.8	38.87	5.137	
7,350.0	6,940.9	7,303.3	6,906.3	20.8	20.7	79.96	420.1	247.7	199.7	159.3	40.39	4.945	
7,381.9	6,943.6	7,333.7	6,908.7	21.4	21.2	79.93	420.1	278.0	199.8	158.3	41.42	4.822	
7,400.0	6,944.5	7,351.0	6,909.6	21.7	21.5	79.92	420.1	295.2	199.8	157.7	42.01	4.755	
7,432.4	6,945.0	7,381.9	6,910.0	22.3	22.1	79.91	420.1	326.1	199.8	156.6	43.11	4.634	
7,432.7	6,945.0	7,382.2	6,910.0	22.3	22.1	79.91	420.1	326.4	199.8	156.6	43.12	4.632	
7,480.3	6,944.6	7,429.7	6,909.4	23.2	23.0	79.87	420.1	373.9	199.8	154.9	44.89	4.451	
7,500.0	6,944.4	7,449.4	6,909.2	23.6	23.4	79.86	420.1	393.6	199.8	154.2	45.62	4.379	
7,578.7	6,943.7	7,528.1	6,908.3	25.2	25.0	79.80	420.1	472.3	199.8	151.1	48.73	4.100	
7,600.0	6,943.6	7,549.4	6,908.1	25.6	25.4	79.78	420.1	493.6	199.8	150.2	49.60	4.029	
7,677.1	6,942.9	7,626.5	6,907.2	27.3	27.1	79.72	420.1	570.7	199.9	147.0	52.86	3.782	
7,700.0	6,942.7	7,649.4	6,907.0	27.8	27.6	79.70	420.1	593.6	199.9	146.1	53.84	3.713	
7,775.6	6,942.1	7,725.0	6,906.1	29.5	29.3	79.64	420.1	669.2	199.9	142.7	57.19	3.496	
7,800.0	6,941.9	7,749.4	6,905.9	30.1	29.9	79.62	420.1	693.6	199.9	141.7	58.29	3.430	
7,874.0	6,941.3	7,823.4	6,905.0	31.8	31.6	79.56	420.1	767.6	200.0	138.3	61.70	3.241	
7,900.0	6,941.1	7,849.4	6,904.8	32.4	32.3	79.54	420.1	793.6	200.0	137.1	62.91	3.179	
7,972.4	6,940.4	7,921.8	6,903.9	34.2	34.0	79.49	420.1	866.0	200.0	133.7	66.34	3.015	
8,000.0	6,940.2	7,949.4	6,903.6	34.9	34.7	79.46	420.1	893.6	200.0	132.4	67.66	2.957	
8,070.8	6,939.6	8,020.2	6,902.8	36.6	36.4	79.41	420.1	964.4	200.1	129.0	71.09	2.814	
8,100.0	6,939.4	8,049.4	6,902.5	37.3	37.2	79.39	420.1	993.6	200.1	127.6	72.52	2.759	
8,169.3	6,938.8	8,118.7	6,901.8	39.1	38.9	79.33	420.1	1,062.8	200.1	124.2	75.93	2.636	
8,200.0	6,938.5	8,149.4	6,901.4	39.8	39.7	79.31	420.1	1,093.5	200.1	122.7	77.46	2.584	
8,267.7	6,938.0	8,217.1	6,900.7	41.6	41.4	79.25	420.1	1,161.2	200.2	119.3	80.84	2.476	
8,300.0	6,937.7	8,249.4	6,900.3	42.4	42.3	79.23	420.1	1,193.5	200.2	117.7	82.47	2.428	
8,366.1	6,937.2	8,315.5	6,899.6	44.1	44.0	79.18	420.1	1,259.7	200.2	114.4	85.82	2.333	
8,400.0	6,936.9	8,349.4	6,899.2	45.0	44.9	79.15	420.1	1,293.5	200.3	112.7	87.54	2.288	
8,464.5	6,936.3	8,413.9	6,898.5	46.6	46.5	79.10	420.1	1,358.1	200.3	109.5	90.83	2.205	
8,500.0	6,936.0	8,449.4	6,898.1	47.6	47.5	79.07	420.1	1,393.5	200.3	107.7	92.65	2.162	
8,563.0	6,935.5	8,512.4	6,897.4	49.2	49.1	79.02	420.1	1,456.5	200.3	104.4	95.89	2.089	
8,600.0	6,935.2	8,549.4	6,896.9	50.2	50.1	78.99	420.1	1,493.5	200.4	102.6	97.81	2.049	
8,661.4	6,934.7	8,610.8	6,896.3	51.8	51.7	78.95	420.1	1,554.9	200.4	99.4	100.99	1.984	
8,700.0	6,934.4	8,649.4	6,895.8	52.8	52.8	78.91	420.1	1,593.5	200.4	97.4	102.99	1.946	
8,759.8	6,933.9	8,709.2	6,895.2	54.4	54.4	78.87	420.1	1,653.3	200.4	94.3	106.11	1.889	
8,800.0	6,933.5	8,749.4	6,894.7	55.5	55.4	78.84	420.1	1,693.5	200.5	92.3	108.21	1.853	
8,858.2	6,933.0	8,807.6	6,894.1	57.1	57.0	78.79	420.1	1,751.8	200.5	89.2	111.26	1.802	
8,900.0	6,932.7	8,849.4	6,893.6	58.2	58.1	78.76	420.1	1,793.5	200.5	87.1	113.45	1.768	
8,956.7	6,932.2	8,906.1	6,893.0	59.7	59.6	78.71	420.1	1,850.2	200.6	84.1	116.42	1.723	
9,000.0	6,931.8	8,949.4	6,892.5	60.9	60.8	78.68	420.1	1,893.5	200.6	81.9	118.70	1.690	
9,055.1	6,931.4	9,004.5	6,891.9	62.4	62.3	78.64	420.1	1,948.6	200.6	79.0	121.61	1.650	
9,100.0	6,931.0	9,049.4	6,891.4	63.6	63.5	78.60	420.1	1,993.5	200.6	76.7	123.98	1.618	
9,153.5	6,930.6	9,102.9	6,890.8	65.0	65.0	78.56	420.1	2,047.0	200.7	73.9	126.81	1.582	
9,200.0	6,930.2	9,149.4	6,890.2	66.3	66.2	78.52	420.1	2,093.5	200.7	71.4	129.27	1.553	
9,251.9	6,929.7	9,201.3	6,889.7	67.7	67.6	78.48	420.1	2,145.4	200.7	68.7	132.02	1.520	
9,300.0	6,929.3	9,249.4	6,889.1	69.0	68.9	78.45	420.1	2,193.5	200.7	66.2	134.57	1.492 Level 3	
9,350.4	6,928.9	9,299.8	6,888.6	70.4	70.3	78.41	420.1	2,243.8	200.8	63.5	137.24	1.463 Level 3	
9,400.0	6,928.5	9,349.4	6,888.0	71.7	71.7	78.37	420.1	2,293.5	200.8	60.9	139.88	1.436 Level 3	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-232 - ORIGINAL WELLBORE - PROPC												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,448.8	6,928.1	9,398.2	6,887.5	73.0	73.0	78.33	420.1	2,342.3	200.8	58.4	142.47	1.410	Level 3
9,500.0	6,927.7	9,449.4	6,886.9	74.4	74.4	78.29	420.1	2,393.5	200.9	55.7	145.20	1.383	Level 3
9,547.2	6,927.3	9,496.6	6,886.4	75.7	75.7	78.25	420.1	2,440.7	200.9	53.2	147.72	1.360	Level 3
9,600.0	6,926.8	9,549.4	6,885.8	77.2	77.1	78.21	420.1	2,493.5	200.9	50.4	150.53	1.335	Level 3
9,645.6	6,926.4	9,595.0	6,885.3	78.4	78.4	78.18	420.1	2,539.1	200.9	48.0	152.96	1.314	Level 3
9,700.0	6,926.0	9,649.4	6,884.7	79.9	79.9	78.13	420.1	2,593.5	201.0	45.1	155.86	1.289	Level 3
9,744.1	6,925.6	9,693.5	6,884.2	81.1	81.1	78.10	420.1	2,637.5	201.0	42.8	158.22	1.270	Level 3
9,800.0	6,925.2	9,749.4	6,883.6	82.6	82.6	78.06	420.1	2,693.4	201.0	39.8	161.20	1.247	Level 2
9,842.5	6,924.8	9,791.9	6,883.1	83.8	83.8	78.02	420.1	2,735.9	201.1	37.6	163.48	1.230	Level 2
9,900.0	6,924.3	9,849.4	6,882.4	85.4	85.4	77.98	420.1	2,793.4	201.1	34.5	166.55	1.207	Level 2
9,940.9	6,924.0	9,890.3	6,882.0	86.5	86.5	77.95	420.1	2,834.4	201.1	32.4	168.74	1.192	Level 2
10,000.0	6,923.5	9,949.4	6,881.3	88.1	88.1	77.90	420.1	2,893.4	201.1	29.2	171.90	1.170	Level 2
10,039.3	6,923.2	9,988.7	6,880.9	89.2	89.2	77.87	420.1	2,932.8	201.2	27.2	174.00	1.156	Level 2
10,100.0	6,922.6	10,049.4	6,880.2	90.9	90.9	77.82	420.1	2,993.4	201.2	24.0	177.25	1.135	Level 2
10,137.8	6,922.3	10,087.2	6,879.8	91.9	91.9	77.79	420.1	3,031.2	201.2	22.0	179.27	1.122	Level 2
10,200.0	6,921.8	10,149.4	6,879.1	93.7	93.7	77.75	420.1	3,093.4	201.3	18.7	182.61	1.102	Level 2
10,236.2	6,921.5	10,185.6	6,878.7	94.7	94.7	77.72	420.1	3,129.6	201.3	16.7	184.54	1.091	Level 2
10,300.0	6,921.0	10,249.4	6,878.0	96.4	96.4	77.67	420.1	3,193.4	201.3	13.4	187.96	1.071	Level 2
10,334.6	6,920.7	10,284.0	6,877.6	97.4	97.4	77.64	420.1	3,228.0	201.3	11.5	189.82	1.061	Level 2
10,400.0	6,920.1	10,349.4	6,876.9	99.2	99.2	77.59	420.1	3,293.4	201.4	8.1	193.32	1.042	Level 2
10,433.0	6,919.9	10,382.4	6,876.5	100.1	100.1	77.57	420.1	3,326.5	201.4	6.3	195.09	1.032	Level 2
10,500.0	6,919.3	10,449.4	6,875.8	101.9	102.0	77.51	420.1	3,393.4	201.4	2.8	198.68	1.014	Level 2
10,531.5	6,919.0	10,480.9	6,875.4	102.8	102.8	77.49	420.1	3,424.9	201.5	1.1	200.37	1.005	Level 2
10,600.0	6,918.5	10,549.4	6,874.6	104.7	104.7	77.44	420.1	3,493.4	201.5	-2.5	204.04	0.988	Level 1
10,629.9	6,918.2	10,579.3	6,874.3	105.5	105.6	77.41	420.1	3,523.3	201.5	-4.1	205.64	0.980	Level 1
10,700.0	6,917.6	10,649.4	6,873.5	107.5	107.5	77.36	420.1	3,593.4	201.6	-7.8	209.40	0.963	Level 1
10,728.3	6,917.4	10,677.7	6,873.2	108.3	108.3	77.34	420.1	3,621.7	201.6	-9.3	210.92	0.956	Level 1
10,800.0	6,916.8	10,749.4	6,872.4	110.3	110.3	77.28	420.1	3,693.4	201.6	-13.1	214.76	0.939	Level 1
10,826.7	6,916.6	10,776.1	6,872.1	111.0	111.0	77.26	420.1	3,720.1	201.6	-14.5	216.20	0.933	Level 1
10,900.0	6,916.0	10,849.4	6,871.3	113.0	113.1	77.21	420.1	3,793.4	201.7	-18.4	220.12	0.916	Level 1
10,925.2	6,915.8	10,874.6	6,871.0	113.7	113.8	77.19	420.1	3,818.5	201.7	-19.8	221.47	0.911	Level 1
11,000.0	6,915.1	10,949.4	6,870.2	115.8	115.8	77.13	420.1	3,893.4	201.8	-23.7	225.48	0.895	Level 1
11,023.6	6,914.9	10,973.0	6,869.9	116.5	116.5	77.11	420.1	3,917.0	201.8	-25.0	226.75	0.890	Level 1
11,100.0	6,914.3	11,049.4	6,869.1	118.6	118.6	77.05	420.1	3,993.4	201.8	-29.0	230.84	0.874	Level 1
11,122.0	6,914.1	11,071.4	6,868.8	119.2	119.2	77.03	420.1	4,015.4	201.8	-30.2	232.03	0.870	Level 1
11,200.0	6,913.5	11,149.4	6,868.0	121.4	121.4	76.97	420.1	4,093.4	201.9	-34.3	236.20	0.855	Level 1
11,220.4	6,913.3	11,169.8	6,867.7	121.9	122.0	76.96	420.1	4,113.8	201.9	-35.4	237.30	0.851	Level 1
11,300.0	6,912.6	11,249.4	6,866.8	124.1	124.2	76.90	420.1	4,193.3	201.9	-39.6	241.56	0.836	Level 1
11,318.9	6,912.5	11,268.3	6,866.6	124.7	124.7	76.88	420.1	4,212.2	202.0	-40.6	242.57	0.833	Level 1
11,400.0	6,911.8	11,349.4	6,865.7	126.9	127.0	76.82	420.1	4,293.3	202.0	-44.9	246.92	0.818	Level 1
11,417.3	6,911.6	11,366.7	6,865.5	127.4	127.4	76.81	420.1	4,310.6	202.0	-45.8	247.85	0.815	Level 1
11,500.0	6,911.0	11,449.4	6,864.6	129.7	129.7	76.74	420.1	4,393.3	202.1	-50.2	252.27	0.801	Level 1
11,515.7	6,910.8	11,465.1	6,864.4	130.2	130.2	76.73	420.1	4,409.1	202.1	-51.0	253.12	0.798	Level 1
11,600.0	6,910.1	11,549.4	6,863.5	132.5	132.5	76.67	420.1	4,493.3	202.1	-55.5	257.63	0.785	Level 1
11,614.1	6,910.0	11,563.5	6,863.3	132.9	132.9	76.66	420.1	4,507.5	202.1	-56.2	258.39	0.782	Level 1
11,700.0	6,909.3	11,649.4	6,862.4	135.3	135.3	76.59	420.1	4,593.3	202.2	-60.8	262.98	0.769	Level 1
11,712.6	6,909.2	11,662.0	6,862.3	135.6	135.7	76.58	420.1	4,605.9	202.2	-61.4	263.65	0.767	Level 1
11,800.0	6,908.5	11,749.4	6,861.3	138.1	138.1	76.51	420.1	4,693.3	202.3	-66.1	268.33	0.754	Level 1
11,811.0	6,908.4	11,760.4	6,861.2	138.4	138.4	76.51	420.1	4,704.3	202.3	-66.6	268.92	0.752	Level 1
11,900.0	6,907.6	11,849.4	6,860.2	140.9	140.9	76.44	420.1	4,793.3	202.3	-71.3	273.68	0.739	Level 1
11,909.4	6,907.5	11,858.8	6,860.1	141.1	141.2	76.43	420.1	4,802.7	202.3	-71.8	274.18	0.738	Level 1
12,000.0	6,906.8	11,949.4	6,859.1	143.6	143.7	76.36	420.1	4,893.3	202.4	-76.6	279.02	0.725	Level 1

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	11,957.2	6,859.0	143.9	143.9	76.35	420.1	4,901.1	202.4	-77.0	279.44	0.724	Level 1
12,100.0	6,905.9	12,049.4	6,857.9	146.4	146.5	76.28	420.1	4,993.3	202.5	-81.9	284.37	0.712	Level 1
12,106.3	6,905.9	12,055.6	6,857.9	146.6	146.6	76.28	420.1	4,999.6	202.5	-82.2	284.70	0.711	Level 1
12,200.0	6,905.1	12,149.4	6,856.8	149.2	149.3	76.21	420.1	5,093.3	202.5	-87.2	289.71	0.699	Level 1
12,204.7	6,905.1	12,154.1	6,856.8	149.4	149.4	76.20	420.1	5,098.0	202.5	-87.4	289.96	0.699	Level 1
12,300.0	6,904.3	12,249.4	6,855.7	152.0	152.1	76.13	420.1	5,193.3	202.6	-92.4	295.05	0.687	Level 1
12,303.1	6,904.3	12,252.5	6,855.7	152.1	152.1	76.13	420.1	5,196.4	202.6	-92.6	295.22	0.686	Level 1
12,400.0	6,903.4	12,349.4	6,854.6	154.8	154.8	76.05	420.1	5,293.3	202.7	-97.7	300.39	0.675	Level 1
12,401.5	6,903.4	12,350.9	6,854.6	154.8	154.9	76.05	420.1	5,294.8	202.7	-97.8	300.47	0.675	Level 1
12,500.0	6,902.6	12,449.4	6,853.5	157.6	157.6	75.98	420.1	5,393.3	202.7	-103.0	305.72	0.663	Level 1
12,598.4	6,901.8	12,547.8	6,852.4	160.3	160.4	75.90	420.1	5,491.7	202.8	-108.2	310.97	0.652	Level 1
12,600.0	6,901.8	12,549.4	6,852.4	160.4	160.4	75.90	420.1	5,493.3	202.8	-108.2	311.05	0.652	Level 1
12,696.8	6,901.0	12,646.2	6,851.3	163.1	163.1	75.83	420.1	5,590.1	202.9	-113.3	316.21	0.642	Level 1
12,700.0	6,900.9	12,649.4	6,851.3	163.2	163.2	75.83	420.1	5,593.3	202.9	-113.5	316.38	0.641	Level 1
12,795.2	6,900.1	12,744.6	6,850.2	165.8	165.9	75.75	420.1	5,688.5	202.9	-118.5	321.45	0.631	Level 1
12,800.0	6,900.1	12,749.4	6,850.2	166.0	166.0	75.75	420.1	5,693.2	202.9	-118.8	321.71	0.631	Level 1
12,893.7	6,899.3	12,843.0	6,849.1	168.6	168.6	75.68	420.1	5,786.9	203.0	-123.7	326.69	0.621	Level 1
12,900.0	6,899.3	12,849.4	6,849.0	168.8	168.8	75.67	420.1	5,793.2	203.0	-124.0	327.03	0.621	Level 1
12,992.1	6,898.5	12,941.5	6,848.0	171.3	171.4	75.60	420.1	5,885.3	203.1	-128.8	331.93	0.612	Level 1
13,000.0	6,898.4	12,949.4	6,847.9	171.6	171.6	75.60	420.1	5,893.2	203.1	-129.3	332.35	0.611	Level 1
13,090.5	6,897.7	13,039.9	6,846.9	174.1	174.1	75.53	420.1	5,983.8	203.2	-134.0	337.16	0.603	Level 1
13,100.0	6,897.6	13,049.4	6,846.8	174.4	174.4	75.52	420.1	5,993.2	203.2	-134.5	337.67	0.602	Level 1
13,188.9	6,896.9	13,138.3	6,845.8	176.8	176.9	75.45	420.1	6,082.2	203.2	-139.2	342.39	0.594	Level 1
13,200.0	6,896.8	13,149.4	6,845.7	177.2	177.2	75.45	420.1	6,093.2	203.2	-139.8	342.98	0.593	Level 1
13,287.4	6,896.0	13,236.7	6,844.7	179.6	179.6	75.38	420.1	6,180.6	203.3	-144.3	347.62	0.585	Level 1
13,300.0	6,895.9	13,249.4	6,844.6	180.0	180.0	75.37	420.1	6,193.2	203.3	-145.0	348.29	0.584	Level 1
13,385.8	6,895.2	13,335.2	6,843.6	182.4	182.4	75.31	420.1	6,279.0	203.4	-149.5	352.84	0.576	Level 1
13,400.0	6,895.1	13,349.4	6,843.5	182.7	182.8	75.30	420.1	6,293.2	203.4	-150.2	353.60	0.575	Level 1
13,484.2	6,894.4	13,433.6	6,842.5	185.1	185.2	75.23	420.1	6,377.4	203.4	-154.6	358.06	0.568	Level 1
13,500.0	6,894.3	13,449.4	6,842.4	185.5	185.6	75.22	420.1	6,393.2	203.4	-155.5	358.90	0.567	Level 1
13,582.6	6,893.6	13,532.0	6,841.5	187.9	187.9	75.16	420.1	6,475.8	203.5	-159.8	363.28	0.560	Level 1
13,600.0	6,893.4	13,549.4	6,841.3	188.3	188.4	75.14	420.1	6,493.2	203.5	-160.7	364.20	0.559	Level 1
13,681.1	6,892.8	13,630.4	6,840.4	190.6	190.7	75.08	420.1	6,574.3	203.6	-164.9	368.50	0.552	Level 1
13,700.0	6,892.6	13,649.4	6,840.1	191.1	191.2	75.07	420.1	6,593.2	203.6	-165.9	369.50	0.551	Level 1
13,779.5	6,891.9	13,728.9	6,839.3	193.4	193.4	75.01	420.1	6,672.7	203.6	-170.1	373.71	0.545	Level 1
13,800.0	6,891.8	13,749.4	6,839.0	193.9	194.0	74.99	420.1	6,693.2	203.7	-171.1	374.79	0.543	Level 1
13,877.9	6,891.1	13,827.3	6,838.2	196.1	196.2	74.93	420.1	6,771.1	203.7	-175.2	378.91	0.538	Level 1
13,900.0	6,890.9	13,849.4	6,837.9	196.7	196.8	74.92	420.1	6,793.2	203.7	-176.3	380.08	0.536	Level 1
13,976.3	6,890.3	13,925.7	6,837.1	198.9	198.9	74.86	420.1	6,869.5	203.8	-180.3	384.12	0.531	Level 1
14,000.0	6,890.1	13,949.4	6,836.8	199.5	199.6	74.84	420.1	6,893.2	203.8	-181.6	385.37	0.529	Level 1
14,074.8	6,889.5	14,024.1	6,836.0	201.6	201.7	74.79	420.1	6,967.9	203.9	-185.5	389.32	0.524	Level 1
14,100.0	6,889.3	14,049.4	6,835.7	202.3	202.4	74.77	420.1	6,993.2	203.9	-186.8	390.65	0.522	Level 1
14,173.2	6,888.7	14,122.6	6,834.9	204.4	204.4	74.71	420.1	7,066.4	203.9	-190.6	394.52	0.517	Level 1
14,200.0	6,888.4	14,149.4	6,834.6	205.1	205.2	74.69	420.1	7,093.2	204.0	-192.0	395.93	0.515	Level 1
14,271.6	6,887.8	14,221.0	6,833.8	207.1	207.2	74.64	420.1	7,164.8	204.0	-195.7	399.71	0.510	Level 1
14,300.0	6,887.6	14,249.4	6,833.5	207.9	208.0	74.62	420.1	7,193.1	204.0	-197.2	401.21	0.509	Level 1
14,370.0	6,887.0	14,319.4	6,832.7	209.9	210.0	74.56	420.1	7,263.2	204.1	-200.8	404.90	0.504	Level 1
14,400.0	6,886.8	14,349.4	6,832.4	210.7	210.8	74.54	420.1	7,293.1	204.1	-202.4	406.48	0.502	Level 1
14,468.5	6,886.2	14,417.8	6,831.6	212.6	212.7	74.49	420.1	7,361.6	204.2	-205.9	410.09	0.498	Level 1
14,500.0	6,885.9	14,449.4	6,831.3	213.5	213.6	74.47	420.1	7,393.1	204.2	-207.6	411.75	0.496	Level 1
14,566.9	6,885.4	14,516.3	6,830.5	215.4	215.3	74.42	420.1	7,460.0	204.2	-210.9	415.11	0.492	Level 1
14,600.0	6,885.1	14,549.4	6,830.2	216.3	215.9	74.39	420.1	7,493.1	204.3	-212.3	416.54	0.490	Level 1

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27G-232 - ORIGINAL WELLBORE - PROPC												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	14,562.4	6,830.0	216.7	216.1	74.38	420.1	7,506.1	204.3	-212.8	417.10	0.490	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-76.5	0.0	76.5				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-76.5	0.0	76.5	76.3	0.17	447.915	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-76.5	0.0	76.5	76.3	0.18	436.379	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-76.5	0.0	76.5	75.9	0.61	125.276	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-76.5	0.0	76.5	75.9	0.62	122.437	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-76.5	0.0	76.5	75.5	1.05	72.645	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-76.5	0.0	76.5	75.4	1.07	71.208	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-76.5	0.0	76.5	75.0	1.50	51.154	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-76.5	0.0	76.5	75.0	1.52	50.203	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-76.5	0.0	76.5	74.6	1.94	39.475	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-76.5	0.0	76.5	74.5	1.97	38.767	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-76.5	0.0	76.5	74.1	2.38	32.138	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-76.5	0.0	76.5	74.1	2.42	31.575	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-76.5	0.0	76.5	73.7	2.82	27.101	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-76.5	0.0	76.5	73.6	2.87	26.633	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-76.5	0.0	76.5	73.2	3.27	23.429	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-76.5	0.0	76.5	73.2	3.32	23.029	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-76.5	0.0	76.5	72.8	3.71	20.633	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-76.5	0.0	76.5	72.7	3.77	20.285	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-76.5	0.0	76.5	72.4	4.15	18.434	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-76.5	0.0	76.5	72.3	4.22	18.124	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-76.5	0.0	76.5	71.9	4.59	16.658	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-76.5	0.0	76.5	71.8	4.67	16.380	
1,150.0	1,150.0	1,151.0	1,151.0	2.4	2.4	-180.00	-76.5	0.0	76.5	71.6	4.90	15.628 CC, ES	
1,181.1	1,181.1	1,182.1	1,182.1	2.5	2.5	-147.38	-76.5	0.0	76.6	71.6	5.03	15.224	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-147.48	-76.5	0.0	76.9	71.8	5.12	15.017	
1,279.5	1,279.5	1,280.5	1,280.5	2.7	2.7	-148.43	-76.5	0.0	79.0	73.5	5.47	14.433	
1,300.0	1,299.9	1,300.9	1,300.9	2.8	2.8	-148.80	-76.5	0.0	79.8	74.3	5.56	14.352	
1,377.9	1,377.7	1,378.7	1,378.7	3.0	3.0	-150.56	-76.5	0.0	84.3	78.4	5.91	14.264	
1,400.0	1,399.7	1,400.7	1,400.7	3.0	3.0	-151.15	-76.5	0.0	85.9	79.9	6.00	14.302	
1,476.4	1,475.7	1,476.7	1,476.7	3.2	3.2	-153.38	-76.5	0.0	92.7	86.3	6.34	14.616	
1,500.0	1,499.1	1,500.1	1,500.1	3.2	3.2	-154.10	-76.5	0.0	95.2	88.7	6.44	14.771	
1,574.8	1,573.2	1,573.7	1,573.7	3.4	3.4	-156.38	-76.6	-0.1	104.4	97.7	6.76	15.439	
1,600.0	1,598.2	1,598.0	1,598.0	3.5	3.4	-157.02	-76.8	-0.3	108.1	101.3	6.86	15.754	
1,673.2	1,670.3	1,668.3	1,668.3	3.7	3.6	-158.40	-78.3	-1.6	120.9	113.8	7.15	16.914	
1,700.0	1,696.6	1,693.9	1,693.8	3.8	3.6	-158.74	-79.2	-2.4	126.3	119.0	7.25	17.418	
1,749.9	1,745.5	1,741.2	1,741.0	3.9	3.7	-159.19	-81.3	-4.2	137.3	129.9	7.45	18.437	
1,771.6	1,766.8	1,761.8	1,761.6	4.0	3.7	-159.34	-82.4	-5.1	142.5	134.9	7.54	18.891	
1,800.0	1,794.5	1,788.5	1,788.2	4.1	3.8	-159.44	-84.0	-6.5	149.3	141.6	7.66	19.483	
1,870.1	1,863.1	1,854.2	1,853.6	4.3	3.9	-159.37	-88.7	-10.6	166.8	158.8	7.97	20.924	
1,900.0	1,892.3	1,882.1	1,881.3	4.4	4.0	-159.21	-91.0	-12.6	174.5	166.4	8.10	21.540	
1,968.5	1,959.4	1,945.6	1,944.3	4.7	4.1	-158.66	-97.1	-17.9	192.9	184.5	8.42	22.917	
2,000.0	1,990.2	1,974.6	1,973.1	4.8	4.2	-158.33	-100.2	-20.6	201.7	193.1	8.57	23.549	
2,066.9	2,055.6	2,035.9	2,033.6	5.1	4.3	-157.51	-107.5	-27.0	221.0	212.1	8.89	24.862	
2,100.0	2,088.0	2,065.9	2,063.1	5.2	4.4	-157.06	-111.4	-30.4	230.8	221.8	9.05	25.501	
2,165.3	2,151.9	2,124.9	2,121.0	5.4	4.6	-156.10	-119.8	-37.8	250.9	241.5	9.38	26.748	
2,200.0	2,185.8	2,156.2	2,151.7	5.6	4.6	-155.56	-124.7	-42.0	261.9	252.4	9.56	27.395	
2,263.8	2,248.2	2,216.4	2,210.6	5.8	4.8	-154.60	-134.1	-50.2	282.4	272.5	9.90	28.512	
2,300.0	2,283.6	2,250.7	2,244.1	6.0	4.9	-154.12	-139.5	-54.9	294.0	283.9	10.10	29.111	
2,362.2	2,344.5	2,309.4	2,301.6	6.2	5.1	-153.37	-148.7	-62.9	314.1	303.6	10.44	30.079	
2,400.0	2,381.4	2,345.1	2,336.5	6.4	5.2	-152.96	-154.3	-67.8	326.3	315.6	10.65	30.631	
2,460.6	2,440.7	2,402.4	2,392.5	6.6	5.4	-152.37	-163.3	-75.6	345.9	334.9	10.99	31.462	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,439.6	2,428.9	6.8	5.6	-152.01	-169.1	-80.7	358.6	347.4	11.22	31.963	
2,559.0	2,537.0	2,495.4	2,483.5	7.0	5.8	-151.53	-177.8	-88.3	377.8	366.2	11.56	32.688	
2,600.0	2,577.1	2,534.1	2,521.3	7.2	5.9	-151.22	-183.9	-93.6	391.1	379.3	11.79	33.156	
2,657.5	2,633.3	2,588.4	2,574.4	7.4	6.1	-150.82	-192.4	-101.0	409.7	397.6	12.13	33.779	
2,700.0	2,674.9	2,628.5	2,613.7	7.6	6.3	-150.55	-198.7	-106.5	423.6	411.2	12.38	34.213	
2,755.9	2,729.6	2,681.3	2,665.4	7.9	6.5	-150.22	-207.0	-113.7	441.7	429.0	12.71	34.752	
2,800.0	2,772.7	2,723.0	2,706.1	8.0	6.6	-149.97	-213.5	-119.4	456.1	443.1	12.97	35.155	
2,854.3	2,825.8	2,774.3	2,756.3	8.3	6.8	-149.69	-221.6	-126.4	473.8	460.5	13.30	35.625	
2,900.0	2,870.5	2,817.5	2,798.5	8.5	7.0	-149.48	-228.3	-132.3	488.6	475.1	13.57	36.000	
2,952.7	2,922.1	2,867.3	2,847.3	8.7	7.2	-149.24	-236.1	-139.1	505.8	491.9	13.89	36.409	
3,000.0	2,968.3	2,911.9	2,890.9	8.9	7.4	-149.04	-243.1	-145.2	521.2	507.0	14.18	36.759	
3,051.2	3,018.4	2,960.3	2,938.2	9.1	7.6	-148.84	-250.7	-151.8	537.9	523.4	14.49	37.117	
3,100.0	3,066.1	3,006.4	2,983.3	9.3	7.8	-148.65	-257.9	-158.1	553.8	539.1	14.79	37.445	
3,149.6	3,114.7	3,053.3	3,029.2	9.5	8.0	-148.48	-265.3	-164.5	570.0	554.9	15.10	37.759	
3,200.0	3,164.0	3,100.9	3,075.7	9.8	8.2	-148.31	-272.7	-171.0	586.5	571.1	15.41	38.066	
3,248.0	3,210.9	3,146.3	3,120.1	10.0	8.3	-148.16	-279.8	-177.2	602.2	586.5	15.70	38.342	
3,300.0	3,261.8	3,195.4	3,168.1	10.2	8.5	-148.00	-287.5	-183.9	619.1	603.1	16.03	38.629	
3,346.4	3,307.2	3,239.2	3,211.1	10.4	8.7	-147.87	-294.4	-189.9	634.3	618.0	16.32	38.873	
3,400.0	3,359.6	3,289.8	3,260.5	10.6	8.9	-147.73	-302.3	-196.8	651.8	635.1	16.65	39.144	
3,444.9	3,403.5	3,332.2	3,302.0	10.8	9.1	-147.61	-309.0	-202.6	666.5	649.5	16.93	39.359	
3,500.0	3,457.4	3,384.3	3,353.0	11.1	9.3	-147.48	-317.2	-209.7	684.5	667.2	17.28	39.614	
3,543.3	3,499.8	3,425.2	3,393.0	11.3	9.5	-147.38	-323.6	-215.3	698.6	681.1	17.55	39.805	
3,600.0	3,555.2	3,478.8	3,445.4	11.5	9.8	-147.25	-332.0	-222.6	717.2	699.3	17.91	40.045	
3,641.7	3,596.0	3,518.2	3,483.9	11.7	9.9	-147.16	-338.1	-228.0	730.8	712.6	18.17	40.215	
3,700.0	3,653.0	3,573.2	3,537.8	11.9	10.2	-147.04	-346.8	-235.5	749.9	731.3	18.54	40.442	
3,740.1	3,692.3	3,611.2	3,574.9	12.1	10.3	-146.97	-352.7	-240.7	763.0	744.2	18.80	40.593	
3,800.0	3,750.8	3,667.7	3,630.2	12.4	10.6	-146.85	-361.6	-248.4	782.6	763.4	19.18	40.809	
3,838.6	3,788.6	3,704.2	3,665.8	12.6	10.7	-146.79	-367.3	-253.4	795.2	775.8	19.42	40.943	
3,900.0	3,848.7	3,762.2	3,722.6	12.8	11.0	-146.68	-376.4	-261.3	815.3	795.5	19.81	41.147	
3,937.0	3,884.9	3,797.1	3,756.8	13.0	11.1	-146.62	-381.9	-266.1	827.4	807.3	20.05	41.267	
4,000.0	3,946.5	3,856.7	3,815.0	13.3	11.4	-146.52	-391.2	-274.2	848.0	827.5	20.45	41.461	
4,035.4	3,981.1	3,890.1	3,847.7	13.4	11.5	-146.46	-396.4	-278.8	859.6	838.9	20.68	41.567	
4,100.0	4,044.3	3,951.1	3,907.4	13.7	11.8	-146.37	-406.0	-287.1	880.7	859.6	21.09	41.753	
4,133.8	4,077.4	3,983.1	3,938.7	13.9	12.0	-146.32	-411.0	-291.5	891.8	870.5	21.31	41.847	
4,200.0	4,142.1	4,045.6	3,999.8	14.2	12.2	-146.23	-420.8	-300.0	913.4	891.7	21.74	42.025	
4,232.3	4,173.7	4,076.1	4,029.6	14.3	12.4	-146.19	-425.6	-304.2	924.0	902.1	21.94	42.108	
4,300.0	4,239.9	4,140.1	4,092.2	14.6	12.7	-146.10	-435.6	-312.9	946.2	923.8	22.38	42.278	
4,330.7	4,270.0	4,169.1	4,120.6	14.7	12.8	-146.06	-440.1	-316.9	956.2	933.7	22.58	42.352	
4,400.0	4,337.7	4,234.5	4,184.6	15.0	13.1	-145.98	-450.4	-325.8	978.9	955.9	23.03	42.515	
4,429.1	4,366.2	4,262.0	4,211.5	15.2	13.2	-145.95	-454.7	-329.6	988.5	965.2	23.21	42.581	
4,500.0	4,435.6	4,329.0	4,277.0	15.5	13.5	-145.87	-465.2	-338.7	1,011.7	988.0	23.67	42.737	
4,527.5	4,462.5	4,355.0	4,302.5	15.6	13.6	-145.84	-469.3	-342.3	1,020.7	996.8	23.85	42.795	
4,600.0	4,533.4	4,423.5	4,369.4	15.9	13.9	-145.76	-480.0	-351.6	1,044.4	1,020.1	24.32	42.945	
4,626.0	4,558.8	4,448.9	4,394.3	16.0	14.0	-145.74	-484.0	-355.1	1,052.9	1,028.4	24.49	42.994	
4,673.6	4,605.3	4,511.6	4,455.8	16.3	14.3	-145.70	-493.3	-363.2	1,068.1	1,043.2	24.83	43.017	
4,700.0	4,631.2	4,546.9	4,490.5	16.4	14.4	-145.79	-498.0	-367.3	1,076.1	1,051.1	25.02	43.012	
4,724.4	4,655.1	4,579.6	4,522.8	16.4	14.5	-145.87	-502.2	-370.9	1,083.1	1,057.9	25.18	43.013	
4,800.0	4,729.5	4,682.5	4,624.6	16.7	14.8	-146.13	-513.4	-380.7	1,102.4	1,076.8	25.67	42.953	
4,822.8	4,752.1	4,714.0	4,655.8	16.7	14.8	-146.20	-516.2	-383.2	1,107.6	1,081.8	25.80	42.922	
4,900.0	4,828.4	4,821.5	4,762.8	17.0	15.1	-146.47	-524.1	-390.0	1,122.4	1,096.2	26.25	42.757	
4,921.2	4,849.5	4,851.4	4,792.6	17.0	15.1	-146.54	-525.7	-391.5	1,125.9	1,099.5	26.36	42.703	
5,000.0	4,927.8	4,962.8	4,903.9	17.2	15.3	-146.81	-529.8	-395.0	1,135.9	1,109.2	26.77	42.440	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,990.8	4,931.9	17.2	15.4	-146.88	-530.3	-395.5	1,137.8	1,110.9	26.86	42.364	
5,100.0	5,027.5	5,087.4	5,028.5	17.4	15.5	-147.12	-530.7	-395.8	1,143.1	1,115.9	27.18	42.051	
5,118.1	5,045.6	5,105.5	5,046.6	17.4	15.5	-147.16	-530.7	-395.8	1,144.0	1,116.7	27.25	41.987	
5,200.0	5,127.4	5,187.3	5,128.4	17.6	15.7	-147.28	-530.7	-395.8	1,146.7	1,119.2	27.52	41.667	
5,216.5	5,143.9	5,203.8	5,144.9	17.6	15.7	-147.29	-530.7	-395.8	1,147.0	1,119.5	27.57	41.601	
5,273.4	5,200.8	5,260.7	5,201.8	17.7	15.8	180.00	-530.7	-395.8	1,147.5	1,117.2	30.32	37.845	
5,300.0	5,227.4	5,287.3	5,228.4	17.7	15.8	180.00	-530.7	-395.8	1,147.5	1,117.1	30.40	37.748	
5,314.9	5,242.3	5,302.3	5,243.3	17.7	15.8	180.00	-530.7	-395.8	1,147.5	1,117.1	30.44	37.691	
5,400.0	5,327.4	5,387.3	5,328.4	17.8	15.9	180.00	-530.7	-395.8	1,147.5	1,116.8	30.71	37.371	
5,413.4	5,340.8	5,400.7	5,341.8	17.9	16.0	180.00	-530.7	-395.8	1,147.5	1,116.8	30.75	37.320	
5,500.0	5,427.4	5,487.3	5,428.4	18.0	16.1	180.00	-530.7	-395.8	1,147.5	1,116.5	31.02	36.996	
5,511.8	5,439.2	5,499.1	5,440.2	18.0	16.1	180.00	-530.7	-395.8	1,147.5	1,116.5	31.05	36.952	
5,600.0	5,527.4	5,587.3	5,528.4	18.1	16.2	180.00	-530.7	-395.8	1,147.5	1,116.2	31.33	36.626	
5,610.2	5,537.6	5,597.5	5,538.6	18.1	16.3	180.00	-530.7	-395.8	1,147.5	1,116.1	31.36	36.588	
5,700.0	5,627.4	5,687.3	5,628.4	18.3	16.4	180.00	-530.7	-395.8	1,147.5	1,115.9	31.65	36.259	
5,708.6	5,636.0	5,696.0	5,637.0	18.3	16.4	180.00	-530.7	-395.8	1,147.5	1,115.8	31.68	36.227	
5,800.0	5,727.4	5,787.3	5,728.4	18.4	16.5	180.00	-530.7	-395.8	1,147.5	1,115.5	31.97	35.895	
5,807.1	5,734.5	5,794.4	5,735.5	18.4	16.5	180.00	-530.7	-395.8	1,147.5	1,115.5	31.99	35.870	
5,900.0	5,827.4	5,887.3	5,828.4	18.6	16.7	180.00	-530.7	-395.8	1,147.5	1,115.2	32.29	35.536	
5,905.5	5,832.9	5,892.8	5,833.9	18.6	16.7	180.00	-530.7	-395.8	1,147.5	1,115.2	32.31	35.516	
6,000.0	5,927.4	5,987.3	5,928.4	18.7	16.8	180.00	-530.7	-395.8	1,147.5	1,114.9	32.62	35.180	
6,003.9	5,931.3	5,991.2	5,932.3	18.7	16.8	180.00	-530.7	-395.8	1,147.5	1,114.9	32.63	35.166	
6,100.0	6,027.4	6,087.3	6,028.4	18.9	17.0	180.00	-530.7	-395.8	1,147.5	1,114.6	32.95	34.828	
6,102.3	6,029.7	6,089.7	6,030.7	18.9	17.0	180.00	-530.7	-395.8	1,147.5	1,114.5	32.96	34.820	
6,200.0	6,127.4	6,187.3	6,128.4	19.0	17.2	180.00	-530.7	-395.8	1,147.5	1,114.2	33.28	34.481	
6,200.8	6,128.2	6,188.1	6,129.2	19.0	17.2	180.00	-530.7	-395.8	1,147.5	1,114.2	33.28	34.478	
6,243.2	6,170.5	6,230.5	6,171.5	19.1	17.2	179.99	-530.7	-395.7	1,147.5	1,114.1	33.42	34.333	
6,299.2	6,226.6	6,286.3	6,227.3	19.2	17.3	179.84	-530.7	-392.5	1,147.5	1,113.9	33.60	34.148	
6,301.4	6,228.8	6,288.5	6,229.5	19.2	17.3	179.83	-530.7	-392.3	1,147.5	1,113.9	33.61	34.141	
6,350.0	6,277.4	6,336.4	6,277.0	19.3	17.3	89.59	-530.7	-386.0	1,147.5	1,116.1	31.48	36.458	
6,397.6	6,324.7	6,383.1	6,322.8	19.3	17.3	89.36	-530.7	-376.8	1,147.6	1,116.0	31.53	36.391	
6,400.0	6,327.1	6,385.5	6,325.0	19.3	17.3	89.35	-530.7	-376.2	1,147.6	1,116.0	31.54	36.388	
6,450.0	6,376.3	6,434.2	6,372.0	19.3	17.3	89.11	-530.7	-363.3	1,147.6	1,116.1	31.56	36.360	
6,496.0	6,421.1	6,478.8	6,414.1	19.3	17.3	88.89	-530.7	-348.7	1,147.7	1,116.2	31.56	36.365	
6,500.0	6,424.9	6,482.6	6,417.7	19.3	17.3	88.88	-530.7	-347.4	1,147.7	1,116.2	31.56	36.366	
6,550.0	6,472.4	6,530.7	6,461.9	19.3	17.3	88.65	-530.7	-328.5	1,147.8	1,116.3	31.54	36.396	
6,594.5	6,513.8	6,573.3	6,499.9	19.3	17.3	88.45	-530.7	-309.3	1,147.9	1,116.4	31.51	36.431	
6,600.0	6,518.8	6,578.6	6,504.6	19.3	17.3	88.43	-530.7	-306.8	1,147.9	1,116.4	31.51	36.436	
6,650.0	6,563.8	6,626.1	6,545.4	19.3	17.2	88.22	-530.7	-282.5	1,148.1	1,116.6	31.48	36.470	
6,692.9	6,601.1	6,666.8	6,579.0	19.2	17.2	88.04	-530.7	-259.6	1,148.2	1,116.7	31.47	36.482	
6,700.0	6,607.1	6,673.5	6,584.4	19.2	17.2	88.01	-530.7	-255.6	1,148.2	1,116.7	31.47	36.482	
6,750.0	6,648.6	6,720.6	6,621.3	19.2	17.1	87.82	-530.7	-226.4	1,148.3	1,116.8	31.51	36.449	
6,791.3	6,681.4	6,759.3	6,650.2	19.1	17.1	87.67	-530.7	-200.6	1,148.5	1,116.9	31.57	36.373	
6,800.0	6,688.1	6,767.4	6,656.1	19.1	17.1	87.64	-530.7	-195.0	1,148.5	1,116.9	31.59	36.351	
6,850.0	6,725.3	6,814.1	6,688.6	19.1	17.1	87.46	-530.7	-161.5	1,148.6	1,116.9	31.76	36.165	
6,889.7	6,753.2	6,850.0	6,712.1	19.0	17.0	87.34	-530.7	-134.4	1,148.8	1,116.8	31.96	35.947	
6,900.0	6,760.1	6,860.6	6,718.8	19.0	17.0	87.30	-530.7	-126.1	1,148.8	1,116.8	32.03	35.871	
6,950.0	6,792.3	6,906.9	6,746.4	19.0	17.0	87.16	-530.7	-89.0	1,148.9	1,116.5	32.41	35.454	
6,988.2	6,815.1	6,942.2	6,765.9	18.9	17.0	87.05	-530.7	-59.6	1,149.0	1,116.2	32.80	35.037	
7,000.0	6,821.8	6,953.1	6,771.6	18.9	17.0	87.02	-530.7	-50.3	1,149.1	1,116.1	32.92	34.904	
7,050.0	6,848.3	7,000.0	6,794.6	18.9	17.1	86.90	-530.7	-9.4	1,149.2	1,115.6	33.59	34.213	
7,086.6	6,865.9	7,032.7	6,808.9	18.9	17.2	86.82	-530.7	20.0	1,149.3	1,115.1	34.18	33.620	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,045.0	6,814.0	18.9	17.2	86.79	-530.7	31.2	1,149.3	1,114.9	34.40	33.405	
7,150.0	6,892.3	7,090.8	6,831.1	18.8	17.5	86.70	-530.7	73.6	1,149.4	1,114.0	35.38	32.483	
7,185.0	6,904.7	7,122.8	6,841.5	18.8	17.9	86.64	-530.7	103.9	1,149.5	1,113.3	36.18	31.775	
7,200.0	6,909.5	7,136.5	6,845.5	18.9	18.0	86.62	-530.7	117.0	1,149.5	1,113.0	36.52	31.476	
7,250.0	6,923.4	7,182.1	6,857.1	19.3	18.6	86.56	-530.7	161.1	1,149.6	1,111.8	37.80	30.411	
7,283.4	6,930.8	7,212.6	6,863.2	19.8	19.1	86.52	-530.7	191.0	1,149.6	1,110.9	38.74	29.674	
7,300.0	6,933.9	7,227.7	6,865.8	20.0	19.3	86.51	-530.7	205.8	1,149.6	1,110.4	39.22	29.313	
7,350.0	6,940.9	7,273.2	6,871.6	20.8	20.1	86.48	-530.7	251.0	1,149.7	1,108.9	40.76	28.209	
7,381.9	6,943.6	7,300.0	6,873.7	21.4	20.6	86.47	-530.7	277.7	1,149.7	1,107.9	41.75	27.538	
7,400.0	6,944.5	7,318.7	6,874.6	21.7	20.9	86.46	-530.7	296.4	1,149.7	1,107.3	42.39	27.120	
7,432.4	6,945.0	7,350.2	6,875.0	22.3	21.5	86.46	-530.7	327.9	1,149.7	1,106.2	43.53	26.410	
7,442.0	6,944.9	7,357.5	6,874.9	22.5	21.6	86.46	-530.7	335.2	1,149.7	1,105.9	43.85	26.219	
7,480.3	6,944.6	7,395.9	6,874.5	23.2	22.4	86.45	-530.7	373.5	1,149.7	1,104.4	45.29	25.386	
7,500.0	6,944.4	7,415.6	6,874.3	23.6	22.8	86.45	-530.7	393.2	1,149.7	1,103.7	46.05	24.967	
7,578.7	6,943.7	7,494.3	6,873.4	25.2	24.4	86.44	-530.7	472.0	1,149.7	1,100.5	49.22	23.359	
7,600.0	6,943.6	7,515.6	6,873.2	25.6	24.8	86.44	-530.7	493.2	1,149.7	1,099.6	50.10	22.950	
7,677.1	6,942.9	7,592.7	6,872.4	27.3	26.5	86.43	-530.7	570.4	1,149.7	1,096.3	53.42	21.522	
7,700.0	6,942.7	7,615.6	6,872.2	27.8	27.0	86.43	-530.7	593.2	1,149.7	1,095.3	54.43	21.125	
7,775.6	6,942.1	7,691.1	6,871.4	29.5	28.8	86.42	-530.7	668.8	1,149.7	1,091.9	57.85	19.874	
7,800.0	6,941.9	7,715.6	6,871.1	30.1	29.3	86.42	-530.7	693.2	1,149.7	1,090.8	58.97	19.496	
7,874.0	6,941.3	7,789.6	6,870.4	31.8	31.1	86.41	-530.7	767.2	1,149.8	1,087.3	62.46	18.409	
7,900.0	6,941.1	7,815.6	6,870.1	32.4	31.7	86.41	-530.7	793.2	1,149.8	1,086.1	63.69	18.053	
7,972.4	6,940.4	7,888.0	6,869.3	34.2	33.5	86.40	-530.7	865.6	1,149.8	1,082.6	67.20	17.110	
8,000.0	6,940.2	7,915.6	6,869.0	34.9	34.2	86.40	-530.7	893.2	1,149.8	1,081.2	68.54	16.775	
8,070.8	6,939.6	7,986.4	6,868.3	36.6	35.9	86.39	-530.7	964.1	1,149.8	1,077.7	72.05	15.958	
8,100.0	6,939.4	8,015.6	6,868.0	37.3	36.7	86.39	-530.7	993.2	1,149.8	1,076.3	73.50	15.643	
8,169.3	6,938.8	8,084.8	6,867.3	39.1	38.4	86.38	-530.7	1,062.5	1,149.8	1,072.8	76.99	14.934	
8,200.0	6,938.5	8,115.6	6,866.9	39.8	39.2	86.38	-530.7	1,093.2	1,149.8	1,071.3	78.55	14.638	
8,267.7	6,938.0	8,183.3	6,866.2	41.6	41.0	86.37	-530.7	1,160.9	1,149.8	1,067.8	82.01	14.021	
8,300.0	6,937.7	8,215.6	6,865.9	42.4	41.8	86.37	-530.7	1,193.2	1,149.8	1,066.1	83.66	13.743	
8,366.1	6,937.2	8,281.7	6,865.2	44.1	43.5	86.36	-530.7	1,259.3	1,149.8	1,062.7	87.08	13.203	
8,400.0	6,936.9	8,315.6	6,864.9	45.0	44.4	86.36	-530.7	1,293.2	1,149.8	1,061.0	88.84	12.943	
8,464.5	6,936.3	8,380.1	6,864.2	46.6	46.1	86.35	-530.7	1,357.7	1,149.8	1,057.6	92.21	12.469	
8,500.0	6,936.0	8,415.6	6,863.8	47.6	47.0	86.35	-530.7	1,393.2	1,149.8	1,055.8	94.07	12.224	
8,563.0	6,935.5	8,478.5	6,863.1	49.2	48.7	86.34	-530.7	1,456.2	1,149.8	1,052.5	97.38	11.808	
8,600.0	6,935.2	8,515.6	6,862.8	50.2	49.7	86.34	-530.7	1,493.2	1,149.9	1,050.5	99.33	11.576	
8,661.4	6,934.7	8,577.0	6,862.1	51.8	51.3	86.33	-530.7	1,554.6	1,149.9	1,047.3	102.59	11.208	
8,700.0	6,934.4	8,615.6	6,861.7	52.8	52.3	86.33	-530.7	1,593.2	1,149.9	1,045.2	104.64	10.989	
8,759.8	6,933.9	8,675.4	6,861.1	54.4	53.9	86.32	-530.7	1,653.0	1,149.9	1,042.0	107.83	10.664	
8,800.0	6,933.5	8,715.6	6,860.7	55.5	55.0	86.32	-530.7	1,693.2	1,149.9	1,039.9	109.97	10.456	
8,858.2	6,933.0	8,773.8	6,860.1	57.1	56.6	86.31	-530.7	1,751.4	1,149.9	1,036.8	113.09	10.168	
8,900.0	6,932.7	8,815.6	6,859.6	58.2	57.7	86.31	-530.7	1,793.2	1,149.9	1,034.6	115.33	9.971	
8,956.7	6,932.2	8,872.2	6,859.0	59.7	59.2	86.30	-530.7	1,849.8	1,149.9	1,031.5	118.38	9.714	
9,000.0	6,931.8	8,915.6	6,858.6	60.9	60.4	86.30	-530.7	1,893.2	1,149.9	1,029.2	120.71	9.526	
9,055.1	6,931.4	8,970.7	6,858.0	62.4	61.9	86.29	-530.7	1,948.3	1,149.9	1,026.2	123.69	9.297	
9,100.0	6,931.0	9,015.6	6,857.5	63.6	63.1	86.29	-530.7	1,993.2	1,149.9	1,023.8	126.11	9.118	
9,153.5	6,930.6	9,069.1	6,857.0	65.0	64.6	86.28	-530.7	2,046.7	1,149.9	1,020.9	129.01	8.913	
9,200.0	6,930.2	9,115.6	6,856.5	66.3	65.8	86.28	-530.7	2,093.1	1,149.9	1,018.4	131.53	8.743	
9,251.9	6,929.7	9,167.5	6,855.9	67.7	67.2	86.27	-530.7	2,145.1	1,149.9	1,015.6	134.35	8.559	
9,300.0	6,929.3	9,215.6	6,855.4	69.0	68.5	86.27	-530.7	2,193.1	1,150.0	1,013.0	136.96	8.396	
9,350.4	6,928.9	9,265.9	6,854.9	70.4	69.9	86.26	-530.7	2,243.5	1,150.0	1,010.3	139.70	8.231	
9,400.0	6,928.5	9,315.6	6,854.4	71.7	71.3	86.25	-530.7	2,293.1	1,150.0	1,007.6	142.41	8.075	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,364.4	6,853.9	73.0	72.6	86.25	-530.7	2,341.9	1,150.0	1,004.9	145.07	7.927	
9,500.0	6,927.7	9,415.6	6,853.3	74.4	74.0	86.24	-530.7	2,393.1	1,150.0	1,002.1	147.87	7.777	
9,547.2	6,927.3	9,462.8	6,852.9	75.7	75.3	86.24	-530.7	2,440.3	1,150.0	999.5	150.45	7.644	
9,600.0	6,926.8	9,515.6	6,852.3	77.2	76.8	86.23	-530.7	2,493.1	1,150.0	996.7	153.33	7.500	
9,645.6	6,926.4	9,561.2	6,851.8	78.4	78.0	86.23	-530.7	2,538.8	1,150.0	994.2	155.84	7.380	
9,700.0	6,926.0	9,615.6	6,851.3	79.9	79.5	86.22	-530.7	2,593.1	1,150.0	991.2	158.81	7.241	
9,744.1	6,925.6	9,659.6	6,850.8	81.1	80.7	86.22	-530.7	2,637.2	1,150.0	988.8	161.23	7.133	
9,800.0	6,925.2	9,715.6	6,850.2	82.6	82.3	86.21	-530.7	2,693.1	1,150.0	985.7	164.30	7.000	
9,842.5	6,924.8	9,758.1	6,849.8	83.8	83.4	86.21	-530.7	2,735.6	1,150.0	983.4	166.63	6.902	
9,900.0	6,924.3	9,815.6	6,849.2	85.4	85.0	86.20	-530.7	2,793.1	1,150.0	980.2	169.79	6.773	
9,940.9	6,924.0	9,856.5	6,848.7	86.5	86.1	86.20	-530.7	2,834.0	1,150.0	978.0	172.04	6.685	
10,000.0	6,923.5	9,915.6	6,848.1	88.1	87.8	86.19	-530.7	2,893.1	1,150.1	974.8	175.29	6.561	
10,039.3	6,923.2	9,954.9	6,847.7	89.2	88.9	86.19	-530.7	2,932.4	1,150.1	972.6	177.46	6.481	
10,100.0	6,922.6	10,015.6	6,847.1	90.9	90.5	86.18	-530.7	2,993.1	1,150.1	969.3	180.80	6.361	
10,137.8	6,922.3	10,053.3	6,846.7	91.9	91.6	86.18	-530.7	3,030.9	1,150.1	967.2	182.88	6.289	
10,200.0	6,921.8	10,115.6	6,846.0	93.7	93.3	86.17	-530.7	3,093.1	1,150.1	963.8	186.32	6.173	
10,236.2	6,921.5	10,151.8	6,845.7	94.7	94.3	86.17	-530.7	3,129.3	1,150.1	961.8	188.31	6.107	
10,300.0	6,921.0	10,215.5	6,845.0	96.4	96.1	86.16	-530.7	3,193.1	1,150.1	958.3	191.83	5.995	
10,334.6	6,920.7	10,250.2	6,844.6	97.4	97.0	86.16	-530.7	3,227.7	1,150.1	956.4	193.75	5.936	
10,400.0	6,920.1	10,315.5	6,843.9	99.2	98.8	86.15	-530.7	3,293.1	1,150.1	952.8	197.36	5.828	
10,433.0	6,919.9	10,348.6	6,843.6	100.1	99.7	86.15	-530.7	3,326.1	1,150.1	950.9	199.18	5.774	
10,500.0	6,919.3	10,415.5	6,842.9	101.9	101.6	86.14	-530.7	3,393.1	1,150.1	947.2	202.88	5.669	
10,531.5	6,919.0	10,447.0	6,842.6	102.8	102.5	86.14	-530.7	3,424.5	1,150.1	945.5	204.63	5.621	
10,600.0	6,918.5	10,515.5	6,841.9	104.7	104.4	86.13	-530.7	3,493.1	1,150.1	941.7	208.42	5.518	
10,629.9	6,918.2	10,545.4	6,841.5	105.5	105.2	86.13	-530.7	3,523.0	1,150.1	940.1	210.07	5.475	
10,700.0	6,917.6	10,615.5	6,840.8	107.5	107.2	86.12	-530.7	3,593.1	1,150.2	936.2	213.95	5.376	
10,728.3	6,917.4	10,643.9	6,840.5	108.3	107.9	86.12	-530.7	3,621.4	1,150.2	934.6	215.52	5.337	
10,800.0	6,916.8	10,715.5	6,839.8	110.3	109.9	86.11	-530.7	3,693.1	1,150.2	930.7	219.49	5.240	
10,826.7	6,916.6	10,742.3	6,839.5	111.0	110.7	86.11	-530.7	3,719.8	1,150.2	929.2	220.97	5.205	
10,900.0	6,916.0	10,815.5	6,838.7	113.0	112.7	86.10	-530.7	3,793.0	1,150.2	925.2	225.03	5.111	
10,925.2	6,915.8	10,840.7	6,838.5	113.7	113.4	86.10	-530.7	3,818.2	1,150.2	923.8	226.43	5.080	
11,000.0	6,915.1	10,915.5	6,837.7	115.8	115.5	86.09	-530.7	3,893.0	1,150.2	919.6	230.58	4.988	
11,023.6	6,914.9	10,939.1	6,837.4	116.5	116.1	86.09	-530.7	3,916.6	1,150.2	918.3	231.88	4.960	
11,100.0	6,914.3	11,015.5	6,836.6	118.6	118.3	86.08	-530.7	3,993.0	1,150.2	914.1	236.12	4.871	
11,122.0	6,914.1	11,037.6	6,836.4	119.2	118.9	86.08	-530.7	4,015.1	1,150.2	912.9	237.34	4.846	
11,200.0	6,913.5	11,115.5	6,835.6	121.4	121.1	86.07	-530.7	4,093.0	1,150.2	908.6	241.67	4.759	
11,220.4	6,913.3	11,136.0	6,835.4	121.9	121.6	86.07	-530.7	4,113.5	1,150.2	907.4	242.81	4.737	
11,300.0	6,912.6	11,215.5	6,834.5	124.1	123.8	86.06	-530.7	4,193.0	1,150.2	903.0	247.22	4.653	
11,318.9	6,912.5	11,234.4	6,834.3	124.7	124.4	86.06	-530.7	4,211.9	1,150.2	902.0	248.27	4.633	
11,400.0	6,911.8	11,315.5	6,833.5	126.9	126.6	86.05	-530.7	4,293.0	1,150.3	897.5	252.78	4.550	
11,417.3	6,911.6	11,332.8	6,833.3	127.4	127.1	86.05	-530.7	4,310.3	1,150.3	896.5	253.74	4.533	
11,500.0	6,911.0	11,415.5	6,832.5	129.7	129.4	86.04	-530.7	4,393.0	1,150.3	891.9	258.33	4.453	
11,515.7	6,910.8	11,431.3	6,832.3	130.2	129.8	86.04	-530.7	4,408.7	1,150.3	891.1	259.21	4.438	
11,600.0	6,910.1	11,515.5	6,831.4	132.5	132.2	86.03	-530.7	4,493.0	1,150.3	886.4	263.89	4.359	
11,614.1	6,910.0	11,529.7	6,831.3	132.9	132.6	86.03	-530.7	4,507.2	1,150.3	885.6	264.68	4.346	
11,700.0	6,909.3	11,615.5	6,830.4	135.3	135.0	86.02	-530.7	4,593.0	1,150.3	880.9	269.45	4.269	
11,712.6	6,909.2	11,628.1	6,830.2	135.6	135.3	86.01	-530.7	4,605.6	1,150.3	880.2	270.15	4.258	
11,800.0	6,908.5	11,715.5	6,829.3	138.1	137.8	86.01	-530.7	4,693.0	1,150.3	875.3	275.01	4.183	
11,811.0	6,908.4	11,726.5	6,829.2	138.4	138.1	86.00	-530.7	4,704.0	1,150.3	874.7	275.63	4.174	
11,900.0	6,907.6	11,815.5	6,828.3	140.9	140.6	86.00	-530.7	4,793.0	1,150.3	869.8	280.58	4.100	
11,909.4	6,907.5	11,825.0	6,828.2	141.1	140.8	85.99	-530.7	4,802.4	1,150.3	869.2	281.10	4.092	
12,000.0	6,906.8	11,915.5	6,827.2	143.6	143.4	85.99	-530.7	4,893.0	1,150.4	864.2	286.14	4.020	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	11,923.4	6,827.2	143.9	143.6	85.98	-530.7	4,900.8	1,150.4	863.8	286.58	4.014	
12,100.0	6,905.9	12,015.5	6,826.2	146.4	146.1	85.97	-530.7	4,993.0	1,150.4	858.7	291.71	3.944	
12,106.3	6,905.9	12,021.8	6,826.1	146.6	146.3	85.97	-530.7	4,999.3	1,150.4	858.3	292.06	3.939	
12,200.0	6,905.1	12,115.5	6,825.2	149.2	148.9	85.96	-530.7	5,093.0	1,150.4	853.1	297.27	3.870	
12,204.7	6,905.1	12,120.2	6,825.1	149.4	149.1	85.96	-530.7	5,097.7	1,150.4	852.9	297.53	3.866	
12,300.0	6,904.3	12,215.5	6,824.1	152.0	151.7	85.95	-530.7	5,193.0	1,150.4	847.6	302.84	3.799	
12,303.1	6,904.3	12,218.7	6,824.1	152.1	151.8	85.95	-530.7	5,196.1	1,150.4	847.4	303.01	3.797	
12,400.0	6,903.4	12,315.5	6,823.1	154.8	154.5	85.94	-530.7	5,293.0	1,150.4	842.0	308.41	3.730	
12,401.5	6,903.4	12,317.1	6,823.1	154.8	154.6	85.94	-530.7	5,294.5	1,150.4	841.9	308.50	3.729	
12,500.0	6,902.6	12,415.5	6,822.0	157.6	157.3	85.93	-530.7	5,393.0	1,150.4	836.5	313.98	3.664	
12,598.4	6,901.8	12,513.9	6,821.0	160.3	160.1	85.92	-530.7	5,491.3	1,150.5	831.0	319.46	3.601	
12,600.0	6,901.8	12,515.5	6,821.0	160.4	160.1	85.92	-530.7	5,492.9	1,150.5	830.9	319.55	3.600	
12,696.8	6,901.0	12,612.4	6,820.0	163.1	162.8	85.91	-530.7	5,589.8	1,150.5	825.5	324.95	3.540	
12,700.0	6,900.9	12,615.5	6,819.9	163.2	162.9	85.91	-530.7	5,592.9	1,150.5	825.3	325.12	3.539	
12,795.2	6,900.1	12,710.8	6,818.9	165.8	165.6	85.90	-530.7	5,688.2	1,150.5	820.1	330.43	3.482	
12,800.0	6,900.1	12,715.5	6,818.9	166.0	165.7	85.90	-530.7	5,692.9	1,150.5	819.8	330.70	3.479	
12,893.7	6,899.3	12,809.2	6,817.9	168.6	168.3	85.89	-530.7	5,786.6	1,150.5	814.6	335.92	3.425	
12,900.0	6,899.3	12,815.5	6,817.9	168.8	168.5	85.89	-530.7	5,792.9	1,150.5	814.2	336.27	3.421	
12,992.1	6,898.5	12,907.6	6,816.9	171.3	171.1	85.88	-530.7	5,885.0	1,150.5	809.1	341.40	3.370	
13,000.0	6,898.4	12,915.5	6,816.8	171.6	171.3	85.88	-530.7	5,892.9	1,150.5	808.7	341.84	3.366	
13,090.5	6,897.7	13,006.1	6,815.9	174.1	173.8	85.87	-530.7	5,983.4	1,150.5	803.6	346.89	3.317	
13,100.0	6,897.6	13,015.5	6,815.8	174.4	174.1	85.87	-530.7	5,992.9	1,150.5	803.1	347.42	3.312	
13,188.9	6,896.9	13,104.5	6,814.8	176.8	176.6	85.86	-530.7	6,081.9	1,150.5	798.2	352.38	3.265	
13,200.0	6,896.8	13,115.5	6,814.7	177.2	176.9	85.86	-530.7	6,092.9	1,150.6	797.6	352.99	3.259	
13,287.4	6,896.0	13,202.9	6,813.8	179.6	179.3	85.85	-530.7	6,180.3	1,150.6	792.7	357.87	3.215	
13,300.0	6,895.9	13,215.5	6,813.7	180.0	179.7	85.85	-530.7	6,192.9	1,150.6	792.0	358.57	3.209	
13,385.8	6,895.2	13,301.3	6,812.8	182.4	182.1	85.84	-530.7	6,278.7	1,150.6	787.2	363.36	3.167	
13,400.0	6,895.1	13,315.5	6,812.6	182.7	182.5	85.84	-530.7	6,292.9	1,150.6	786.4	364.15	3.160	
13,484.2	6,894.4	13,399.8	6,811.8	185.1	184.8	85.83	-530.7	6,377.1	1,150.6	781.8	368.85	3.119	
13,500.0	6,894.3	13,415.5	6,811.6	185.5	185.3	85.83	-530.7	6,392.9	1,150.6	780.9	369.73	3.112	
13,582.6	6,893.6	13,498.2	6,810.7	187.9	187.6	85.82	-530.7	6,475.5	1,150.6	776.3	374.34	3.074	
13,600.0	6,893.4	13,515.5	6,810.6	188.3	188.1	85.82	-530.7	6,492.9	1,150.6	775.3	375.30	3.066	
13,681.1	6,892.8	13,596.6	6,809.7	190.6	190.4	85.81	-530.7	6,574.0	1,150.6	770.8	379.83	3.029	
13,700.0	6,892.6	13,615.5	6,809.5	191.1	190.9	85.81	-530.7	6,592.9	1,150.6	769.8	380.88	3.021	
13,779.5	6,891.9	13,695.0	6,808.7	193.4	193.1	85.80	-530.7	6,672.4	1,150.6	765.3	385.32	2.986	
13,800.0	6,891.8	13,715.5	6,808.5	193.9	193.7	85.80	-530.7	6,692.9	1,150.7	764.2	386.46	2.977	
13,877.9	6,891.1	13,793.5	6,807.7	196.1	195.9	85.79	-530.7	6,770.8	1,150.7	759.9	390.81	2.944	
13,900.0	6,890.9	13,815.5	6,807.4	196.7	196.5	85.79	-530.7	6,792.9	1,150.7	758.6	392.04	2.935	
13,976.3	6,890.3	13,891.9	6,806.6	198.9	198.6	85.78	-530.7	6,869.2	1,150.7	754.4	396.30	2.904	
14,000.0	6,890.1	13,915.5	6,806.4	199.5	199.3	85.78	-530.7	6,892.9	1,150.7	753.1	397.62	2.894	
14,074.8	6,889.5	13,990.3	6,805.6	201.6	201.4	85.77	-530.7	6,967.6	1,150.7	748.9	401.79	2.864	
14,100.0	6,889.3	14,015.5	6,805.4	202.3	202.1	85.77	-530.7	6,992.9	1,150.7	747.5	403.20	2.854	
14,173.2	6,888.7	14,088.7	6,804.6	204.4	204.1	85.76	-530.7	7,066.1	1,150.7	743.4	407.29	2.825	
14,200.0	6,888.4	14,115.5	6,804.3	205.1	204.9	85.76	-530.7	7,092.9	1,150.7	741.9	408.78	2.815	
14,271.6	6,887.8	14,187.2	6,803.6	207.1	206.9	85.75	-530.7	7,164.5	1,150.7	738.0	412.78	2.788	
14,300.0	6,887.6	14,215.5	6,803.3	207.9	207.7	85.75	-530.7	7,192.9	1,150.7	736.4	414.36	2.777	
14,370.0	6,887.0	14,285.6	6,802.5	209.9	209.6	85.74	-530.7	7,262.9	1,150.7	732.5	418.27	2.751	
14,400.0	6,886.8	14,315.5	6,802.2	210.7	210.5	85.74	-530.7	7,292.8	1,150.8	730.8	419.94	2.740	
14,468.5	6,886.2	14,384.0	6,801.5	212.6	212.4	85.73	-530.7	7,361.3	1,150.8	727.0	423.77	2.716	
14,500.0	6,885.9	14,415.5	6,801.2	213.5	213.3	85.73	-530.7	7,392.8	1,150.8	725.2	425.53	2.704	
14,566.9	6,885.4	14,482.4	6,800.5	215.4	215.2	85.72	-530.7	7,459.7	1,150.8	721.5	429.26	2.681	
14,600.0	6,885.1	14,515.5	6,800.1	216.3	216.1	85.72	-530.7	7,492.8	1,150.8	719.7	431.11	2.669	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-202 - ORIGINAL WELLBORE - PROPC												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	14,528.6	6,800.0	216.7	216.5	85.71	-530.7	7,505.8	1,150.8	719.0	431.83	2.665 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+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	-180.00	-47.4	0.0	47.4				
98.4	98.4	98.4	98.4	0.1	0.1	-180.00	-47.4	0.0	47.4	47.2	0.17	278.693	
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-47.4	0.0	47.4	47.2	0.17	273.648	
196.8	196.8	196.8	196.8	0.3	0.3	-180.00	-47.4	0.0	47.4	46.8	0.61	77.839	
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-47.4	0.0	47.4	46.7	0.62	76.068	
295.3	295.3	295.3	295.3	0.5	0.5	-180.00	-47.4	0.0	47.4	46.3	1.05	45.067	
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-47.4	0.0	47.4	46.3	1.07	44.174	
393.7	393.7	393.7	393.7	0.7	0.7	-180.00	-47.4	0.0	47.4	45.9	1.49	31.714	
400.0	400.0	400.0	400.0	0.8	0.8	-180.00	-47.4	0.0	47.4	45.8	1.52	31.124	
492.1	492.1	492.1	492.1	1.0	1.0	-180.00	-47.4	0.0	47.4	45.4	1.94	24.465	
500.0	500.0	500.0	500.0	1.0	1.0	-180.00	-47.4	0.0	47.4	45.4	1.97	24.026	
590.5	590.5	590.5	590.5	1.2	1.2	-180.00	-47.4	0.0	47.4	45.0	2.38	19.914	
600.0	600.0	600.0	600.0	1.2	1.2	-180.00	-47.4	0.0	47.4	44.9	2.42	19.564	
689.0	689.0	689.0	689.0	1.4	1.4	-180.00	-47.4	0.0	47.4	44.5	2.82	16.790	
700.0	700.0	700.0	700.0	1.4	1.4	-180.00	-47.4	0.0	47.4	44.5	2.87	16.500	
787.4	787.4	787.4	787.4	1.6	1.6	-180.00	-47.4	0.0	47.4	44.1	3.26	14.514	
800.0	800.0	800.0	800.0	1.7	1.7	-180.00	-47.4	0.0	47.4	44.0	3.32	14.266	
885.8	885.8	885.8	885.8	1.9	1.9	-180.00	-47.4	0.0	47.4	43.7	3.71	12.781	
900.0	900.0	900.0	900.0	1.9	1.9	-180.00	-47.4	0.0	47.4	43.6	3.77	12.565	
984.2	984.2	984.2	984.2	2.1	2.1	-180.00	-47.4	0.0	47.4	43.2	4.15	11.417	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-180.00	-47.4	0.0	47.4	43.1	4.22	11.226	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	-180.00	-47.4	0.0	47.4	42.8	4.59	10.317	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-180.00	-47.4	0.0	47.4	42.7	4.67	10.145	
1,150.0	1,150.0	1,150.0	1,150.0	2.4	2.4	-180.00	-47.4	0.0	47.4	42.5	4.89	9.679 CC, ES	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	-147.42	-47.4	0.0	47.5	42.5	5.03	9.439	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-147.59	-47.4	0.0	47.7	42.6	5.12	9.328	
1,279.5	1,279.5	1,279.5	1,279.5	2.7	2.7	-149.10	-47.4	0.0	49.8	44.4	5.47	9.113	
1,300.0	1,299.9	1,299.9	1,299.9	2.8	2.8	-149.67	-47.4	0.0	50.7	45.1	5.56	9.119	
1,377.9	1,377.7	1,377.7	1,377.7	3.0	3.0	-152.32	-47.4	0.0	55.2	49.3	5.91	9.348	
1,400.0	1,399.7	1,399.7	1,399.7	3.0	3.0	-153.17	-47.4	0.0	56.8	50.8	6.00	9.470	
1,476.4	1,475.7	1,475.8	1,475.8	3.2	3.2	-156.12	-47.4	-0.1	63.8	57.4	6.33	10.067	
1,500.0	1,499.1	1,499.3	1,499.3	3.2	3.2	-156.81	-47.4	-0.4	66.3	59.8	6.43	10.302	
1,574.8	1,573.2	1,573.9	1,573.9	3.4	3.4	-158.08	-47.4	-2.7	75.2	68.4	6.74	11.152	
1,600.0	1,598.2	1,599.0	1,599.0	3.5	3.4	-158.25	-47.3	-3.9	78.5	71.7	6.84	11.471	
1,673.2	1,670.3	1,671.9	1,671.7	3.7	3.6	-158.13	-47.3	-8.6	89.1	82.0	7.15	12.455	
1,700.0	1,696.6	1,698.5	1,698.2	3.8	3.6	-157.92	-47.3	-10.8	93.3	86.1	7.27	12.843	
1,749.9	1,745.5	1,748.0	1,747.4	3.9	3.7	-157.33	-47.3	-15.5	101.7	94.2	7.49	13.579	
1,771.6	1,766.8	1,769.6	1,768.9	4.0	3.8	-157.03	-47.3	-17.8	105.4	97.8	7.59	13.890	
1,800.0	1,794.5	1,797.7	1,796.8	4.1	3.9	-156.53	-47.3	-21.1	110.3	102.6	7.73	14.275	
1,870.1	1,863.1	1,867.1	1,865.6	4.3	4.0	-154.93	-47.3	-30.3	122.2	114.1	8.09	15.111	
1,900.0	1,892.3	1,896.7	1,894.9	4.4	4.1	-154.10	-47.3	-34.8	127.2	119.0	8.24	15.438	
1,968.5	1,959.4	1,964.4	1,961.6	4.7	4.3	-151.96	-47.2	-46.1	138.7	130.1	8.63	16.081	
2,000.0	1,990.2	1,995.5	1,992.2	4.8	4.4	-150.88	-47.2	-51.8	144.0	135.2	8.81	16.353	
2,066.9	2,055.6	2,061.3	2,056.7	5.1	4.6	-148.43	-47.2	-64.9	155.4	146.2	9.22	16.855	
2,100.0	2,088.0	2,093.7	2,088.4	5.2	4.7	-147.26	-47.2	-71.7	161.1	151.7	9.43	17.082	
2,165.3	2,151.9	2,157.8	2,151.0	5.4	4.9	-145.17	-47.1	-85.0	172.5	162.7	9.86	17.494	
2,200.0	2,185.8	2,191.7	2,184.3	5.6	5.0	-144.17	-47.1	-92.1	178.7	168.6	10.09	17.703	
2,263.8	2,248.2	2,254.2	2,245.4	5.8	5.2	-142.49	-47.1	-105.1	190.1	179.6	10.53	18.053	
2,300.0	2,283.6	2,289.7	2,280.1	6.0	5.4	-141.63	-47.0	-112.5	196.7	185.9	10.78	18.242	
2,362.2	2,344.5	2,350.7	2,339.8	6.2	5.6	-140.28	-47.0	-125.1	208.1	196.9	11.22	18.538	
2,400.0	2,381.4	2,387.8	2,376.0	6.4	5.7	-139.52	-47.0	-132.9	215.0	203.6	11.49	18.708	
2,460.6	2,440.7	2,447.2	2,434.1	6.6	5.9	-138.41	-47.0	-145.2	226.3	214.3	11.94	18.959	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,485.8	2,471.9	6.8	6.1	-137.75	-46.9	-153.2	233.6	221.4	12.22	19.113	
2,559.0	2,537.0	2,543.7	2,528.5	7.0	6.3	-136.83	-46.9	-165.3	244.7	232.0	12.66	19.326	
2,600.0	2,577.1	2,583.8	2,567.8	7.2	6.5	-136.23	-46.9	-173.6	252.4	239.4	12.96	19.466	
2,657.5	2,633.3	2,640.2	2,622.9	7.4	6.7	-135.46	-46.8	-185.3	263.2	249.8	13.40	19.648	
2,700.0	2,674.9	2,681.8	2,663.6	7.6	6.9	-134.93	-46.8	-194.0	271.3	257.6	13.72	19.776	
2,755.9	2,729.6	2,736.6	2,717.2	7.9	7.1	-134.28	-46.8	-205.4	281.9	267.8	14.14	19.932	
2,800.0	2,772.7	2,779.9	2,759.5	8.0	7.3	-133.79	-46.8	-214.4	290.3	275.8	14.48	20.048	
2,854.3	2,825.8	2,833.1	2,811.6	8.3	7.5	-133.24	-46.7	-225.5	300.7	285.8	14.90	20.183	
2,900.0	2,870.5	2,877.9	2,855.4	8.5	7.7	-132.80	-46.7	-234.8	309.4	294.2	15.25	20.290	
2,952.7	2,922.1	2,929.6	2,906.0	8.7	7.9	-132.32	-46.7	-245.5	319.5	303.9	15.66	20.406	
3,000.0	2,968.3	2,975.9	2,951.3	8.9	8.1	-131.92	-46.7	-255.2	328.6	312.6	16.03	20.504	
3,051.2	3,018.4	3,026.1	3,000.3	9.1	8.3	-131.51	-46.6	-265.6	338.5	322.0	16.43	20.605	
3,100.0	3,066.1	3,073.9	3,047.2	9.3	8.5	-131.14	-46.6	-275.6	347.9	331.1	16.81	20.697	
3,149.6	3,114.7	3,122.5	3,094.7	9.5	8.7	-130.78	-46.6	-285.7	357.5	340.3	17.20	20.784	
3,200.0	3,164.0	3,171.9	3,143.0	9.8	8.9	-130.44	-46.5	-296.0	367.2	349.6	17.60	20.869	
3,248.0	3,210.9	3,219.0	3,189.1	10.0	9.1	-130.12	-46.5	-305.7	376.5	358.5	17.98	20.946	
3,300.0	3,261.8	3,270.0	3,238.9	10.2	9.4	-129.81	-46.5	-316.3	386.6	368.2	18.39	21.025	
3,346.4	3,307.2	3,315.5	3,283.4	10.4	9.6	-129.53	-46.5	-325.8	395.6	376.8	18.76	21.092	
3,400.0	3,359.6	3,368.7	3,335.5	10.6	9.8	-129.24	-46.4	-336.8	406.0	386.8	19.17	21.173	
3,444.9	3,403.5	3,414.7	3,380.6	10.8	9.9	-129.08	-46.4	-345.8	414.5	395.0	19.50	21.253	
3,500.0	3,457.4	3,471.4	3,436.4	11.1	10.1	-129.02	-46.4	-355.7	424.7	404.8	19.88	21.364	
3,543.3	3,499.8	3,515.9	3,480.4	11.3	10.2	-129.08	-46.4	-362.8	432.5	412.3	20.17	21.444	
3,600.0	3,555.2	3,574.4	3,538.2	11.5	10.4	-129.29	-46.3	-371.1	442.4	421.9	20.53	21.545	
3,641.7	3,596.0	3,617.4	3,580.9	11.7	10.5	-129.53	-46.3	-376.4	449.5	428.7	20.79	21.615	
3,700.0	3,653.0	3,677.5	3,640.7	11.9	10.7	-129.98	-46.3	-382.8	459.1	437.9	21.14	21.713	
3,740.1	3,692.3	3,718.9	3,681.9	12.1	10.7	-130.37	-46.3	-386.4	465.5	444.2	21.38	21.779	
3,800.0	3,750.8	3,780.5	3,743.4	12.4	10.9	-131.05	-46.3	-390.7	474.9	453.2	21.70	21.880	
3,838.6	3,788.6	3,820.1	3,782.9	12.6	11.0	-131.56	-46.3	-392.8	480.8	458.9	21.91	21.948	
3,900.0	3,848.7	3,883.1	3,845.9	12.8	11.1	-132.47	-46.3	-395.0	490.0	467.8	22.21	22.061	
3,937.0	3,884.9	3,920.8	3,883.6	13.0	11.1	-133.08	-46.3	-395.6	495.4	473.0	22.38	22.133	
4,000.0	3,946.5	3,983.7	3,946.5	13.3	11.2	-134.16	-46.3	-395.8	504.6	481.9	22.66	22.266	
4,035.4	3,981.1	4,018.3	3,981.1	13.4	11.3	-134.74	-46.3	-395.8	509.8	487.0	22.82	22.341	
4,100.0	4,044.3	4,081.5	4,044.3	13.7	11.4	-135.78	-46.3	-395.8	519.4	496.3	23.10	22.481	
4,133.8	4,077.4	4,114.6	4,077.4	13.9	11.4	-136.31	-46.3	-395.8	524.5	501.3	23.25	22.557	
4,200.0	4,142.1	4,179.3	4,142.1	14.2	11.5	-137.32	-46.3	-395.8	534.7	511.1	23.54	22.710	
4,232.3	4,173.7	4,210.9	4,173.7	14.3	11.6	-137.80	-46.3	-395.8	539.7	516.0	23.68	22.786	
4,300.0	4,239.9	4,277.1	4,239.9	14.6	11.7	-138.78	-46.3	-395.8	550.3	526.3	23.98	22.951	
4,330.7	4,270.0	4,307.2	4,270.0	14.7	11.8	-139.21	-46.3	-395.8	555.1	531.0	24.11	23.027	
4,400.0	4,337.7	4,374.9	4,337.7	15.0	11.9	-140.15	-46.3	-395.8	566.2	541.8	24.40	23.202	
4,429.1	4,366.2	4,403.4	4,366.2	15.2	11.9	-140.54	-46.3	-395.8	570.9	546.4	24.53	23.276	
4,500.0	4,435.6	4,472.8	4,435.6	15.5	12.0	-141.45	-46.3	-395.8	582.5	557.6	24.83	23.460	
4,527.5	4,462.5	4,499.7	4,462.5	15.6	12.1	-141.79	-46.3	-395.8	587.0	562.1	24.94	23.532	
4,600.0	4,533.4	4,570.6	4,533.4	15.9	12.2	-142.68	-46.3	-395.8	599.0	573.8	25.25	23.723	
4,626.0	4,558.8	4,596.0	4,558.8	16.0	12.3	-142.99	-46.3	-395.8	603.3	578.0	25.36	23.792	
4,673.6	4,605.3	4,642.5	4,605.3	16.3	12.3	-143.54	-46.3	-395.8	611.3	585.8	25.56	23.919	
4,700.0	4,631.2	4,668.4	4,631.2	16.4	12.4	-143.89	-46.3	-395.8	615.7	590.0	25.67	23.986	
4,724.4	4,655.1	4,692.4	4,655.1	16.4	12.4	-144.19	-46.3	-395.8	619.6	593.8	25.76	24.052	
4,800.0	4,729.5	4,766.8	4,729.5	16.7	12.6	-145.03	-46.3	-395.8	630.6	604.5	26.04	24.213	
4,822.8	4,752.1	4,789.3	4,752.1	16.7	12.6	-145.25	-46.3	-395.8	633.6	607.5	26.12	24.254	
4,900.0	4,828.4	4,865.7	4,828.4	17.0	12.7	-145.92	-46.3	-395.8	642.7	616.3	26.40	24.345	
4,921.2	4,849.5	4,886.7	4,849.5	17.0	12.8	-146.07	-46.3	-395.8	645.0	618.5	26.47	24.363	
5,000.0	4,927.8	4,965.0	4,927.8	17.2	12.9	-146.57	-46.3	-395.8	652.1	625.4	26.74	24.384	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-212 - ORIGINAL WELLBORE - PROP												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,984.6	4,947.4	17.2	12.9	-146.68	-46.3	-395.8	653.6	626.8	26.81	24.382	
5,100.0	5,027.5	5,064.7	5,027.5	17.4	13.1	-147.02	-46.3	-395.8	658.7	631.6	27.07	24.330	
5,118.1	5,045.6	5,082.8	5,045.6	17.4	13.1	-147.08	-46.3	-395.8	659.5	632.4	27.13	24.313	
5,200.0	5,127.4	5,164.6	5,127.4	17.6	13.3	-147.26	-46.3	-395.8	662.3	634.9	27.38	24.188	
5,216.5	5,143.9	5,181.1	5,143.9	17.6	13.3	-147.28	-46.3	-395.8	662.6	635.2	27.43	24.157	
5,273.4	5,200.8	5,238.0	5,200.8	17.7	13.4	180.00	-46.3	-395.8	663.1	635.5	27.54	24.076	
5,300.0	5,227.4	5,264.6	5,227.4	17.7	13.5	180.00	-46.3	-395.8	663.1	635.4	27.63	23.994	
5,314.9	5,242.3	5,279.5	5,242.3	17.7	13.5	180.00	-46.3	-395.8	663.1	635.4	27.69	23.947	
5,400.0	5,327.4	5,364.6	5,327.4	17.8	13.6	180.00	-46.3	-395.8	663.1	635.1	28.00	23.682	
5,413.4	5,340.8	5,378.0	5,340.8	17.9	13.7	180.00	-46.3	-395.8	663.1	635.0	28.05	23.641	
5,500.0	5,427.4	5,464.6	5,427.4	18.0	13.8	180.00	-46.3	-395.8	663.1	634.7	28.36	23.377	
5,511.8	5,439.2	5,476.4	5,439.2	18.0	13.9	180.00	-46.3	-395.8	663.1	634.7	28.41	23.341	
5,600.0	5,527.4	5,564.6	5,527.4	18.1	14.0	180.00	-46.3	-395.8	663.1	634.3	28.73	23.078	
5,610.2	5,537.6	5,574.8	5,537.6	18.1	14.0	180.00	-46.3	-395.8	663.1	634.3	28.77	23.047	
5,700.0	5,627.4	5,664.6	5,627.4	18.3	14.2	180.00	-46.3	-395.8	663.1	634.0	29.10	22.784	
5,708.6	5,636.0	5,673.2	5,636.0	18.3	14.2	180.00	-46.3	-395.8	663.1	633.9	29.13	22.759	
5,800.0	5,727.4	5,764.6	5,727.4	18.4	14.4	180.00	-46.3	-395.8	663.1	633.6	29.47	22.497	
5,807.1	5,734.5	5,771.7	5,734.5	18.4	14.4	180.00	-46.3	-395.8	663.1	633.6	29.50	22.477	
5,900.0	5,827.4	5,864.6	5,827.4	18.6	14.6	180.00	-46.3	-395.8	663.1	633.2	29.85	22.215	
5,905.5	5,832.9	5,870.1	5,832.9	18.6	14.6	180.00	-46.3	-395.8	663.1	633.2	29.87	22.200	
6,000.0	5,927.4	5,964.6	5,927.4	18.7	14.8	180.00	-46.3	-395.8	663.1	632.8	30.22	21.939	
6,003.9	5,931.3	5,968.5	5,931.3	18.7	14.8	180.00	-46.3	-395.8	663.1	632.8	30.24	21.929	
6,100.0	6,027.4	6,064.6	6,027.4	18.9	15.0	180.00	-46.3	-395.8	663.1	632.5	30.60	21.669	
6,102.3	6,029.7	6,066.9	6,029.7	18.9	15.0	180.00	-46.3	-395.8	663.1	632.5	30.61	21.663	
6,200.0	6,127.4	6,164.6	6,127.4	19.0	15.2	180.00	-46.3	-395.8	663.1	632.1	30.98	21.404	
6,200.8	6,128.2	6,165.4	6,128.2	19.0	15.2	180.00	-46.3	-395.8	663.1	632.1	30.98	21.402	
6,259.8	6,187.2	6,224.4	6,187.2	19.1	15.3	180.00	-46.3	-395.8	663.1	631.9	31.21	21.248	
6,299.2	6,226.6	6,263.8	6,226.6	19.2	15.3	179.94	-46.3	-395.1	663.1	631.7	31.35	21.148	
6,301.4	6,228.8	6,266.0	6,228.8	19.2	15.3	179.93	-46.3	-394.9	663.1	631.7	31.36	21.142	
6,350.0	6,277.4	6,314.4	6,277.0	19.3	15.4	89.72	-46.3	-391.0	663.1	631.6	31.51	21.044	
6,397.6	6,324.7	6,361.7	6,323.7	19.3	15.4	89.52	-46.3	-383.9	663.1	631.5	31.58	20.998	
6,400.0	6,327.1	6,364.0	6,326.0	19.3	15.4	89.51	-46.3	-383.5	663.1	631.5	31.58	20.997	
6,450.0	6,376.3	6,413.5	6,374.3	19.3	15.5	89.31	-46.3	-372.7	663.1	631.5	31.62	20.973	
6,496.0	6,421.1	6,458.9	6,417.9	19.3	15.5	89.12	-46.3	-359.8	663.1	631.5	31.63	20.969	
6,500.0	6,424.9	6,462.8	6,421.6	19.3	15.5	89.11	-46.3	-358.6	663.1	631.5	31.63	20.969	
6,550.0	6,472.4	6,512.0	6,467.6	19.3	15.5	88.91	-46.3	-341.4	663.2	631.6	31.61	20.977	
6,594.5	6,513.8	6,555.6	6,507.4	19.3	15.5	88.74	-46.3	-323.5	663.2	631.6	31.60	20.989	
6,600.0	6,518.8	6,561.0	6,512.2	19.3	15.5	88.72	-46.3	-321.1	663.2	631.6	31.60	20.991	
6,650.0	6,563.8	6,609.8	6,555.2	19.3	15.5	88.53	-46.3	-297.9	663.3	631.7	31.58	21.001	
6,692.9	6,601.1	6,651.6	6,590.7	19.2	15.5	88.38	-46.3	-275.8	663.3	631.7	31.59	20.999	
6,700.0	6,607.1	6,658.6	6,596.4	19.2	15.5	88.35	-46.3	-271.9	663.3	631.7	31.59	20.997	
6,750.0	6,648.6	6,707.2	6,635.6	19.2	15.6	88.18	-46.3	-243.3	663.4	631.8	31.64	20.967	
6,791.3	6,681.4	6,747.2	6,666.5	19.1	15.6	88.05	-46.3	-217.7	663.4	631.7	31.72	20.914	
6,800.0	6,688.1	6,755.6	6,672.7	19.1	15.6	88.02	-46.3	-212.1	663.5	631.7	31.74	20.900	
6,850.0	6,725.3	6,804.0	6,707.6	19.1	15.7	87.87	-46.3	-178.6	663.5	631.6	31.93	20.781	
6,889.7	6,753.2	6,842.4	6,733.6	19.0	15.9	87.75	-46.3	-150.3	663.6	631.4	32.15	20.637	
6,900.0	6,760.1	6,852.2	6,740.0	19.0	15.9	87.73	-46.3	-142.8	663.6	631.4	32.21	20.599	
6,950.0	6,792.3	6,900.0	6,769.7	19.0	16.1	87.60	-46.3	-105.4	663.6	631.0	32.62	20.347	
6,988.2	6,815.1	6,937.1	6,790.9	18.9	16.4	87.50	-46.3	-75.0	663.7	630.7	33.03	20.091	
7,000.0	6,821.8	6,948.5	6,797.1	18.9	16.4	87.48	-46.3	-65.5	663.7	630.5	33.16	20.014	
7,050.0	6,848.3	6,996.4	6,821.6	18.9	16.8	87.37	-46.3	-24.2	663.8	629.9	33.86	19.605	
7,086.6	6,865.9	7,031.5	6,837.7	18.9	17.2	87.30	-46.3	6.9	663.8	629.3	34.48	19.252	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,044.4	6,843.3	18.9	17.3	87.27	-46.3	18.5	663.8	629.1	34.71	19.124	
7,150.0	6,892.3	7,092.2	6,862.0	18.8	17.8	87.19	-46.3	62.5	663.9	628.1	35.73	18.582	
7,185.0	6,904.7	7,125.7	6,873.3	18.8	18.2	87.14	-46.3	94.0	663.9	627.3	36.54	18.166	
7,200.0	6,909.5	7,140.0	6,877.7	18.9	18.4	87.12	-46.3	107.6	663.9	627.0	36.90	17.992	
7,250.0	6,923.4	7,187.7	6,890.3	19.3	19.1	87.07	-46.3	153.7	663.9	625.7	38.22	17.369	
7,283.4	6,930.8	7,219.7	6,897.1	19.8	19.6	87.04	-46.3	184.9	663.9	624.8	39.20	16.939	
7,300.0	6,933.9	7,235.5	6,899.9	20.0	19.8	87.02	-46.3	200.4	664.0	624.3	39.69	16.730	
7,350.0	6,940.9	7,283.2	6,906.3	20.8	20.6	86.99	-46.3	247.7	664.0	622.7	41.27	16.089	
7,381.9	6,943.6	7,313.5	6,908.7	21.4	21.2	86.98	-46.3	278.0	664.0	621.6	42.34	15.684	
7,400.0	6,944.5	7,330.8	6,909.6	21.7	21.5	86.98	-46.3	295.2	664.0	621.0	42.95	15.459	
7,432.4	6,945.0	7,361.7	6,910.0	22.3	22.0	86.98	-46.3	326.1	664.0	619.9	44.08	15.062	
7,432.7	6,945.0	7,362.0	6,910.0	22.3	22.0	86.98	-46.3	326.4	664.0	619.9	44.09	15.058	
7,480.3	6,944.6	7,409.5	6,909.4	23.2	23.0	86.97	-46.3	373.9	664.0	618.1	45.89	14.469	
7,500.0	6,944.4	7,429.2	6,909.2	23.6	23.4	86.96	-46.3	393.6	664.0	617.3	46.65	14.233	
7,578.7	6,943.7	7,507.9	6,908.3	25.2	24.9	86.94	-46.3	472.3	664.0	614.2	49.83	13.325	
7,600.0	6,943.6	7,529.2	6,908.1	25.6	25.4	86.94	-46.3	493.6	664.0	613.3	50.72	13.093	
7,677.1	6,942.9	7,606.4	6,907.2	27.3	27.1	86.92	-46.3	570.7	664.0	610.0	54.04	12.287	
7,700.0	6,942.7	7,629.2	6,907.0	27.8	27.6	86.91	-46.3	593.6	664.0	609.0	55.05	12.062	
7,775.6	6,942.1	7,704.8	6,906.1	29.5	29.3	86.90	-46.3	669.2	664.0	605.6	58.47	11.357	
7,800.0	6,941.9	7,729.2	6,905.9	30.1	29.9	86.89	-46.3	693.6	664.0	604.4	59.60	11.142	
7,874.0	6,941.3	7,803.2	6,905.0	31.8	31.6	86.87	-46.3	767.6	664.0	601.0	63.07	10.528	
7,900.0	6,941.1	7,829.2	6,904.8	32.4	32.3	86.87	-46.3	793.6	664.1	599.7	64.31	10.326	
7,972.4	6,940.4	7,901.6	6,903.9	34.2	34.0	86.85	-46.3	866.0	664.1	596.3	67.81	9.793	
8,000.0	6,940.2	7,929.2	6,903.6	34.9	34.7	86.84	-46.3	893.6	664.1	594.9	69.16	9.602	
8,070.8	6,939.6	8,000.1	6,902.8	36.6	36.5	86.83	-46.3	964.4	664.1	591.4	72.66	9.139	
8,100.0	6,939.4	8,029.2	6,902.5	37.3	37.2	86.82	-46.3	993.6	664.1	590.0	74.12	8.960	
8,169.3	6,938.8	8,098.5	6,901.8	39.1	39.0	86.80	-46.3	1,062.8	664.1	586.5	77.60	8.558	
8,200.0	6,938.5	8,129.2	6,901.4	39.8	39.7	86.79	-46.3	1,093.6	664.1	584.9	79.16	8.389	
8,267.7	6,938.0	8,196.9	6,900.7	41.6	41.5	86.78	-46.3	1,161.2	664.1	581.5	82.62	8.039	
8,300.0	6,937.7	8,229.2	6,900.3	42.4	42.3	86.77	-46.3	1,193.5	664.1	579.8	84.27	7.881	
8,366.1	6,937.2	8,295.3	6,899.6	44.1	44.0	86.75	-46.3	1,259.7	664.1	576.4	87.69	7.574	
8,400.0	6,936.9	8,329.2	6,899.2	45.0	44.9	86.75	-46.3	1,293.5	664.1	574.7	89.45	7.425	
8,464.5	6,936.3	8,393.8	6,898.5	46.6	46.6	86.73	-46.3	1,358.1	664.1	571.3	92.81	7.156	
8,500.0	6,936.0	8,429.2	6,898.1	47.6	47.5	86.72	-46.3	1,393.5	664.1	569.5	94.67	7.015	
8,563.0	6,935.5	8,492.2	6,897.4	49.2	49.2	86.71	-46.3	1,456.5	664.2	566.2	97.98	6.778	
8,600.0	6,935.2	8,529.2	6,896.9	50.2	50.2	86.70	-46.3	1,493.5	664.2	564.2	99.93	6.646	
8,661.4	6,934.7	8,590.6	6,896.3	51.8	51.8	86.68	-46.3	1,554.9	664.2	561.0	103.18	6.437	
8,700.0	6,934.4	8,629.2	6,895.8	52.8	52.8	86.67	-46.3	1,593.5	664.2	558.9	105.23	6.312	
8,759.8	6,933.9	8,689.0	6,895.2	54.4	54.4	86.66	-46.3	1,653.3	664.2	555.8	108.42	6.126	
8,800.0	6,933.5	8,729.2	6,894.7	55.5	55.5	86.65	-46.3	1,693.5	664.2	553.6	110.56	6.007	
8,858.2	6,933.0	8,787.5	6,894.1	57.1	57.1	86.64	-46.3	1,751.8	664.2	550.5	113.68	5.843	
8,900.0	6,932.7	8,829.2	6,893.6	58.2	58.2	86.63	-46.3	1,793.5	664.2	548.3	115.92	5.730	
8,956.7	6,932.2	8,885.9	6,893.0	59.7	59.7	86.61	-46.3	1,850.2	664.2	545.3	118.96	5.583	
9,000.0	6,931.8	8,929.2	6,892.5	60.9	60.9	86.60	-46.3	1,893.5	664.2	542.9	121.30	5.476	
9,055.1	6,931.4	8,984.3	6,891.9	62.4	62.4	86.59	-46.3	1,948.6	664.2	540.0	124.27	5.345	
9,100.0	6,931.0	9,029.2	6,891.4	63.6	63.6	86.58	-46.3	1,993.5	664.2	537.5	126.69	5.243	
9,153.5	6,930.6	9,082.7	6,890.8	65.0	65.1	86.57	-46.3	2,047.0	664.3	534.7	129.59	5.126	
9,200.0	6,930.2	9,129.2	6,890.2	66.3	66.3	86.55	-46.3	2,093.5	664.3	532.2	132.11	5.028	
9,251.9	6,929.7	9,181.2	6,889.7	67.7	67.7	86.54	-46.3	2,145.4	664.3	529.3	134.93	4.923	
9,300.0	6,929.3	9,229.2	6,889.1	69.0	69.1	86.53	-46.3	2,193.5	664.3	526.7	137.54	4.830	
9,350.4	6,928.9	9,279.6	6,888.6	70.4	70.4	86.52	-46.3	2,243.9	664.3	524.0	140.28	4.735	
9,400.0	6,928.5	9,329.2	6,888.0	71.7	71.8	86.51	-46.3	2,293.5	664.3	521.3	142.98	4.646	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,378.0	6,887.5	73.0	73.1	86.49	-46.3	2,342.3	664.3	518.7	145.64	4.561	
9,500.0	6,927.7	9,429.2	6,886.9	74.4	74.5	86.48	-46.3	2,393.5	664.3	515.9	148.44	4.475	
9,547.2	6,927.3	9,476.4	6,886.4	75.7	75.8	86.47	-46.3	2,440.7	664.3	513.3	151.02	4.399	
9,600.0	6,926.8	9,529.2	6,885.8	77.2	77.3	86.46	-46.3	2,493.5	664.3	510.4	153.90	4.317	
9,645.6	6,926.4	9,574.9	6,885.3	78.4	78.5	86.45	-46.3	2,539.1	664.3	507.9	156.40	4.248	
9,700.0	6,926.0	9,629.2	6,884.7	79.9	80.0	86.43	-46.3	2,593.5	664.3	505.0	159.38	4.168	
9,744.1	6,925.6	9,673.3	6,884.2	81.1	81.2	86.42	-46.3	2,637.5	664.4	502.6	161.79	4.106	
9,800.0	6,925.2	9,729.2	6,883.6	82.6	82.8	86.41	-46.3	2,693.4	664.4	499.5	164.86	4.030	
9,842.5	6,924.8	9,771.7	6,883.1	83.8	83.9	86.40	-46.3	2,735.9	664.4	497.2	167.19	3.974	
9,900.0	6,924.3	9,829.2	6,882.4	85.4	85.5	86.39	-46.3	2,793.4	664.4	494.0	170.35	3.900	
9,940.9	6,924.0	9,870.1	6,882.0	86.5	86.7	86.38	-46.3	2,834.4	664.4	491.8	172.60	3.849	
10,000.0	6,923.5	9,929.2	6,881.3	88.1	88.3	86.36	-46.3	2,893.4	664.4	488.5	175.85	3.778	
10,039.3	6,923.2	9,968.6	6,880.9	89.2	89.4	86.35	-46.3	2,932.8	664.4	486.4	178.01	3.732	
10,100.0	6,922.6	10,029.2	6,880.2	90.9	91.0	86.34	-46.3	2,993.4	664.4	483.1	181.35	3.664	
10,137.8	6,922.3	10,067.0	6,879.8	91.9	92.1	86.33	-46.3	3,031.2	664.4	481.0	183.43	3.622	
10,200.0	6,921.8	10,129.2	6,879.1	93.7	93.8	86.31	-46.3	3,093.4	664.4	477.6	186.86	3.556	
10,236.2	6,921.5	10,165.4	6,878.7	94.7	94.8	86.31	-46.3	3,129.6	664.4	475.6	188.86	3.518	
10,300.0	6,921.0	10,229.2	6,878.0	96.4	96.6	86.29	-46.3	3,193.4	664.4	472.1	192.38	3.454	
10,334.6	6,920.7	10,263.8	6,877.6	97.4	97.5	86.28	-46.3	3,228.0	664.5	470.2	194.29	3.420	
10,400.0	6,920.1	10,329.2	6,876.9	99.2	99.3	86.27	-46.3	3,293.4	664.5	466.6	197.90	3.358	
10,433.0	6,919.9	10,362.3	6,876.5	100.1	100.3	86.26	-46.3	3,326.5	664.5	464.8	199.72	3.327	
10,500.0	6,919.3	10,429.2	6,875.8	101.9	102.1	86.24	-46.3	3,393.4	664.5	461.1	203.42	3.267	
10,531.5	6,919.0	10,460.7	6,875.4	102.8	103.0	86.23	-46.3	3,424.9	664.5	459.3	205.16	3.239	
10,600.0	6,918.5	10,529.2	6,874.6	104.7	104.9	86.22	-46.3	3,493.4	664.5	455.6	208.95	3.180	
10,629.9	6,918.2	10,559.1	6,874.3	105.5	105.7	86.21	-46.3	3,523.3	664.5	453.9	210.60	3.155	
10,700.0	6,917.6	10,629.2	6,873.5	107.5	107.7	86.19	-46.3	3,593.4	664.5	450.0	214.48	3.098	
10,728.3	6,917.4	10,657.5	6,873.2	108.3	108.5	86.19	-46.2	3,621.7	664.5	448.5	216.04	3.076	
10,800.0	6,916.8	10,729.2	6,872.4	110.3	110.4	86.17	-46.2	3,693.4	664.5	444.5	220.01	3.020	
10,826.7	6,916.6	10,756.0	6,872.1	111.0	111.2	86.16	-46.2	3,720.1	664.5	443.1	221.49	3.000	
10,900.0	6,916.0	10,829.2	6,871.3	113.0	113.2	86.15	-46.2	3,793.4	664.6	439.0	225.55	2.946	
10,925.2	6,915.8	10,854.4	6,871.0	113.7	113.9	86.14	-46.2	3,818.5	664.6	437.6	226.94	2.928	
11,000.0	6,915.1	10,929.2	6,870.2	115.8	116.0	86.12	-46.2	3,893.4	664.6	433.5	231.09	2.876	
11,023.6	6,914.9	10,952.8	6,869.9	116.5	116.7	86.12	-46.2	3,917.0	664.6	432.2	232.40	2.860	
11,100.0	6,914.3	11,029.2	6,869.1	118.6	118.8	86.10	-46.2	3,993.4	664.6	428.0	236.63	2.809	
11,122.0	6,914.1	11,051.2	6,868.8	119.2	119.4	86.09	-46.2	4,015.4	664.6	426.7	237.85	2.794	
11,200.0	6,913.5	11,129.2	6,868.0	121.4	121.6	86.07	-46.2	4,093.4	664.6	422.4	242.17	2.744	
11,220.4	6,913.3	11,149.6	6,867.7	121.9	122.1	86.07	-46.2	4,113.8	664.6	421.3	243.31	2.732	
11,300.0	6,912.6	11,229.2	6,866.8	124.1	124.4	86.05	-46.2	4,193.4	664.6	416.9	247.72	2.683	
11,318.9	6,912.5	11,248.1	6,866.6	124.7	124.9	86.05	-46.2	4,212.2	664.6	415.9	248.77	2.672	
11,400.0	6,911.8	11,329.2	6,865.7	126.9	127.1	86.03	-46.2	4,293.3	664.7	411.4	253.27	2.624	
11,417.3	6,911.6	11,346.5	6,865.5	127.4	127.6	86.02	-46.2	4,310.6	664.7	410.4	254.23	2.614	
11,500.0	6,911.0	11,429.2	6,864.6	129.7	129.9	86.00	-46.2	4,393.3	664.7	405.9	258.82	2.568	
11,515.7	6,910.8	11,444.9	6,864.4	130.2	130.4	86.00	-46.2	4,409.1	664.7	405.0	259.69	2.559	
11,600.0	6,910.1	11,529.2	6,863.5	132.5	132.7	85.98	-46.2	4,493.3	664.7	400.3	264.37	2.514	
11,614.1	6,910.0	11,543.3	6,863.3	132.9	133.1	85.98	-46.2	4,507.5	664.7	399.5	265.16	2.507	
11,700.0	6,909.3	11,629.2	6,862.4	135.3	135.5	85.95	-46.2	4,593.3	664.7	394.8	269.93	2.463	
11,712.6	6,909.2	11,641.8	6,862.3	135.6	135.8	85.95	-46.2	4,605.9	664.7	394.1	270.63	2.456	
11,800.0	6,908.5	11,729.2	6,861.3	138.1	138.3	85.93	-46.2	4,693.3	664.7	389.2	275.48	2.413	
11,811.0	6,908.4	11,740.2	6,861.2	138.4	138.6	85.93	-46.2	4,704.3	664.7	388.6	276.09	2.408	
11,900.0	6,907.6	11,829.2	6,860.2	140.9	141.1	85.91	-46.2	4,793.3	664.7	383.7	281.04	2.365	
11,909.4	6,907.5	11,838.6	6,860.1	141.1	141.3	85.90	-46.2	4,802.7	664.8	383.2	281.56	2.361	
12,000.0	6,906.8	11,929.2	6,859.1	143.6	143.9	85.88	-46.2	4,893.3	664.8	378.2	286.60	2.320	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	11,937.0	6,859.0	143.9	144.1	85.88	-46.2	4,901.2	664.8	377.7	287.03	2.316	
12,100.0	6,905.9	12,029.2	6,857.9	146.4	146.7	85.86	-46.2	4,993.3	664.8	372.6	292.15	2.275	
12,106.3	6,905.9	12,035.5	6,857.9	146.6	146.8	85.86	-46.2	4,999.6	664.8	372.3	292.50	2.273	
12,200.0	6,905.1	12,129.2	6,856.8	149.2	149.5	85.83	-46.2	5,093.3	664.8	367.1	297.71	2.233	
12,204.7	6,905.1	12,133.9	6,856.8	149.4	149.6	85.83	-46.2	5,098.0	664.8	366.8	297.98	2.231	
12,300.0	6,904.3	12,229.2	6,855.7	152.0	152.2	85.81	-46.2	5,193.3	664.8	361.6	303.28	2.192	
12,303.1	6,904.3	12,232.3	6,855.7	152.1	152.3	85.81	-46.2	5,196.4	664.8	361.4	303.45	2.191	
12,400.0	6,903.4	12,329.2	6,854.6	154.8	155.0	85.79	-46.2	5,293.3	664.8	356.0	308.84	2.153	
12,401.5	6,903.4	12,330.7	6,854.6	154.8	155.1	85.79	-46.2	5,294.8	664.8	355.9	308.92	2.152	
12,500.0	6,902.6	12,429.2	6,853.5	157.6	157.8	85.76	-46.2	5,393.3	664.9	350.5	314.40	2.115	
12,598.4	6,901.8	12,527.6	6,852.4	160.3	160.6	85.74	-46.2	5,491.7	664.9	345.0	319.87	2.079	
12,600.0	6,901.8	12,529.2	6,852.4	160.4	160.6	85.74	-46.2	5,493.3	664.9	344.9	319.96	2.078	
12,696.8	6,901.0	12,626.0	6,851.3	163.1	163.3	85.72	-46.2	5,590.1	664.9	339.6	325.35	2.044	
12,700.0	6,900.9	12,629.2	6,851.3	163.2	163.4	85.72	-46.2	5,593.3	664.9	339.4	325.53	2.043	
12,795.2	6,900.1	12,724.4	6,850.2	165.8	166.1	85.69	-46.2	5,688.5	664.9	334.1	330.83	2.010	
12,800.0	6,900.1	12,729.2	6,850.2	166.0	166.2	85.69	-46.2	5,693.3	664.9	333.8	331.09	2.008	
12,893.7	6,899.3	12,822.9	6,849.1	168.6	168.8	85.67	-46.2	5,786.9	664.9	328.6	336.31	1.977	
12,900.0	6,899.3	12,829.2	6,849.0	168.8	169.0	85.67	-46.2	5,793.2	665.0	328.3	336.66	1.975	
12,992.1	6,898.5	12,921.3	6,848.0	171.3	171.6	85.65	-46.2	5,885.3	665.0	323.2	341.78	1.946	
13,000.0	6,898.4	12,929.2	6,847.9	171.6	171.8	85.64	-46.2	5,893.2	665.0	322.7	342.22	1.943	
13,090.5	6,897.7	13,019.7	6,846.9	174.1	174.3	85.62	-46.2	5,983.8	665.0	317.7	347.26	1.915	
13,100.0	6,897.6	13,029.2	6,846.8	174.4	174.6	85.62	-46.2	5,993.2	665.0	317.2	347.79	1.912	
13,188.9	6,896.9	13,118.1	6,845.8	176.8	177.1	85.60	-46.2	6,082.2	665.0	312.3	352.74	1.885	
13,200.0	6,896.8	13,129.2	6,845.7	177.2	177.4	85.60	-46.2	6,093.2	665.0	311.7	353.36	1.882	
13,287.4	6,896.0	13,216.6	6,844.7	179.6	179.9	85.57	-46.2	6,180.6	665.0	306.8	358.22	1.856	
13,300.0	6,895.9	13,229.2	6,844.6	180.0	180.2	85.57	-46.2	6,193.2	665.0	306.1	358.92	1.853	
13,385.8	6,895.2	13,315.0	6,843.6	182.4	182.6	85.55	-46.2	6,279.0	665.1	301.4	363.70	1.829	
13,400.0	6,895.1	13,329.2	6,843.5	182.7	183.0	85.55	-46.2	6,293.2	665.1	300.6	364.49	1.825	
13,484.2	6,894.4	13,413.4	6,842.5	185.1	185.4	85.53	-46.2	6,377.4	665.1	295.9	369.18	1.801	
13,500.0	6,894.3	13,429.2	6,842.4	185.5	185.8	85.52	-46.2	6,393.2	665.1	295.0	370.06	1.797	
13,582.6	6,893.6	13,511.8	6,841.5	187.9	188.1	85.50	-46.2	6,475.9	665.1	290.4	374.66	1.775	
13,600.0	6,893.4	13,529.2	6,841.3	188.3	188.6	85.50	-46.2	6,493.2	665.1	289.5	375.63	1.771	
13,681.1	6,892.8	13,610.3	6,840.4	190.6	190.9	85.48	-46.2	6,574.3	665.1	285.0	380.14	1.750	
13,700.0	6,892.6	13,629.2	6,840.2	191.1	191.4	85.48	-46.2	6,593.2	665.1	283.9	381.19	1.745	
13,779.5	6,891.9	13,708.7	6,839.3	193.4	193.6	85.46	-46.2	6,672.7	665.1	279.5	385.62	1.725	
13,800.0	6,891.8	13,729.2	6,839.0	193.9	194.2	85.45	-46.2	6,693.2	665.1	278.4	386.76	1.720	
13,877.9	6,891.1	13,807.1	6,838.2	196.1	196.4	85.43	-46.2	6,771.1	665.2	274.1	391.10	1.701	
13,900.0	6,890.9	13,829.2	6,837.9	196.7	197.0	85.43	-46.2	6,793.2	665.2	272.8	392.33	1.695	
13,976.3	6,890.3	13,905.5	6,837.1	198.9	199.1	85.41	-46.2	6,869.5	665.2	268.6	396.58	1.677	
14,000.0	6,890.1	13,929.2	6,836.8	199.5	199.8	85.40	-46.2	6,893.2	665.2	267.3	397.90	1.672	
14,074.8	6,889.5	14,004.0	6,836.0	201.6	201.9	85.39	-46.2	6,967.9	665.2	263.1	402.06	1.654	
14,100.0	6,889.3	14,029.2	6,835.7	202.3	202.6	85.38	-46.2	6,993.2	665.2	261.7	403.47	1.649	
14,173.2	6,888.7	14,102.4	6,834.9	204.4	204.6	85.36	-46.2	7,066.4	665.2	257.7	407.55	1.632	
14,200.0	6,888.4	14,129.2	6,834.6	205.1	205.4	85.36	-46.2	7,093.2	665.2	256.2	409.04	1.626	
14,271.6	6,887.8	14,200.8	6,833.8	207.1	207.4	85.34	-46.2	7,164.8	665.2	252.2	413.03	1.611	
14,300.0	6,887.6	14,229.2	6,833.5	207.9	208.2	85.33	-46.2	7,193.2	665.2	250.6	414.61	1.605	
14,370.0	6,887.0	14,299.2	6,832.7	209.9	210.2	85.32	-46.2	7,263.2	665.3	246.8	418.51	1.590	
14,400.0	6,886.8	14,329.2	6,832.4	210.7	211.0	85.31	-46.2	7,293.2	665.3	245.1	420.18	1.583	
14,468.5	6,886.2	14,397.7	6,831.6	212.6	212.9	85.29	-46.2	7,361.6	665.3	241.3	423.99	1.569	
14,500.0	6,885.9	14,429.2	6,831.3	213.5	213.8	85.29	-46.2	7,393.1	665.3	239.5	425.75	1.563	
14,566.9	6,885.4	14,496.1	6,830.5	215.4	215.7	85.27	-46.2	7,460.0	665.3	235.8	429.47	1.549	
14,600.0	6,885.1	14,529.2	6,830.2	216.3	216.6	85.26	-46.2	7,493.1	665.3	234.0	431.32	1.543	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-212 - ORIGINAL WELLBORE - PROPC												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	
14,613.0	6,885.0	14,542.2	6,830.0	216.7	217.0	85.26	-46.2	7,506.2	665.3	233.3	432.04	1.540 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-105.6	0.0	105.6				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-105.6	0.0	105.6	105.5	0.17	618.549	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-105.6	0.0	105.6	105.5	0.18	602.618	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-105.6	0.0	105.6	105.0	0.61	173.001	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-105.6	0.0	105.6	105.0	0.62	169.080	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-105.6	0.0	105.6	104.6	1.05	100.319	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-105.6	0.0	105.6	104.6	1.07	98.335	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-105.6	0.0	105.6	104.2	1.50	70.641	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-105.6	0.0	105.6	104.1	1.52	69.328	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-105.6	0.0	105.6	103.7	1.94	54.514	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-105.6	0.0	105.6	103.7	1.97	53.536	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-105.6	0.0	105.6	103.3	2.38	44.381	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-105.6	0.0	105.6	103.2	2.42	43.603	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-105.6	0.0	105.6	102.8	2.82	37.425	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-105.6	0.0	105.6	102.8	2.87	36.780	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-105.6	0.0	105.6	102.4	3.27	32.354	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-105.6	0.0	105.6	102.3	3.32	31.803	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-105.6	0.0	105.6	101.9	3.71	28.493	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-105.6	0.0	105.6	101.9	3.77	28.012	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-105.6	0.0	105.6	101.5	4.15	25.456	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-105.6	0.0	105.6	101.4	4.22	25.029	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-105.6	0.0	105.6	101.1	4.59	23.004	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-105.6	0.0	105.6	101.0	4.67	22.620	
1,150.0	1,150.0	1,151.0	1,151.0	2.4	2.4	-180.00	-105.6	0.0	105.6	100.8	4.90	21.581 CC, ES	
1,181.1	1,181.1	1,182.1	1,182.1	2.5	2.5	-147.36	-105.6	0.0	105.8	100.8	5.03	21.013	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-147.44	-105.6	0.0	106.0	100.9	5.12	20.711	
1,279.5	1,279.5	1,280.5	1,280.5	2.7	2.7	-148.12	-105.6	0.0	108.1	102.7	5.47	19.758	
1,300.0	1,299.9	1,300.9	1,300.9	2.8	2.8	-148.39	-105.6	0.0	109.0	103.4	5.56	19.589	
1,377.9	1,377.7	1,377.7	1,377.7	3.0	3.0	-149.66	-105.8	-0.1	113.5	107.6	5.90	19.243	
1,400.0	1,399.7	1,398.9	1,398.9	3.0	3.0	-150.02	-106.0	-0.2	115.4	109.4	5.99	19.263	
1,476.4	1,475.7	1,472.0	1,472.0	3.2	3.1	-151.20	-108.0	-1.0	124.1	117.8	6.29	19.739	
1,500.0	1,499.1	1,494.5	1,494.5	3.2	3.2	-151.52	-109.0	-1.4	127.5	121.1	6.38	19.992	
1,574.8	1,573.2	1,565.2	1,565.0	3.4	3.3	-152.43	-113.1	-3.2	140.5	133.8	6.67	21.051	
1,600.0	1,598.2	1,588.9	1,588.6	3.5	3.3	-152.69	-114.8	-4.0	145.6	138.9	6.77	21.501	
1,673.2	1,670.3	1,656.9	1,656.3	3.7	3.5	-153.30	-120.7	-6.5	162.7	155.6	7.07	23.006	
1,700.0	1,696.6	1,681.5	1,680.7	3.8	3.5	-153.48	-123.2	-7.6	169.7	162.5	7.18	23.637	
1,749.9	1,745.5	1,726.9	1,725.8	3.9	3.6	-153.75	-128.4	-9.8	183.8	176.4	7.38	24.894	
1,771.6	1,766.8	1,746.5	1,745.3	4.0	3.7	-153.90	-130.8	-10.9	190.3	182.8	7.48	25.450	
1,800.0	1,794.5	1,772.0	1,770.5	4.1	3.7	-154.04	-134.1	-12.3	199.0	191.4	7.60	26.177	
1,870.1	1,863.1	1,834.5	1,832.2	4.3	3.9	-154.21	-143.2	-16.3	221.4	213.4	7.92	27.957	
1,900.0	1,892.3	1,861.0	1,858.3	4.4	3.9	-154.21	-147.3	-18.1	231.3	223.2	8.05	28.722	
1,968.5	1,959.4	1,920.9	1,917.2	4.7	4.1	-154.11	-157.7	-22.5	254.8	246.5	8.37	30.445	
2,000.0	1,990.2	1,948.2	1,943.9	4.8	4.2	-154.02	-162.8	-24.7	266.1	257.5	8.52	31.234	
2,066.9	2,055.6	2,005.7	2,000.0	5.1	4.3	-153.76	-174.2	-29.7	290.7	281.8	8.84	32.895	
2,100.0	2,088.0	2,033.8	2,027.3	5.2	4.4	-153.61	-180.2	-32.3	303.2	294.2	9.00	33.692	
2,165.3	2,151.9	2,094.1	2,085.9	5.4	4.6	-153.28	-193.2	-38.0	328.3	319.0	9.33	35.197	
2,200.0	2,185.8	2,126.1	2,117.0	5.6	4.8	-153.13	-200.2	-41.0	341.6	332.1	9.50	35.948	
2,263.8	2,248.2	2,185.0	2,174.2	5.8	5.0	-152.87	-212.9	-46.5	366.1	356.3	9.83	37.246	
2,300.0	2,283.6	2,218.4	2,206.7	6.0	5.1	-152.74	-220.2	-49.6	380.0	370.0	10.02	37.940	
2,362.2	2,344.5	2,275.8	2,262.5	6.2	5.3	-152.54	-232.6	-55.0	403.9	393.6	10.34	39.046	
2,400.0	2,381.4	2,310.7	2,296.4	6.4	5.5	-152.43	-240.2	-58.3	418.4	407.9	10.54	39.692	
2,460.6	2,440.7	2,366.7	2,350.8	6.6	5.7	-152.27	-252.3	-63.6	441.7	430.9	10.87	40.652	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,403.0	2,386.1	6.8	5.8	-152.17	-260.2	-67.0	456.8	445.8	11.08	41.247	
2,559.0	2,537.0	2,457.5	2,439.0	7.0	6.1	-152.03	-272.0	-72.1	479.5	468.1	11.40	42.077	
2,600.0	2,577.1	2,495.3	2,475.8	7.2	6.2	-151.95	-280.2	-75.7	495.3	483.7	11.62	42.626	
2,657.5	2,633.3	2,548.4	2,527.3	7.4	6.5	-151.84	-291.7	-80.6	517.4	505.4	11.94	43.347	
2,700.0	2,674.9	2,587.6	2,565.5	7.6	6.6	-151.76	-300.2	-84.3	533.7	521.5	12.17	43.857	
2,755.9	2,729.6	2,639.2	2,615.6	7.9	6.9	-151.67	-311.4	-89.2	555.2	542.7	12.48	44.485	
2,800.0	2,772.7	2,679.9	2,655.2	8.0	7.1	-151.60	-320.3	-93.0	572.1	559.4	12.73	44.958	
2,854.3	2,825.8	2,730.1	2,703.9	8.3	7.3	-151.52	-331.1	-97.7	593.0	580.0	13.03	45.509	
2,900.0	2,870.5	2,772.2	2,744.9	8.5	7.5	-151.45	-340.3	-101.7	610.6	597.3	13.29	45.949	
2,952.7	2,922.1	2,820.9	2,792.2	8.7	7.7	-151.39	-350.8	-106.3	630.8	617.3	13.59	46.432	
3,000.0	2,968.3	2,864.5	2,834.5	8.9	7.9	-151.33	-360.3	-110.4	649.0	635.2	13.86	46.843	
3,051.2	3,018.4	2,911.8	2,880.4	9.1	8.1	-151.27	-370.5	-114.8	668.7	654.5	14.15	47.268	
3,100.0	3,066.1	2,956.9	2,924.2	9.3	8.3	-151.22	-380.3	-119.0	687.5	673.0	14.43	47.653	
3,149.6	3,114.7	3,002.6	2,968.7	9.5	8.5	-151.17	-390.2	-123.3	706.5	691.8	14.71	48.027	
3,200.0	3,164.0	3,049.2	3,013.9	9.8	8.8	-151.12	-400.3	-127.7	725.9	710.9	15.00	48.388	
3,248.0	3,210.9	3,093.5	3,057.0	10.0	9.0	-151.07	-409.9	-131.9	744.4	729.1	15.28	48.719	
3,300.0	3,261.8	3,141.5	3,103.6	10.2	9.2	-151.03	-420.3	-136.4	764.3	748.8	15.58	49.059	
3,346.4	3,307.2	3,184.3	3,145.3	10.4	9.4	-150.99	-429.6	-140.4	782.2	766.4	15.85	49.351	
3,400.0	3,359.6	3,233.8	3,193.3	10.6	9.6	-150.95	-440.3	-145.0	802.8	786.6	16.16	49.672	
3,444.9	3,403.5	3,275.2	3,233.6	10.8	9.8	-150.91	-449.3	-148.9	820.0	803.6	16.42	49.930	
3,500.0	3,457.4	3,326.1	3,283.0	11.1	10.1	-150.87	-460.4	-153.7	841.2	824.5	16.75	50.235	
3,543.3	3,499.8	3,366.1	3,321.9	11.3	10.3	-150.84	-469.0	-157.5	857.9	840.9	17.00	50.464	
3,600.0	3,555.2	3,418.4	3,372.7	11.5	10.5	-150.81	-480.4	-162.4	879.7	862.4	17.33	50.752	
3,641.7	3,596.0	3,456.9	3,410.1	11.7	10.7	-150.78	-488.7	-166.0	895.7	878.2	17.58	50.955	
3,700.0	3,653.0	3,510.7	3,462.4	11.9	11.0	-150.74	-500.4	-171.1	918.1	900.2	17.92	51.229	
3,740.1	3,692.3	3,547.8	3,498.4	12.1	11.1	-150.72	-508.4	-174.5	933.6	915.4	18.16	51.409	
3,800.0	3,750.8	3,603.0	3,552.1	12.4	11.4	-150.69	-520.4	-179.7	956.6	938.1	18.51	51.670	
3,838.6	3,788.6	3,638.6	3,586.7	12.6	11.6	-150.67	-528.1	-183.1	971.4	952.7	18.74	51.830	
3,900.0	3,848.7	3,695.3	3,641.8	12.8	11.9	-150.63	-540.4	-188.4	995.1	975.9	19.11	52.078	
3,937.0	3,884.9	3,729.5	3,675.0	13.0	12.0	-150.62	-547.8	-191.6	1,009.3	990.0	19.33	52.221	
4,000.0	3,946.5	3,787.6	3,731.5	13.3	12.3	-150.59	-560.4	-197.1	1,033.5	1,013.8	19.70	52.457	
4,035.4	3,981.1	3,820.3	3,763.3	13.4	12.5	-150.57	-567.5	-200.2	1,047.1	1,027.2	19.91	52.585	
4,100.0	4,044.3	3,879.9	3,821.2	13.7	12.8	-150.54	-580.4	-205.8	1,072.0	1,051.7	20.30	52.810	
4,133.8	4,077.4	3,911.2	3,851.5	13.9	12.9	-150.53	-587.2	-208.7	1,085.0	1,064.5	20.50	52.924	
4,200.0	4,142.1	3,972.2	3,910.9	14.2	13.2	-150.50	-600.4	-214.4	1,110.4	1,089.5	20.90	53.139	
4,232.3	4,173.7	4,002.0	3,939.8	14.3	13.4	-150.49	-606.9	-217.2	1,122.8	1,101.7	21.09	53.241	
4,300.0	4,239.9	4,064.5	4,000.6	14.6	13.7	-150.46	-620.5	-223.1	1,148.9	1,127.4	21.50	53.447	
4,330.7	4,270.0	4,092.9	4,028.1	14.7	13.8	-150.45	-626.6	-225.8	1,160.7	1,139.0	21.68	53.537	
4,400.0	4,337.7	4,156.9	4,090.3	15.0	14.1	-150.42	-640.5	-231.8	1,187.3	1,165.2	22.10	53.735	
4,429.1	4,366.2	4,183.7	4,116.4	15.2	14.2	-150.41	-646.3	-234.3	1,198.5	1,176.3	22.27	53.815	
4,500.0	4,435.6	4,249.2	4,180.0	15.5	14.6	-150.39	-660.5	-240.5	1,225.8	1,203.1	22.70	54.004	
4,527.5	4,462.5	4,274.6	4,204.7	15.6	14.7	-150.38	-666.0	-242.8	1,236.4	1,213.5	22.86	54.076	
4,600.0	4,533.4	4,341.5	4,269.6	15.9	15.0	-150.36	-680.5	-249.1	1,264.2	1,240.9	23.30	54.258	
4,626.0	4,558.8	4,365.4	4,292.9	16.0	15.1	-150.35	-685.7	-251.4	1,274.2	1,250.8	23.46	54.321	
4,673.6	4,605.3	4,409.4	4,335.6	16.3	15.4	-150.34	-695.2	-255.5	1,292.5	1,268.8	23.74	54.435	
4,700.0	4,631.2	4,433.8	4,359.4	16.4	15.5	-150.43	-700.5	-257.8	1,302.6	1,278.7	23.92	54.449	
4,724.4	4,655.1	4,456.4	4,381.4	16.4	15.6	-150.51	-705.4	-259.9	1,311.7	1,287.6	24.08	54.483	
4,800.0	4,729.5	4,527.0	4,449.9	16.7	15.9	-150.73	-720.7	-266.6	1,338.9	1,314.3	24.55	54.545	
4,822.8	4,752.1	4,548.4	4,470.7	16.7	16.1	-150.78	-725.4	-268.6	1,346.8	1,322.1	24.68	54.561	
4,900.0	4,828.4	4,621.1	4,541.4	17.0	16.4	-150.91	-741.1	-275.4	1,372.4	1,347.2	25.14	54.579	
4,921.2	4,849.5	4,641.3	4,561.0	17.0	16.5	-150.94	-745.5	-277.3	1,379.1	1,353.8	25.27	54.582	
5,000.0	4,927.8	4,716.2	4,633.8	17.2	16.9	-151.00	-761.7	-284.3	1,402.9	1,377.2	25.71	54.561	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,735.0	4,652.0	17.2	17.0	-151.00	-765.8	-286.1	1,408.6	1,382.8	25.82	54.555	
5,100.0	5,027.5	4,812.0	4,726.9	17.4	17.4	-150.99	-782.5	-293.3	1,430.6	1,404.4	26.25	54.500	
5,118.1	5,045.6	4,829.5	4,743.8	17.4	17.5	-150.98	-786.3	-295.0	1,435.3	1,409.0	26.34	54.488	
5,200.0	5,127.4	4,908.5	4,820.7	17.6	17.8	-150.89	-803.4	-302.4	1,455.4	1,428.6	26.75	54.403	
5,216.5	5,143.9	4,924.5	4,836.2	17.6	17.9	-150.87	-806.9	-303.9	1,459.2	1,432.4	26.83	54.386	
5,273.4	5,200.8	4,979.7	4,889.8	17.7	18.2	176.54	-818.9	-309.1	1,471.7	1,438.2	33.54	43.877	
5,300.0	5,227.4	5,005.6	4,914.9	17.7	18.3	176.65	-824.5	-311.5	1,477.4	1,443.7	33.70	43.841	
5,314.9	5,242.3	5,020.1	4,929.1	17.7	18.4	176.71	-827.6	-312.9	1,480.6	1,446.8	33.79	43.818	
5,400.0	5,327.4	5,102.7	5,009.4	17.8	18.8	177.06	-845.6	-320.7	1,498.6	1,464.3	34.30	43.692	
5,413.4	5,340.8	5,115.7	5,022.0	17.9	18.9	177.11	-848.4	-321.9	1,501.5	1,467.1	34.38	43.672	
5,500.0	5,427.4	5,199.9	5,103.8	18.0	19.3	177.45	-866.6	-329.8	1,520.0	1,485.1	34.91	43.546	
5,511.8	5,439.2	5,211.4	5,114.9	18.0	19.4	177.50	-869.1	-330.9	1,522.5	1,487.5	34.98	43.528	
5,600.0	5,527.4	5,297.1	5,198.2	18.1	19.8	177.83	-887.7	-338.9	1,541.3	1,505.8	35.51	43.401	
5,610.2	5,537.6	5,307.0	5,207.9	18.1	19.8	177.87	-889.8	-339.8	1,543.5	1,508.0	35.58	43.387	
5,700.0	5,627.4	5,394.3	5,292.6	18.3	20.3	178.21	-908.8	-348.0	1,562.8	1,526.7	36.13	43.259	
5,708.6	5,636.0	5,402.7	5,300.8	18.3	20.3	178.24	-910.6	-348.8	1,564.7	1,528.5	36.18	43.247	
5,800.0	5,727.4	5,491.4	5,387.0	18.4	20.8	178.57	-929.8	-357.2	1,584.3	1,547.6	36.74	43.120	
5,807.1	5,734.5	5,498.3	5,393.7	18.4	20.8	178.59	-931.3	-357.8	1,585.8	1,549.1	36.79	43.110	
5,900.0	5,827.4	5,619.5	5,511.6	18.6	21.3	179.02	-957.0	-369.0	1,605.6	1,568.2	37.45	42.875	
5,905.5	5,832.9	5,630.5	5,522.4	18.6	21.4	179.06	-959.2	-369.9	1,606.7	1,569.2	37.49	42.853	
6,000.0	5,927.4	5,822.6	5,711.3	18.7	22.0	179.56	-990.8	-383.6	1,622.2	1,584.0	38.21	42.458	
6,003.9	5,931.3	5,830.6	5,719.3	18.7	22.0	179.58	-991.8	-384.0	1,622.7	1,584.5	38.23	42.442	
6,100.0	6,027.4	6,030.0	5,917.4	18.9	22.4	179.89	-1,011.7	-392.7	1,632.3	1,593.5	38.83	42.033	
6,102.3	6,029.7	6,034.9	5,922.3	18.9	22.4	179.89	-1,012.0	-392.8	1,632.5	1,593.6	38.85	42.023	
6,200.0	6,127.4	6,239.6	6,126.8	19.0	22.7	180.00	-1,018.9	-395.8	1,635.7	1,596.4	39.32	41.603	
6,200.8	6,128.2	6,241.2	6,128.5	19.0	22.7	180.00	-1,018.9	-395.8	1,635.7	1,596.4	39.32	41.599	
6,299.2	6,226.6	6,340.2	6,227.3	19.2	22.8	179.89	-1,018.9	-392.6	1,635.8	1,596.2	39.60	41.311	
6,301.4	6,228.8	6,342.3	6,229.5	19.2	22.8	179.88	-1,018.9	-392.4	1,635.8	1,596.2	39.60	41.305	
6,350.0	6,277.4	6,390.3	6,277.0	19.3	22.9	89.72	-1,018.9	-386.1	1,635.8	1,603.3	32.44	50.422	
6,397.6	6,324.7	6,437.1	6,322.8	19.3	22.9	89.56	-1,018.9	-377.0	1,635.8	1,603.3	32.50	50.327	
6,400.0	6,327.1	6,439.4	6,325.1	19.3	22.9	89.55	-1,018.9	-376.5	1,635.8	1,603.3	32.51	50.323	
6,450.0	6,376.3	6,488.1	6,372.1	19.3	22.9	89.39	-1,018.9	-363.6	1,635.8	1,603.3	32.53	50.283	
6,496.0	6,421.1	6,532.7	6,414.3	19.3	22.9	89.24	-1,018.9	-349.1	1,635.9	1,603.4	32.53	50.292	
6,500.0	6,424.9	6,536.6	6,417.8	19.3	22.9	89.22	-1,018.9	-347.7	1,635.9	1,603.4	32.53	50.294	
6,550.0	6,472.4	6,584.7	6,462.1	19.3	22.8	89.07	-1,018.9	-328.9	1,636.0	1,603.5	32.50	50.341	
6,594.5	6,513.8	6,627.3	6,500.2	19.3	22.8	88.93	-1,018.9	-309.7	1,636.0	1,603.6	32.46	50.401	
6,600.0	6,518.8	6,632.6	6,504.8	19.3	22.8	88.92	-1,018.9	-307.2	1,636.0	1,603.6	32.46	50.409	
6,650.0	6,563.8	6,680.2	6,545.8	19.3	22.8	88.77	-1,018.9	-282.9	1,636.1	1,603.7	32.41	50.476	
6,692.9	6,601.1	6,720.9	6,579.4	19.2	22.7	88.65	-1,018.9	-260.0	1,636.2	1,603.8	32.39	50.515	
6,700.0	6,607.1	6,727.6	6,584.8	19.2	22.7	88.63	-1,018.9	-256.1	1,636.2	1,603.8	32.39	50.520	
6,750.0	6,648.6	6,774.7	6,621.8	19.2	22.7	88.49	-1,018.9	-226.9	1,636.3	1,603.9	32.39	50.513	
6,791.3	6,681.4	6,813.5	6,650.7	19.1	22.6	88.39	-1,018.9	-201.1	1,636.4	1,604.0	32.44	50.445	
6,800.0	6,688.1	6,821.6	6,656.6	19.1	22.6	88.37	-1,018.9	-195.4	1,636.4	1,604.0	32.45	50.424	
6,850.0	6,725.3	6,868.3	6,689.2	19.1	22.5	88.25	-1,018.9	-162.0	1,636.5	1,603.9	32.58	50.224	
6,889.7	6,753.2	6,905.4	6,713.4	19.0	22.5	88.16	-1,018.9	-134.0	1,636.6	1,603.8	32.76	49.964	
6,900.0	6,760.1	6,914.9	6,719.4	19.0	22.5	88.14	-1,018.9	-126.6	1,636.6	1,603.8	32.81	49.882	
6,950.0	6,792.3	6,961.2	6,747.1	19.0	22.4	88.03	-1,018.9	-89.4	1,636.7	1,603.6	33.15	49.376	
6,988.2	6,815.1	6,996.5	6,766.6	18.9	22.4	87.96	-1,018.9	-60.0	1,636.8	1,603.3	33.50	48.863	
7,000.0	6,821.8	7,007.5	6,772.3	18.9	22.4	87.94	-1,018.9	-50.7	1,636.8	1,603.2	33.62	48.689	
7,050.0	6,848.3	7,053.5	6,794.9	18.9	22.4	87.85	-1,018.9	-10.6	1,636.9	1,602.7	34.23	47.818	
7,086.6	6,865.9	7,087.2	6,809.8	18.9	22.3	87.80	-1,018.9	19.6	1,637.0	1,602.2	34.80	47.045	
7,100.0	6,871.9	7,100.0	6,815.1	18.9	22.3	87.78	-1,018.9	31.3	1,637.0	1,602.0	35.01	46.762	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	7,145.3	6,832.0	18.8	22.3	87.72	-1,018.9	73.3	1,637.1	1,601.1	35.94	45.552	
7,185.0	6,904.7	7,177.4	6,842.4	18.8	22.3	87.68	-1,018.9	103.7	1,637.1	1,600.4	36.70	44.608	
7,200.0	6,909.5	7,191.1	6,846.4	18.9	22.3	87.66	-1,018.9	116.7	1,637.1	1,600.1	37.03	44.209	
7,250.0	6,923.4	7,236.8	6,858.0	19.3	22.3	87.62	-1,018.9	160.9	1,637.2	1,598.9	38.28	42.773	
7,283.4	6,930.8	7,267.3	6,864.2	19.8	22.4	87.59	-1,018.9	190.8	1,637.2	1,598.0	39.19	41.772	
7,300.0	6,933.9	7,282.4	6,866.8	20.0	22.4	87.58	-1,018.9	205.7	1,637.2	1,597.5	39.66	41.283	
7,350.0	6,940.9	7,328.0	6,872.6	20.8	22.6	87.56	-1,018.9	250.9	1,637.2	1,596.1	41.16	39.773	
7,381.9	6,943.6	7,357.0	6,874.8	21.4	22.7	87.55	-1,018.9	279.9	1,637.2	1,595.1	42.18	38.813	
7,400.0	6,944.5	7,373.5	6,875.6	21.7	22.9	87.55	-1,018.9	296.3	1,637.2	1,594.5	42.78	38.275	
7,432.4	6,945.0	7,403.4	6,876.0	22.3	23.2	87.55	-1,018.9	326.2	1,637.2	1,593.4	43.87	37.318	
7,480.3	6,944.6	7,451.3	6,875.8	23.2	23.8	87.56	-1,018.9	374.1	1,637.2	1,591.6	45.66	35.855	
7,500.0	6,944.4	7,471.0	6,875.8	23.6	24.1	87.56	-1,018.9	393.8	1,637.2	1,590.8	46.40	35.286	
7,578.7	6,943.7	7,549.7	6,875.6	25.2	25.5	87.58	-1,018.9	472.5	1,637.2	1,587.7	49.55	33.044	
7,600.0	6,943.6	7,571.0	6,875.5	25.6	25.9	87.58	-1,018.9	493.8	1,637.2	1,586.8	50.41	32.478	
7,677.1	6,942.9	7,648.1	6,875.3	27.3	27.5	87.60	-1,018.9	570.9	1,637.2	1,583.5	53.71	30.480	
7,700.0	6,942.7	7,671.0	6,875.2	27.8	28.0	87.60	-1,018.9	593.8	1,637.2	1,582.5	54.70	29.928	
7,775.6	6,942.1	7,746.5	6,875.0	29.5	29.6	87.62	-1,018.9	669.4	1,637.2	1,579.1	58.11	28.176	
7,800.0	6,941.9	7,771.0	6,875.0	30.1	30.2	87.62	-1,018.9	693.8	1,637.2	1,577.9	59.22	27.648	
7,874.0	6,941.3	7,845.0	6,874.8	31.8	31.9	87.64	-1,018.9	767.8	1,637.1	1,574.5	62.68	26.120	
7,900.0	6,941.1	7,871.0	6,874.7	32.4	32.5	87.64	-1,018.9	793.8	1,637.1	1,573.2	63.90	25.619	
7,972.4	6,940.4	7,943.4	6,874.5	34.2	34.2	87.66	-1,018.9	866.2	1,637.1	1,569.7	67.39	24.292	
8,000.0	6,940.2	7,971.0	6,874.4	34.9	34.9	87.66	-1,018.9	893.8	1,637.1	1,568.4	68.73	23.820	
8,070.8	6,939.6	8,041.8	6,874.2	36.6	36.6	87.67	-1,018.9	964.6	1,637.1	1,564.9	72.22	22.667	
8,100.0	6,939.4	8,071.0	6,874.1	37.3	37.3	87.68	-1,018.9	993.8	1,637.1	1,563.4	73.67	22.222	
8,169.3	6,938.8	8,140.2	6,873.9	39.1	39.0	87.69	-1,018.9	1,063.1	1,637.1	1,559.9	77.15	21.219	
8,200.0	6,938.5	8,171.0	6,873.8	39.8	39.8	87.70	-1,018.9	1,093.8	1,637.1	1,558.4	78.70	20.802	
8,267.7	6,938.0	8,238.7	6,873.7	41.6	41.5	87.71	-1,018.9	1,161.5	1,637.1	1,554.9	82.15	19.927	
8,300.0	6,937.7	8,271.0	6,873.6	42.4	42.3	87.72	-1,018.9	1,193.8	1,637.0	1,553.2	83.80	19.534	
8,366.1	6,937.2	8,337.1	6,873.4	44.1	44.0	87.73	-1,018.9	1,259.9	1,637.0	1,549.8	87.22	18.769	
8,400.0	6,936.9	8,371.0	6,873.3	45.0	44.9	87.74	-1,018.9	1,293.8	1,637.0	1,548.1	88.97	18.400	
8,464.5	6,936.3	8,435.5	6,873.1	46.6	46.5	87.75	-1,018.9	1,358.3	1,637.0	1,544.7	92.34	17.729	
8,500.0	6,936.0	8,471.0	6,873.0	47.6	47.5	87.76	-1,018.9	1,393.8	1,637.0	1,542.8	94.19	17.380	
8,563.0	6,935.5	8,533.9	6,872.8	49.2	49.1	87.77	-1,018.9	1,456.7	1,637.0	1,539.5	97.50	16.789	
8,600.0	6,935.2	8,571.0	6,872.7	50.2	50.1	87.78	-1,018.9	1,493.8	1,637.0	1,537.5	99.45	16.460	
8,661.4	6,934.7	8,632.4	6,872.6	51.8	51.7	87.79	-1,018.9	1,555.2	1,637.0	1,534.3	102.70	15.939	
8,700.0	6,934.4	8,670.9	6,872.4	52.8	52.7	87.80	-1,018.9	1,593.8	1,637.0	1,532.2	104.75	15.627	
8,759.8	6,933.9	8,730.8	6,872.3	54.4	54.3	87.81	-1,018.9	1,653.6	1,636.9	1,529.0	107.94	15.166	
8,800.0	6,933.5	8,770.9	6,872.2	55.5	55.4	87.82	-1,018.9	1,693.8	1,636.9	1,526.9	110.08	14.870	
8,858.2	6,933.0	8,829.2	6,872.0	57.1	56.9	87.83	-1,018.9	1,752.0	1,636.9	1,523.7	113.20	14.460	
8,900.0	6,932.7	8,870.9	6,871.9	58.2	58.0	87.84	-1,018.9	1,793.8	1,636.9	1,521.5	115.44	14.180	
8,956.7	6,932.2	8,927.6	6,871.7	59.7	59.5	87.85	-1,018.9	1,850.4	1,636.9	1,518.4	118.49	13.815	
9,000.0	6,931.8	8,970.9	6,871.6	60.9	60.7	87.86	-1,018.9	1,893.8	1,636.9	1,516.1	120.82	13.548	
9,055.1	6,931.4	9,026.0	6,871.5	62.4	62.2	87.87	-1,018.9	1,948.9	1,636.9	1,513.1	123.80	13.222	
9,100.0	6,931.0	9,070.9	6,871.3	63.6	63.4	87.88	-1,018.9	1,993.8	1,636.9	1,510.7	126.22	12.968	
9,153.5	6,930.6	9,124.5	6,871.2	65.0	64.8	87.89	-1,018.9	2,047.3	1,636.9	1,507.7	129.12	12.677	
9,200.0	6,930.2	9,170.9	6,871.0	66.3	66.1	87.89	-1,018.9	2,093.8	1,636.9	1,505.2	131.64	12.434	
9,251.9	6,929.7	9,222.9	6,870.9	67.7	67.5	87.91	-1,018.9	2,145.7	1,636.8	1,502.4	134.47	12.173	
9,300.0	6,929.3	9,270.9	6,870.8	69.0	68.8	87.91	-1,018.9	2,193.8	1,636.8	1,499.8	137.08	11.941	
9,350.4	6,928.9	9,321.3	6,870.6	70.4	70.2	87.92	-1,018.9	2,244.1	1,636.8	1,497.0	139.82	11.706	
9,400.0	6,928.5	9,370.9	6,870.5	71.7	71.5	87.93	-1,018.9	2,293.8	1,636.8	1,494.3	142.53	11.484	
9,448.8	6,928.1	9,419.7	6,870.4	73.0	72.8	87.94	-1,018.9	2,342.6	1,636.8	1,491.6	145.19	11.273	
9,500.0	6,927.7	9,470.9	6,870.2	74.4	74.2	87.95	-1,018.9	2,393.8	1,636.8	1,488.8	147.99	11.060	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	9,518.2	6,870.1	75.7	75.5	87.96	-1,018.9	2,441.0	1,636.8	1,486.2	150.58	10.870	
9,600.0	6,926.8	9,570.9	6,869.9	77.2	77.0	87.97	-1,018.9	2,493.8	1,636.8	1,483.3	153.47	10.665	
9,645.6	6,926.4	9,616.6	6,869.8	78.4	78.2	87.98	-1,018.9	2,539.4	1,636.8	1,480.8	155.97	10.494	
9,700.0	6,926.0	9,670.9	6,869.7	79.9	79.7	87.99	-1,018.9	2,593.8	1,636.8	1,477.8	158.95	10.297	
9,744.1	6,925.6	9,715.0	6,869.5	81.1	80.9	88.00	-1,018.9	2,637.8	1,636.7	1,475.4	161.37	10.143	
9,800.0	6,925.2	9,770.9	6,869.4	82.6	82.4	88.01	-1,018.9	2,693.7	1,636.7	1,472.3	164.45	9.953	
9,842.5	6,924.8	9,813.4	6,869.3	83.8	83.6	88.02	-1,018.9	2,736.2	1,636.7	1,469.9	166.78	9.814	
9,900.0	6,924.3	9,870.9	6,869.1	85.4	85.2	88.03	-1,018.9	2,793.7	1,636.7	1,466.8	169.95	9.631	
9,940.9	6,924.0	9,911.9	6,869.0	86.5	86.3	88.04	-1,018.9	2,834.7	1,636.7	1,464.5	172.20	9.505	
10,000.0	6,923.5	9,970.9	6,868.8	88.1	87.9	88.05	-1,018.9	2,893.7	1,636.7	1,461.2	175.46	9.328	
10,039.3	6,923.2	10,010.3	6,868.7	89.2	89.0	88.06	-1,018.9	2,933.1	1,636.7	1,459.1	177.63	9.214	
10,100.0	6,922.6	10,070.9	6,868.5	90.9	90.7	88.07	-1,018.9	2,993.7	1,636.7	1,455.7	180.97	9.044	
10,137.8	6,922.3	10,108.7	6,868.4	91.9	91.7	88.08	-1,018.9	3,031.5	1,636.7	1,453.6	183.06	8.941	
10,200.0	6,921.8	10,170.9	6,868.3	93.7	93.4	88.09	-1,018.9	3,093.7	1,636.7	1,450.2	186.50	8.776	
10,236.2	6,921.5	10,207.1	6,868.2	94.7	94.4	88.10	-1,018.9	3,129.9	1,636.7	1,448.2	188.50	8.683	
10,300.0	6,921.0	10,270.9	6,868.0	96.4	96.2	88.11	-1,018.9	3,193.7	1,636.6	1,444.6	192.02	8.523	
10,334.6	6,920.7	10,305.5	6,867.9	97.4	97.1	88.12	-1,018.9	3,228.4	1,636.6	1,442.7	193.94	8.439	
10,400.0	6,920.1	10,370.9	6,867.7	99.2	98.9	88.13	-1,018.9	3,293.7	1,636.6	1,439.1	197.56	8.284	
10,433.0	6,919.9	10,404.0	6,867.6	100.1	99.8	88.14	-1,018.9	3,326.8	1,636.6	1,437.2	199.39	8.208	
10,500.0	6,919.3	10,470.9	6,867.4	101.9	101.7	88.15	-1,018.9	3,393.7	1,636.6	1,433.5	203.09	8.058	
10,531.5	6,919.0	10,502.4	6,867.3	102.8	102.6	88.15	-1,018.9	3,425.2	1,636.6	1,431.8	204.84	7.990	
10,600.0	6,918.5	10,570.9	6,867.1	104.7	104.5	88.17	-1,018.9	3,493.7	1,636.6	1,428.0	208.64	7.844	
10,629.9	6,918.2	10,600.8	6,867.1	105.5	105.3	88.17	-1,018.9	3,523.6	1,636.6	1,426.3	210.30	7.782	
10,700.0	6,917.6	10,670.9	6,866.9	107.5	107.2	88.19	-1,018.9	3,593.7	1,636.6	1,422.4	214.18	7.641	
10,728.3	6,917.4	10,699.2	6,866.8	108.3	108.0	88.19	-1,018.9	3,622.1	1,636.6	1,420.8	215.76	7.585	
10,800.0	6,916.8	10,770.9	6,866.6	110.3	110.0	88.21	-1,018.9	3,693.7	1,636.6	1,416.8	219.73	7.448	
10,826.7	6,916.6	10,797.7	6,866.5	111.0	110.7	88.21	-1,018.9	3,720.5	1,636.6	1,415.3	221.22	7.398	
10,900.0	6,916.0	10,870.9	6,866.3	113.0	112.8	88.23	-1,018.9	3,793.7	1,636.5	1,411.3	225.29	7.264	
10,925.2	6,915.8	10,896.1	6,866.2	113.7	113.5	88.23	-1,018.9	3,818.9	1,636.5	1,409.9	226.69	7.219	
11,000.0	6,915.1	10,970.9	6,866.0	115.8	115.5	88.25	-1,018.9	3,893.7	1,636.5	1,405.7	230.85	7.089	
11,023.6	6,914.9	10,994.5	6,866.0	116.5	116.2	88.25	-1,018.9	3,917.3	1,636.5	1,404.4	232.16	7.049	
11,100.0	6,914.3	11,070.9	6,865.7	118.6	118.3	88.26	-1,018.9	3,993.7	1,636.5	1,400.1	236.41	6.922	
11,122.0	6,914.1	11,092.9	6,865.7	119.2	118.9	88.27	-1,018.9	4,015.7	1,636.5	1,398.9	237.63	6.887	
11,200.0	6,913.5	11,170.9	6,865.5	121.4	121.1	88.28	-1,018.9	4,093.7	1,636.5	1,394.5	241.97	6.763	
11,220.4	6,913.3	11,191.4	6,865.4	121.9	121.7	88.29	-1,018.9	4,114.2	1,636.5	1,393.4	243.11	6.732	
11,300.0	6,912.6	11,270.9	6,865.2	124.1	123.9	88.30	-1,018.9	4,193.7	1,636.5	1,388.9	247.53	6.611	
11,318.9	6,912.5	11,289.8	6,865.1	124.7	124.4	88.31	-1,018.9	4,212.6	1,636.5	1,387.9	248.58	6.583	
11,400.0	6,911.8	11,370.9	6,864.9	126.9	126.6	88.32	-1,018.9	4,293.7	1,636.5	1,383.4	253.10	6.466	
11,417.3	6,911.6	11,388.2	6,864.9	127.4	127.1	88.33	-1,018.9	4,311.0	1,636.5	1,382.4	254.07	6.441	
11,500.0	6,911.0	11,470.9	6,864.6	129.7	129.4	88.34	-1,018.9	4,393.7	1,636.4	1,377.8	258.67	6.326	
11,515.7	6,910.8	11,486.6	6,864.6	130.2	129.9	88.35	-1,018.9	4,409.4	1,636.4	1,376.9	259.55	6.305	
11,600.0	6,910.1	11,570.9	6,864.3	132.5	132.2	88.36	-1,018.9	4,493.7	1,636.4	1,372.2	264.24	6.193	
11,614.1	6,910.0	11,585.1	6,864.3	132.9	132.6	88.36	-1,018.9	4,507.9	1,636.4	1,371.4	265.03	6.174	
11,700.0	6,909.3	11,670.9	6,864.1	135.3	135.0	88.38	-1,018.9	4,593.7	1,636.4	1,366.6	269.82	6.065	
11,712.6	6,909.2	11,683.5	6,864.0	135.6	135.3	88.38	-1,018.9	4,606.3	1,636.4	1,365.9	270.52	6.049	
11,800.0	6,908.5	11,770.9	6,863.8	138.1	137.8	88.40	-1,018.9	4,693.7	1,636.4	1,361.0	275.40	5.942	
11,811.0	6,908.4	11,781.9	6,863.8	138.4	138.1	88.40	-1,018.9	4,704.7	1,636.4	1,360.4	276.01	5.929	
11,900.0	6,907.6	11,870.9	6,863.5	140.9	140.6	88.42	-1,018.9	4,793.7	1,636.4	1,355.4	280.97	5.824	
11,909.4	6,907.5	11,880.3	6,863.5	141.1	140.8	88.42	-1,018.9	4,803.1	1,636.4	1,354.9	281.50	5.813	
12,000.0	6,906.8	11,970.9	6,863.2	143.6	143.3	88.44	-1,018.9	4,893.7	1,636.4	1,349.8	286.55	5.710	
12,007.8	6,906.7	11,978.7	6,863.2	143.9	143.6	88.44	-1,018.9	4,901.6	1,636.4	1,349.4	286.99	5.702	
12,100.0	6,905.9	12,070.9	6,862.9	146.4	146.1	88.46	-1,018.9	4,993.7	1,636.4	1,344.2	292.14	5.601	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	12,077.2	6,862.9	146.6	146.3	88.46	-1,018.9	5,000.0	1,636.4	1,343.9	292.49	5.595	
12,200.0	6,905.1	12,170.9	6,862.7	149.2	148.9	88.48	-1,018.9	5,093.7	1,636.3	1,338.6	297.72	5.496	
12,204.7	6,905.1	12,175.6	6,862.7	149.4	149.1	88.48	-1,018.9	5,098.4	1,636.3	1,338.4	297.98	5.491	
12,300.0	6,904.3	12,270.9	6,862.4	152.0	151.7	88.50	-1,018.9	5,193.7	1,636.3	1,333.0	303.30	5.395	
12,303.1	6,904.3	12,274.0	6,862.4	152.1	151.8	88.50	-1,018.9	5,196.8	1,636.3	1,332.8	303.48	5.392	
12,400.0	6,903.4	12,370.9	6,862.1	154.8	154.5	88.52	-1,018.9	5,293.7	1,636.3	1,327.4	308.89	5.297	
12,401.5	6,903.4	12,372.4	6,862.1	154.8	154.5	88.52	-1,018.9	5,295.2	1,636.3	1,327.3	308.98	5.296	
12,500.0	6,902.6	12,470.9	6,861.8	157.6	157.3	88.54	-1,018.9	5,393.7	1,636.3	1,321.8	314.48	5.203	
12,598.4	6,901.8	12,569.3	6,861.6	160.3	160.0	88.56	-1,018.9	5,492.1	1,636.3	1,316.3	319.98	5.114	
12,600.0	6,901.8	12,570.9	6,861.6	160.4	160.1	88.56	-1,018.9	5,493.7	1,636.3	1,316.2	320.07	5.112	
12,696.8	6,901.0	12,667.7	6,861.3	163.1	162.8	88.58	-1,018.9	5,590.5	1,636.3	1,310.8	325.48	5.027	
12,700.0	6,900.9	12,670.9	6,861.3	163.2	162.9	88.58	-1,018.9	5,593.7	1,636.3	1,310.6	325.66	5.025	
12,795.2	6,900.1	12,766.1	6,861.0	165.8	165.5	88.59	-1,018.9	5,688.9	1,636.3	1,305.3	330.98	4.944	
12,800.0	6,900.1	12,770.9	6,861.0	166.0	165.7	88.60	-1,018.9	5,693.7	1,636.3	1,305.0	331.25	4.940	
12,893.7	6,899.3	12,864.6	6,860.7	168.6	168.3	88.61	-1,018.9	5,787.4	1,636.2	1,299.8	336.48	4.863	
12,900.0	6,899.3	12,870.9	6,860.7	168.8	168.5	88.61	-1,018.9	5,793.7	1,636.2	1,299.4	336.84	4.858	
12,992.1	6,898.5	12,963.0	6,860.5	171.3	171.0	88.63	-1,018.9	5,885.8	1,636.2	1,294.2	341.99	4.784	
13,000.0	6,898.4	12,970.9	6,860.4	171.6	171.2	88.63	-1,018.9	5,893.7	1,636.2	1,293.8	342.43	4.778	
13,090.5	6,897.7	13,061.4	6,860.2	174.1	173.8	88.65	-1,018.9	5,984.2	1,636.2	1,288.7	347.49	4.709	
13,100.0	6,897.6	13,070.9	6,860.2	174.4	174.0	88.65	-1,018.9	5,993.7	1,636.2	1,288.2	348.02	4.701	
13,188.9	6,896.9	13,159.8	6,859.9	176.8	176.5	88.67	-1,018.9	6,082.6	1,636.2	1,283.2	353.00	4.635	
13,200.0	6,896.8	13,170.9	6,859.9	177.2	176.8	88.67	-1,018.9	6,093.7	1,636.2	1,282.6	353.62	4.627	
13,287.4	6,896.0	13,258.3	6,859.6	179.6	179.3	88.69	-1,018.9	6,181.1	1,636.2	1,277.7	358.51	4.564	
13,300.0	6,895.9	13,270.9	6,859.6	180.0	179.6	88.69	-1,018.9	6,193.7	1,636.2	1,277.0	359.21	4.555	
13,385.8	6,895.2	13,356.7	6,859.4	182.4	182.0	88.71	-1,018.9	6,279.5	1,636.2	1,272.2	364.02	4.495	
13,400.0	6,895.1	13,370.9	6,859.3	182.7	182.4	88.71	-1,018.9	6,293.7	1,636.2	1,271.4	364.81	4.485	
13,484.2	6,894.4	13,455.1	6,859.1	185.1	184.8	88.73	-1,018.9	6,377.9	1,636.2	1,266.6	369.53	4.428	
13,500.0	6,894.3	13,470.9	6,859.0	185.5	185.2	88.73	-1,018.9	6,393.7	1,636.2	1,265.8	370.41	4.417	
13,582.6	6,893.6	13,553.5	6,858.8	187.9	187.5	88.75	-1,018.9	6,476.3	1,636.2	1,261.1	375.04	4.363	
13,600.0	6,893.4	13,570.9	6,858.8	188.3	188.0	88.75	-1,018.9	6,493.7	1,636.2	1,260.2	376.01	4.351	
13,681.1	6,892.8	13,651.9	6,858.5	190.6	190.3	88.77	-1,018.9	6,574.7	1,636.2	1,255.6	380.55	4.299	
13,700.0	6,892.6	13,670.9	6,858.5	191.1	190.8	88.77	-1,018.9	6,593.7	1,636.2	1,254.5	381.61	4.288	
13,779.5	6,891.9	13,750.4	6,858.3	193.4	193.0	88.79	-1,018.9	6,673.2	1,636.1	1,250.1	386.06	4.238	
13,800.0	6,891.8	13,770.9	6,858.2	193.9	193.6	88.79	-1,018.9	6,693.7	1,636.1	1,248.9	387.20	4.226	
13,877.9	6,891.1	13,848.8	6,858.0	196.1	195.8	88.80	-1,018.9	6,771.6	1,636.1	1,244.6	391.57	4.178	
13,900.0	6,890.9	13,870.9	6,857.9	196.7	196.4	88.81	-1,018.9	6,793.7	1,636.1	1,243.3	392.80	4.165	
13,976.3	6,890.3	13,947.2	6,857.7	198.9	198.5	88.82	-1,018.9	6,870.0	1,636.1	1,239.0	397.08	4.120	
14,000.0	6,890.1	13,970.9	6,857.6	199.5	199.2	88.83	-1,018.9	6,893.7	1,636.1	1,237.7	398.41	4.107	
14,074.8	6,889.5	14,045.6	6,857.4	201.6	201.3	88.84	-1,018.9	6,968.4	1,636.1	1,233.5	402.59	4.064	
14,100.0	6,889.3	14,070.9	6,857.4	202.3	202.0	88.85	-1,018.9	6,993.7	1,636.1	1,232.1	404.01	4.050	
14,173.2	6,888.7	14,144.1	6,857.2	204.4	204.1	88.86	-1,018.9	7,066.9	1,636.1	1,228.0	408.11	4.009	
14,200.0	6,888.4	14,170.9	6,857.1	205.1	204.8	88.87	-1,018.9	7,093.7	1,636.1	1,226.5	409.61	3.994	
14,271.6	6,887.8	14,242.5	6,856.9	207.1	206.8	88.88	-1,018.9	7,165.3	1,636.1	1,222.5	413.62	3.956	
14,300.0	6,887.6	14,270.9	6,856.8	207.9	207.6	88.89	-1,018.9	7,193.7	1,636.1	1,220.9	415.21	3.940	
14,370.0	6,887.0	14,340.9	6,856.6	209.9	209.6	88.90	-1,018.9	7,263.7	1,636.1	1,216.9	419.14	3.903	
14,400.0	6,886.8	14,370.9	6,856.5	210.7	210.4	88.91	-1,018.9	7,293.7	1,636.1	1,215.3	420.81	3.888	
14,468.5	6,886.2	14,439.3	6,856.3	212.6	212.3	88.92	-1,018.9	7,362.1	1,636.1	1,211.4	424.65	3.853	
14,500.0	6,885.9	14,470.9	6,856.2	213.5	213.2	88.93	-1,018.9	7,393.7	1,636.1	1,209.7	426.42	3.837	
14,566.9	6,885.4	14,538.4	6,856.1	215.4	215.1	88.94	-1,018.9	7,461.2	1,636.0	1,205.9	430.18	3.803	
14,600.0	6,885.1	14,571.5	6,856.0	216.3	216.0	88.95	-1,018.9	7,494.3	1,636.0	1,204.0	432.04	3.787	
14,613.0	6,885.0	14,584.5	6,856.0	216.7	216.4	88.95	-1,018.9	7,507.3	1,636.0	1,203.3	432.77	3.780 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-61.9	0.0	61.9				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-61.9	0.0	61.9	61.8	0.17	362.598	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-61.9	0.0	61.9	61.8	0.18	353.259	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-61.9	0.0	61.9	61.3	0.61	101.414	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-61.9	0.0	61.9	61.3	0.62	99.116	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-61.9	0.0	61.9	60.9	1.05	58.807	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-61.9	0.0	61.9	60.9	1.07	57.645	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-61.9	0.0	61.9	60.4	1.50	41.410	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-61.9	0.0	61.9	60.4	1.52	40.640	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-61.9	0.0	61.9	60.0	1.94	31.956	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-61.9	0.0	61.9	60.0	1.97	31.383	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-61.9	0.0	61.9	59.6	2.38	26.017	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-61.9	0.0	61.9	59.5	2.42	25.561	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-61.9	0.0	61.9	59.1	2.82	21.939	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-61.9	0.0	61.9	59.1	2.87	21.560	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-61.9	0.0	61.9	58.7	3.27	18.966	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-61.9	0.0	61.9	58.6	3.32	18.643	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-61.9	0.0	61.9	58.2	3.71	16.703	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-61.9	0.0	61.9	58.2	3.77	16.421	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-61.9	0.0	61.9	57.8	4.15	14.922	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-61.9	0.0	61.9	57.7	4.22	14.672	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-61.9	0.0	61.9	57.3	4.59	13.485	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-61.9	0.0	61.9	57.3	4.67	13.260	
1,150.0	1,150.0	1,151.0	1,151.0	2.4	2.4	-180.00	-61.9	0.0	61.9	57.0	4.90	12.651 CC, ES	
1,181.1	1,181.1	1,182.1	1,182.1	2.5	2.5	-147.39	-61.9	0.0	62.1	57.0	5.03	12.330	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-147.52	-61.9	0.0	62.3	57.2	5.12	12.171	
1,279.5	1,279.5	1,280.5	1,280.5	2.7	2.7	-148.69	-61.9	0.0	64.4	58.9	5.47	11.771	
1,300.0	1,299.9	1,300.9	1,300.9	2.8	2.8	-149.14	-61.9	0.0	65.3	59.7	5.56	11.733	
1,377.9	1,377.7	1,378.7	1,378.7	3.0	3.0	-151.26	-61.9	0.0	69.7	63.8	5.91	11.803	
1,400.0	1,399.7	1,400.7	1,400.7	3.0	3.0	-151.95	-61.9	0.0	71.4	65.3	6.00	11.883	
1,476.4	1,475.7	1,476.7	1,476.7	3.2	3.2	-154.54	-61.9	0.0	78.2	71.9	6.34	12.335	
1,500.0	1,499.1	1,500.1	1,500.1	3.2	3.2	-155.36	-61.9	0.0	80.7	74.3	6.44	12.531	
1,574.8	1,573.2	1,574.2	1,574.2	3.4	3.4	-157.97	-61.9	0.0	90.0	83.2	6.77	13.299	
1,600.0	1,598.2	1,599.2	1,599.2	3.5	3.5	-158.82	-61.9	0.0	93.6	86.7	6.88	13.610	
1,673.2	1,670.3	1,671.1	1,671.1	3.7	3.6	-161.13	-62.0	-0.1	105.3	98.1	7.19	14.649	
1,700.0	1,696.6	1,697.2	1,697.2	3.8	3.7	-161.77	-62.1	-0.3	110.1	102.8	7.29	15.095	
1,749.9	1,745.5	1,745.5	1,745.5	3.9	3.8	-162.61	-62.7	-1.4	119.9	112.4	7.49	16.011	
1,771.6	1,766.8	1,766.6	1,766.6	4.0	3.8	-162.87	-63.1	-2.1	124.4	116.8	7.58	16.413	
1,800.0	1,794.5	1,794.1	1,794.0	4.1	3.8	-163.09	-63.7	-3.1	130.3	122.6	7.70	16.930	
1,870.1	1,863.1	1,861.8	1,861.6	4.3	4.0	-163.09	-65.8	-6.8	145.3	137.3	8.00	18.149	
1,900.0	1,892.3	1,890.6	1,890.3	4.4	4.0	-162.91	-66.9	-8.8	151.8	143.6	8.13	18.657	
1,968.5	1,959.4	1,956.5	1,955.9	4.7	4.2	-162.17	-70.0	-14.2	166.9	158.5	8.45	19.756	
2,000.0	1,990.2	1,986.7	1,986.0	4.8	4.2	-161.71	-71.7	-17.2	174.0	165.4	8.60	20.248	
2,066.9	2,055.6	2,050.7	2,049.4	5.1	4.4	-160.53	-75.7	-24.3	189.5	180.5	8.92	21.239	
2,100.0	2,088.0	2,082.1	2,080.5	5.2	4.4	-159.87	-78.0	-28.3	197.3	188.2	9.08	21.713	
2,165.3	2,151.9	2,144.0	2,141.6	5.4	4.6	-158.44	-82.9	-37.0	213.1	203.6	9.43	22.605	
2,200.0	2,185.8	2,176.7	2,173.7	5.6	4.7	-157.63	-85.8	-42.0	221.7	212.0	9.61	23.065	
2,263.8	2,248.2	2,236.4	2,232.3	5.8	4.9	-156.08	-91.5	-52.0	237.9	228.0	9.96	23.880	
2,300.0	2,283.6	2,270.8	2,265.9	6.0	5.0	-155.16	-95.0	-58.2	247.4	237.3	10.17	24.321	
2,362.2	2,344.5	2,330.4	2,324.3	6.2	5.1	-153.72	-101.1	-69.0	263.9	253.3	10.54	25.025	
2,400.0	2,381.4	2,366.7	2,359.7	6.4	5.3	-152.92	-104.8	-75.5	273.9	263.2	10.77	25.430	
2,460.6	2,440.7	2,424.8	2,416.6	6.6	5.4	-151.76	-110.8	-86.0	290.2	279.0	11.14	26.040	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,462.6	2,453.6	6.8	5.6	-151.08	-114.7	-92.9	300.8	289.4	11.39	26.412	
2,559.0	2,537.0	2,519.2	2,509.0	7.0	5.8	-150.13	-120.5	-103.1	316.8	305.0	11.76	26.937	
2,600.0	2,577.1	2,558.5	2,547.4	7.2	5.9	-149.53	-124.5	-110.2	327.9	315.9	12.02	27.275	
2,657.5	2,633.3	2,613.6	2,601.3	7.4	6.1	-148.75	-130.2	-120.2	343.5	331.1	12.39	27.729	
2,700.0	2,674.9	2,654.4	2,641.2	7.6	6.3	-148.22	-134.3	-127.5	355.2	342.5	12.66	28.043	
2,755.9	2,729.6	2,708.0	2,693.6	7.9	6.5	-147.57	-139.8	-137.2	370.5	357.4	13.03	28.434	
2,800.0	2,772.7	2,750.3	2,735.0	8.0	6.6	-147.10	-144.2	-144.9	382.6	369.3	13.32	28.723	
2,854.3	2,825.8	2,802.4	2,786.0	8.3	6.8	-146.55	-149.5	-154.3	397.5	383.9	13.68	29.063	
2,900.0	2,870.5	2,846.2	2,828.8	8.5	7.0	-146.13	-154.0	-162.2	410.1	396.1	13.98	29.330	
2,952.7	2,922.1	2,896.8	2,878.3	8.7	7.2	-145.66	-159.2	-171.4	424.7	410.4	14.34	29.625	
3,000.0	2,968.3	2,942.2	2,922.7	8.9	7.4	-145.28	-163.9	-179.6	437.8	423.1	14.65	29.872	
3,051.2	3,018.4	2,991.2	2,970.7	9.1	7.6	-144.88	-168.9	-188.4	451.9	436.9	15.00	30.129	
3,100.0	3,066.1	3,038.1	3,016.5	9.3	7.8	-144.52	-173.7	-196.9	465.5	450.1	15.33	30.360	
3,149.6	3,114.7	3,085.6	3,063.0	9.5	8.0	-144.18	-178.6	-205.5	479.3	463.6	15.67	30.584	
3,200.0	3,164.0	3,134.0	3,110.3	9.8	8.2	-143.86	-183.6	-214.2	493.3	477.2	16.02	30.800	
3,248.0	3,210.9	3,180.0	3,155.3	10.0	8.3	-143.56	-188.3	-222.6	506.6	490.3	16.34	30.996	
3,300.0	3,261.8	3,229.9	3,204.1	10.2	8.6	-143.26	-193.4	-231.6	521.1	504.4	16.70	31.198	
3,346.4	3,307.2	3,274.4	3,247.7	10.4	8.7	-143.01	-198.0	-239.6	534.1	517.0	17.02	31.370	
3,400.0	3,359.6	3,325.8	3,297.9	10.6	9.0	-142.73	-203.2	-248.9	549.0	531.6	17.40	31.560	
3,444.9	3,403.5	3,368.8	3,340.0	10.8	9.1	-142.51	-207.7	-256.7	561.5	543.8	17.71	31.711	
3,500.0	3,457.4	3,421.7	3,391.7	11.1	9.4	-142.25	-213.1	-266.2	576.9	558.8	18.09	31.890	
3,543.3	3,499.8	3,463.2	3,432.4	11.3	9.5	-142.05	-217.3	-273.8	589.0	570.6	18.39	32.023	
3,600.0	3,555.2	3,517.6	3,485.6	11.5	9.8	-141.81	-222.9	-283.6	604.9	586.1	18.79	32.191	
3,641.7	3,596.0	3,557.6	3,524.7	11.7	10.0	-141.64	-227.0	-290.8	616.5	597.5	19.08	32.309	
3,700.0	3,653.0	3,613.5	3,579.4	11.9	10.2	-141.41	-232.8	-300.9	632.9	613.4	19.49	32.468	
3,740.1	3,692.3	3,652.1	3,617.1	12.1	10.4	-141.26	-236.7	-307.9	644.1	624.3	19.77	32.572	
3,800.0	3,750.8	3,709.5	3,673.2	12.4	10.6	-141.04	-242.6	-318.3	660.9	640.7	20.20	32.722	
3,838.6	3,788.6	3,746.5	3,709.4	12.6	10.8	-140.91	-246.4	-325.0	671.7	651.2	20.47	32.815	
3,900.0	3,848.7	3,805.4	3,767.0	12.8	11.0	-140.70	-252.5	-335.6	688.9	668.0	20.90	32.957	
3,937.0	3,884.9	3,841.4	3,802.3	13.0	11.2	-140.58	-256.2	-342.1	699.3	678.1	21.17	33.039	
4,000.0	3,946.5	3,912.2	3,871.7	13.3	11.4	-140.43	-262.9	-354.1	716.5	694.9	21.61	33.154	
4,035.4	3,981.1	3,952.2	3,911.1	13.4	11.6	-140.39	-266.4	-360.2	725.8	703.9	21.84	33.226	
4,100.0	4,044.3	4,025.6	3,983.6	13.7	11.8	-140.43	-272.1	-370.1	742.0	719.7	22.26	33.332	
4,133.8	4,077.4	4,064.3	4,022.0	13.9	11.9	-140.49	-274.7	-374.7	750.1	727.6	22.47	33.378	
4,200.0	4,142.1	4,140.3	4,097.4	14.2	12.1	-140.71	-279.0	-382.4	765.3	742.4	22.88	33.451	
4,232.3	4,173.7	4,177.5	4,134.4	14.3	12.2	-140.86	-280.8	-385.6	772.3	749.2	23.07	33.477	
4,300.0	4,239.9	4,255.8	4,212.5	14.6	12.3	-141.26	-283.8	-390.8	786.3	762.8	23.46	33.523	
4,330.7	4,270.0	4,291.4	4,248.1	14.7	12.4	-141.48	-284.8	-392.6	792.3	768.7	23.63	33.535	
4,400.0	4,337.7	4,371.8	4,328.4	15.0	12.5	-142.06	-286.3	-395.2	805.1	781.2	23.99	33.561	
4,429.1	4,366.2	4,405.7	4,362.3	15.2	12.6	-142.33	-286.5	-395.6	810.2	786.1	24.14	33.565	
4,500.0	4,435.6	4,480.0	4,436.6	15.5	12.7	-142.99	-286.6	-395.8	822.1	797.7	24.48	33.589	
4,527.5	4,462.5	4,506.9	4,463.5	15.6	12.8	-143.23	-286.6	-395.8	826.8	802.1	24.61	33.600	
4,600.0	4,533.4	4,577.8	4,534.4	15.9	12.9	-143.84	-286.6	-395.8	839.0	814.0	24.95	33.629	
4,626.0	4,558.8	4,603.2	4,559.8	16.0	12.9	-144.05	-286.6	-395.8	843.4	818.3	25.07	33.640	
4,673.6	4,605.3	4,649.7	4,606.3	16.3	13.0	-144.44	-286.6	-395.8	851.4	826.1	25.29	33.663	
4,700.0	4,631.2	4,675.6	4,632.2	16.4	13.0	-144.70	-286.6	-395.8	855.9	830.4	25.42	33.663	
4,724.4	4,655.1	4,699.6	4,656.1	16.4	13.1	-144.93	-286.6	-395.8	859.8	834.2	25.53	33.673	
4,800.0	4,729.5	4,774.0	4,730.5	16.7	13.2	-145.56	-286.6	-395.8	870.8	845.0	25.86	33.670	
4,822.8	4,752.1	4,796.5	4,753.1	16.7	13.2	-145.73	-286.6	-395.8	873.9	847.9	25.96	33.664	
4,900.0	4,828.4	4,872.9	4,829.4	17.0	13.3	-146.24	-286.6	-395.8	883.1	856.8	26.28	33.606	
4,921.2	4,849.5	4,894.0	4,850.5	17.0	13.4	-146.36	-286.6	-395.8	885.3	859.0	26.36	33.586	
5,000.0	4,927.8	4,972.2	4,928.8	17.2	13.5	-146.74	-286.6	-395.8	892.5	865.8	26.66	33.474	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,991.8	4,948.4	17.2	13.5	-146.82	-286.6	-395.8	894.0	867.3	26.73	33.442	
5,100.0	5,027.5	5,071.9	5,028.5	17.4	13.7	-147.08	-286.6	-395.8	899.0	872.0	27.02	33.274	
5,118.1	5,045.6	5,090.0	5,046.6	17.4	13.7	-147.13	-286.6	-395.8	899.9	872.8	27.08	33.232	
5,200.0	5,127.4	5,171.8	5,128.4	17.6	13.8	-147.27	-286.6	-395.8	902.6	875.3	27.35	33.008	
5,216.5	5,143.9	5,188.3	5,144.9	17.6	13.9	-147.29	-286.6	-395.8	903.0	875.6	27.40	32.958	
5,273.4	5,200.8	5,245.2	5,201.8	17.7	14.0	180.00	-286.6	-395.8	903.4	875.2	28.21	32.022	
5,300.0	5,227.4	5,271.8	5,228.4	17.7	14.0	180.00	-286.6	-395.8	903.4	875.1	28.30	31.921	
5,314.9	5,242.3	5,286.8	5,243.3	17.7	14.0	180.00	-286.6	-395.8	903.4	875.1	28.35	31.864	
5,400.0	5,327.4	5,371.8	5,328.4	17.8	14.2	180.00	-286.6	-395.8	903.4	874.8	28.65	31.537	
5,413.4	5,340.8	5,385.2	5,341.8	17.9	14.2	180.00	-286.6	-395.8	903.4	874.7	28.69	31.486	
5,500.0	5,427.4	5,471.8	5,428.4	18.0	14.4	180.00	-286.6	-395.8	903.4	874.4	28.99	31.159	
5,511.8	5,439.2	5,483.6	5,440.2	18.0	14.4	180.00	-286.6	-395.8	903.4	874.4	29.04	31.114	
5,600.0	5,527.4	5,571.8	5,528.4	18.1	14.5	180.00	-286.6	-395.8	903.4	874.1	29.34	30.787	
5,610.2	5,537.6	5,582.0	5,538.6	18.1	14.5	180.00	-286.6	-395.8	903.4	874.1	29.38	30.749	
5,700.0	5,627.4	5,671.8	5,628.4	18.3	14.7	180.00	-286.6	-395.8	903.4	873.7	29.70	30.421	
5,708.6	5,636.0	5,680.5	5,637.0	18.3	14.7	180.00	-286.6	-395.8	903.4	873.7	29.73	30.389	
5,800.0	5,727.4	5,771.8	5,728.4	18.4	14.9	180.00	-286.6	-395.8	903.4	873.4	30.05	30.061	
5,807.1	5,734.5	5,778.9	5,735.5	18.4	14.9	180.00	-286.6	-395.8	903.4	873.4	30.08	30.036	
5,900.0	5,827.4	5,871.8	5,828.4	18.6	15.1	180.00	-286.6	-395.8	903.4	873.0	30.41	29.707	
5,905.5	5,832.9	5,877.3	5,833.9	18.6	15.1	180.00	-286.6	-395.8	903.4	873.0	30.43	29.688	
6,000.0	5,927.4	5,971.8	5,928.4	18.7	15.2	180.00	-286.6	-395.8	903.4	872.7	30.77	29.360	
6,003.9	5,931.3	5,975.7	5,932.3	18.7	15.2	180.00	-286.6	-395.8	903.4	872.6	30.79	29.346	
6,100.0	6,027.4	6,071.8	6,028.4	18.9	15.4	180.00	-286.6	-395.8	903.4	872.3	31.13	29.018	
6,102.3	6,029.7	6,074.2	6,030.7	18.9	15.4	180.00	-286.6	-395.8	903.4	872.3	31.14	29.010	
6,200.0	6,127.4	6,171.8	6,128.4	19.0	15.6	180.00	-286.6	-395.8	903.4	871.9	31.50	28.683	
6,200.8	6,128.2	6,172.6	6,129.2	19.0	15.6	180.00	-286.6	-395.8	903.4	871.9	31.50	28.680	
6,299.2	6,226.6	6,271.0	6,227.6	19.2	15.8	180.00	-286.6	-395.8	903.4	871.6	31.86	28.356	
6,299.5	6,226.8	6,271.3	6,227.8	19.2	15.8	180.00	-286.6	-395.8	903.4	871.6	31.86	28.355	
6,301.4	6,228.8	6,273.2	6,229.8	19.2	15.8	180.00	-286.6	-395.8	903.4	871.6	31.87	28.349	
6,350.0	6,277.4	6,321.8	6,278.4	19.3	15.9	90.00	-286.6	-394.1	903.4	872.0	31.48	28.697	
6,397.6	6,324.7	6,369.4	6,325.7	19.3	15.9	89.99	-286.6	-389.2	903.4	871.9	31.58	28.610	
6,400.0	6,327.1	6,371.8	6,328.1	19.3	15.9	89.99	-286.6	-388.9	903.4	871.9	31.58	28.606	
6,450.0	6,376.3	6,421.8	6,377.3	19.3	15.9	89.99	-286.6	-380.2	903.4	871.8	31.64	28.552	
6,496.0	6,421.1	6,467.8	6,422.0	19.3	15.9	89.98	-286.6	-369.3	903.4	871.8	31.67	28.528	
6,500.0	6,424.9	6,471.8	6,425.8	19.3	15.9	89.98	-286.6	-368.2	903.4	871.8	31.67	28.527	
6,550.0	6,472.4	6,521.8	6,473.3	19.3	15.9	89.98	-286.6	-352.8	903.4	871.8	31.67	28.525	
6,594.5	6,513.8	6,566.2	6,514.6	19.3	15.9	89.97	-286.6	-336.3	903.4	871.8	31.66	28.535	
6,600.0	6,518.8	6,571.7	6,519.7	19.3	15.9	89.97	-286.6	-334.1	903.4	871.8	31.66	28.536	
6,650.0	6,563.8	6,621.7	6,564.6	19.3	15.9	89.97	-286.6	-312.2	903.4	871.8	31.64	28.550	
6,692.9	6,601.1	6,664.6	6,601.8	19.2	15.9	89.97	-286.6	-291.0	903.4	871.8	31.64	28.552	
6,700.0	6,607.1	6,671.7	6,607.9	19.2	15.9	89.97	-286.6	-287.3	903.4	871.8	31.64	28.551	
6,750.0	6,648.6	6,721.6	6,649.3	19.2	15.9	89.96	-286.6	-259.4	903.4	871.8	31.67	28.524	
6,791.3	6,681.4	6,762.9	6,682.0	19.1	15.9	89.96	-286.6	-234.2	903.4	871.7	31.74	28.466	
6,800.0	6,688.1	6,771.6	6,688.7	19.1	15.9	89.96	-286.6	-228.7	903.4	871.7	31.75	28.451	
6,850.0	6,725.3	6,821.5	6,725.8	19.1	16.0	89.96	-286.6	-195.3	903.4	871.5	31.91	28.312	
6,889.7	6,753.2	6,861.2	6,753.6	19.0	16.0	89.95	-286.6	-166.9	903.4	871.3	32.10	28.140	
6,900.0	6,760.1	6,871.5	6,760.5	19.0	16.0	89.95	-286.6	-159.4	903.4	871.3	32.16	28.089	
6,950.0	6,792.3	6,921.4	6,792.7	19.0	16.2	89.95	-286.6	-121.2	903.4	870.9	32.53	27.768	
6,988.2	6,815.1	6,959.6	6,815.4	18.9	16.3	89.95	-286.6	-90.5	903.4	870.5	32.91	27.448	
7,000.0	6,821.8	6,971.4	6,822.1	18.9	16.4	89.95	-286.6	-80.8	903.4	870.4	33.05	27.339	
7,050.0	6,848.3	7,021.3	6,848.6	18.9	16.6	89.95	-286.6	-38.5	903.4	869.7	33.71	26.799	
7,086.6	6,865.9	7,057.9	6,866.1	18.9	16.9	89.94	-286.6	-6.4	903.4	869.1	34.31	26.334	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,071.3	6,872.1	18.9	17.0	89.94	-286.6	5.6	903.4	868.9	34.54	26.154	
7,150.0	6,892.3	7,121.2	6,892.5	18.8	17.5	89.94	-286.6	51.1	903.4	867.9	35.54	25.417	
7,185.0	6,904.7	7,156.2	6,904.8	18.8	17.9	89.94	-286.6	83.9	903.4	867.1	36.35	24.853	
7,200.0	6,909.5	7,171.1	6,909.6	18.9	18.1	89.94	-286.6	98.0	903.4	866.7	36.72	24.606	
7,250.0	6,923.4	7,221.1	6,923.4	19.3	18.8	89.94	-286.6	146.0	903.4	865.4	38.05	23.744	
7,283.4	6,930.8	7,254.5	6,930.8	19.8	19.3	89.94	-286.6	178.6	903.4	864.4	39.03	23.149	
7,300.0	6,933.9	7,271.0	6,933.9	20.0	19.5	89.94	-286.6	194.8	903.4	863.9	39.53	22.854	
7,350.0	6,940.9	7,320.9	6,940.9	20.8	20.4	89.94	-286.6	244.2	903.4	862.3	41.14	21.960	
7,381.9	6,943.6	7,352.8	6,943.6	21.4	20.9	89.94	-286.6	276.0	903.4	861.2	42.23	21.394	
7,400.0	6,944.5	7,370.9	6,944.5	21.7	21.2	89.94	-286.6	294.0	903.4	860.6	42.86	21.078	
7,432.4	6,945.0	7,403.2	6,945.0	22.3	21.8	89.94	-286.6	326.4	903.4	859.4	44.02	20.523	
7,432.5	6,945.0	7,403.3	6,945.0	22.3	21.8	89.94	-286.6	326.4	903.4	859.4	44.02	20.522	
7,480.3	6,944.6	7,451.1	6,944.5	23.2	22.7	89.93	-286.6	374.3	903.4	857.6	45.84	19.707	
7,500.0	6,944.4	7,470.8	6,944.4	23.6	23.1	89.93	-286.6	394.0	903.4	856.8	46.59	19.390	
7,578.7	6,943.7	7,549.5	6,943.6	25.2	24.7	89.93	-286.6	472.7	903.4	853.7	49.78	18.148	
7,600.0	6,943.6	7,570.8	6,943.5	25.6	25.2	89.93	-286.6	494.0	903.4	852.8	50.66	17.835	
7,677.1	6,942.9	7,648.0	6,942.8	27.3	26.9	89.93	-286.6	571.1	903.4	849.4	53.99	16.733	
7,700.0	6,942.7	7,670.8	6,942.5	27.8	27.4	89.92	-286.6	594.0	903.4	848.4	54.99	16.429	
7,775.6	6,942.1	7,746.4	6,941.9	29.5	29.1	89.92	-286.6	669.5	903.4	845.0	58.42	15.464	
7,800.0	6,941.9	7,770.8	6,941.6	30.1	29.7	89.92	-286.6	694.0	903.4	843.9	59.54	15.174	
7,874.0	6,941.3	7,844.8	6,941.0	31.8	31.4	89.92	-286.6	768.0	903.4	840.4	63.03	14.334	
7,900.0	6,941.1	7,870.8	6,940.7	32.4	32.0	89.92	-286.6	794.0	903.4	839.2	64.26	14.059	
7,972.4	6,940.4	7,943.2	6,940.1	34.2	33.8	89.91	-286.6	866.4	903.4	835.7	67.77	13.330	
8,000.0	6,940.2	7,970.8	6,939.8	34.9	34.5	89.91	-286.6	894.0	903.4	834.3	69.12	13.071	
8,070.8	6,939.6	8,041.7	6,939.2	36.6	36.3	89.91	-286.6	964.8	903.4	830.8	72.63	12.439	
8,100.0	6,939.4	8,070.8	6,938.9	37.3	37.0	89.91	-286.6	994.0	903.4	829.4	74.08	12.195	
8,169.3	6,938.8	8,140.1	6,938.3	39.1	38.7	89.90	-286.6	1,063.2	903.4	825.9	77.58	11.645	
8,200.0	6,938.5	8,170.8	6,938.0	39.8	39.5	89.90	-286.6	1,093.9	903.4	824.3	79.13	11.416	
8,267.7	6,938.0	8,238.5	6,937.4	41.6	41.3	89.90	-286.6	1,161.6	903.4	820.8	82.60	10.937	
8,300.0	6,937.7	8,270.8	6,937.1	42.4	42.1	89.90	-286.6	1,193.9	903.4	819.2	84.26	10.722	
8,366.1	6,937.2	8,336.9	6,936.5	44.1	43.8	89.90	-286.6	1,260.1	903.4	815.8	87.68	10.303	
8,400.0	6,936.9	8,370.8	6,936.2	45.0	44.7	89.89	-286.6	1,293.9	903.4	814.0	89.44	10.101	
8,464.5	6,936.3	8,435.4	6,935.6	46.6	46.4	89.89	-286.6	1,358.5	903.4	810.6	92.82	9.733	
8,500.0	6,936.0	8,470.8	6,935.3	47.6	47.3	89.89	-286.6	1,393.9	903.4	808.8	94.68	9.542	
8,563.0	6,935.5	8,533.8	6,934.7	49.2	49.0	89.89	-286.6	1,456.9	903.4	805.4	98.00	9.219	
8,600.0	6,935.2	8,570.8	6,934.4	50.2	50.0	89.88	-286.6	1,493.9	903.4	803.5	99.95	9.039	
8,661.4	6,934.7	8,632.2	6,933.8	51.8	51.6	89.88	-286.6	1,555.3	903.4	800.2	103.21	8.753	
8,700.0	6,934.4	8,670.8	6,933.5	52.8	52.6	89.88	-286.6	1,593.9	903.4	798.2	105.26	8.583	
8,759.8	6,933.9	8,730.6	6,932.9	54.4	54.2	89.88	-286.6	1,653.8	903.4	795.0	108.46	8.330	
8,800.0	6,933.5	8,770.8	6,932.6	55.5	55.3	89.88	-286.6	1,693.9	903.4	792.8	110.61	8.168	
8,858.2	6,933.0	8,829.1	6,932.0	57.1	56.9	89.87	-286.6	1,752.2	903.4	789.7	113.73	7.944	
8,900.0	6,932.7	8,870.8	6,931.7	58.2	58.0	89.87	-286.6	1,793.9	903.4	787.5	115.97	7.790	
8,956.7	6,932.2	8,927.5	6,931.1	59.7	59.5	89.87	-286.6	1,850.6	903.4	784.4	119.03	7.590	
9,000.0	6,931.8	8,970.8	6,930.8	60.9	60.7	89.87	-286.6	1,893.9	903.4	782.1	121.36	7.444	
9,055.1	6,931.4	9,025.9	6,930.3	62.4	62.2	89.86	-286.6	1,949.0	903.4	779.1	124.34	7.266	
9,100.0	6,931.0	9,070.8	6,929.8	63.6	63.4	89.86	-286.6	1,993.9	903.4	776.7	126.78	7.126	
9,153.5	6,930.6	9,124.3	6,929.4	65.0	64.9	89.86	-286.6	2,047.4	903.4	773.8	129.68	6.967	
9,200.0	6,930.2	9,170.8	6,928.9	66.3	66.1	89.86	-286.6	2,093.9	903.4	771.2	132.20	6.834	
9,251.9	6,929.7	9,222.8	6,928.5	67.7	67.5	89.86	-286.6	2,145.9	903.4	768.4	135.03	6.691	
9,300.0	6,929.3	9,270.8	6,928.0	69.0	68.8	89.85	-286.6	2,193.9	903.4	765.8	137.65	6.563	
9,350.4	6,928.9	9,321.2	6,927.6	70.4	70.2	89.85	-286.6	2,244.3	903.4	763.0	140.40	6.435	
9,400.0	6,928.5	9,370.8	6,927.1	71.7	71.6	89.85	-286.6	2,293.9	903.4	760.3	143.10	6.313	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-302 - ORIGINAL WELLBORE - PROPC												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,419.6	6,926.7	73.0	72.9	89.85	-286.6	2,342.7	903.4	757.7	145.77	6.198	
9,500.0	6,927.7	9,470.8	6,926.2	74.4	74.3	89.85	-286.6	2,393.9	903.4	754.9	148.57	6.081	
9,547.2	6,927.3	9,518.0	6,925.8	75.7	75.6	89.84	-286.6	2,441.1	903.4	752.3	151.16	5.977	
9,600.0	6,926.8	9,570.8	6,925.3	77.2	77.1	89.84	-286.6	2,493.9	903.4	749.4	154.05	5.864	
9,645.6	6,926.4	9,616.5	6,924.9	78.4	78.3	89.84	-286.6	2,539.5	903.4	746.9	156.56	5.771	
9,700.0	6,926.0	9,670.8	6,924.4	79.9	79.8	89.84	-286.6	2,593.9	903.4	743.9	159.54	5.663	
9,744.1	6,925.6	9,714.9	6,924.0	81.1	81.0	89.83	-286.6	2,638.0	903.4	741.5	161.97	5.578	
9,800.0	6,925.2	9,770.8	6,923.5	82.6	82.6	89.83	-286.6	2,693.9	903.4	738.4	165.04	5.474	
9,842.5	6,924.8	9,813.3	6,923.1	83.8	83.7	89.83	-286.6	2,736.4	903.4	736.1	167.38	5.398	
9,900.0	6,924.3	9,870.8	6,922.6	85.4	85.3	89.83	-286.6	2,793.9	903.4	732.9	170.55	5.297	
9,940.9	6,924.0	9,911.7	6,922.2	86.5	86.4	89.83	-286.6	2,834.8	903.4	730.6	172.80	5.228	
10,000.0	6,923.5	9,970.8	6,921.7	88.1	88.1	89.82	-286.6	2,893.9	903.4	727.4	176.06	5.131	
10,039.3	6,923.2	10,010.2	6,921.3	89.2	89.2	89.82	-286.6	2,933.2	903.4	725.2	178.23	5.069	
10,100.0	6,922.6	10,070.8	6,920.8	90.9	90.8	89.82	-286.6	2,993.9	903.4	721.9	181.58	4.975	
10,137.8	6,922.3	10,108.6	6,920.4	91.9	91.9	89.82	-286.6	3,031.6	903.4	719.8	183.67	4.919	
10,200.0	6,921.8	10,170.8	6,919.9	93.7	93.6	89.81	-286.6	3,093.9	903.4	716.3	187.11	4.828	
10,236.2	6,921.5	10,207.0	6,919.6	94.7	94.6	89.81	-286.6	3,130.1	903.4	714.3	189.11	4.777	
10,300.0	6,921.0	10,270.8	6,919.0	96.4	96.4	89.81	-286.6	3,193.9	903.4	710.8	192.64	4.690	
10,334.6	6,920.7	10,305.4	6,918.7	97.4	97.3	89.81	-286.6	3,228.5	903.4	708.9	194.56	4.644	
10,400.0	6,920.1	10,370.8	6,918.1	99.2	99.1	89.81	-286.6	3,293.9	903.4	705.3	198.18	4.559	
10,433.0	6,919.9	10,403.9	6,917.8	100.1	100.0	89.80	-286.6	3,326.9	903.4	703.4	200.01	4.517	
10,500.0	6,919.3	10,470.8	6,917.2	101.9	101.9	89.80	-286.6	3,393.9	903.4	699.7	203.72	4.435	
10,531.5	6,919.0	10,502.3	6,916.9	102.8	102.8	89.80	-286.6	3,425.3	903.4	698.0	205.46	4.397	
10,600.0	6,918.5	10,570.8	6,916.3	104.7	104.7	89.80	-286.6	3,493.8	903.4	694.2	209.26	4.317	
10,629.9	6,918.2	10,600.7	6,916.0	105.5	105.5	89.80	-286.6	3,523.7	903.4	692.5	210.92	4.283	
10,700.0	6,917.6	10,670.8	6,915.4	107.5	107.5	89.79	-286.6	3,593.8	903.4	688.6	214.81	4.206	
10,728.3	6,917.4	10,699.1	6,915.1	108.3	108.2	89.79	-286.6	3,622.2	903.5	687.1	216.38	4.175	
10,800.0	6,916.8	10,770.8	6,914.5	110.3	110.2	89.79	-286.6	3,693.8	903.5	683.1	220.36	4.100	
10,826.7	6,916.6	10,797.6	6,914.2	111.0	111.0	89.79	-286.6	3,720.6	903.5	681.6	221.85	4.072	
10,900.0	6,916.0	10,870.8	6,913.5	113.0	113.0	89.78	-286.6	3,793.8	903.5	677.5	225.92	3.999	
10,925.2	6,915.8	10,896.0	6,913.3	113.7	113.7	89.78	-286.6	3,819.0	903.5	676.1	227.32	3.974	
11,000.0	6,915.1	10,970.8	6,912.6	115.8	115.8	89.78	-286.6	3,893.8	903.5	672.0	231.48	3.903	
11,023.6	6,914.9	10,994.4	6,912.4	116.5	116.4	89.78	-286.6	3,917.4	903.5	670.7	232.79	3.881	
11,100.0	6,914.3	11,070.8	6,911.7	118.6	118.6	89.77	-286.6	3,993.8	903.5	666.4	237.04	3.811	
11,122.0	6,914.1	11,092.8	6,911.5	119.2	119.2	89.77	-286.6	4,015.9	903.5	665.2	238.27	3.792	
11,200.0	6,913.5	11,170.8	6,910.8	121.4	121.4	89.77	-286.6	4,093.8	903.5	660.9	242.60	3.724	
11,220.4	6,913.3	11,191.3	6,910.6	121.9	121.9	89.77	-286.6	4,114.3	903.5	659.7	243.74	3.707	
11,300.0	6,912.6	11,270.8	6,909.9	124.1	124.1	89.77	-286.6	4,193.8	903.5	655.3	248.17	3.640	
11,318.9	6,912.5	11,289.7	6,909.8	124.7	124.7	89.76	-286.6	4,212.7	903.5	654.2	249.22	3.625	
11,400.0	6,911.8	11,370.8	6,909.0	126.9	126.9	89.76	-286.6	4,293.8	903.5	649.7	253.74	3.561	
11,417.3	6,911.6	11,388.1	6,908.9	127.4	127.4	89.76	-286.6	4,311.1	903.5	648.8	254.70	3.547	
11,500.0	6,911.0	11,470.8	6,908.1	129.7	129.7	89.76	-286.6	4,393.8	903.5	644.1	259.31	3.484	
11,515.7	6,910.8	11,486.5	6,908.0	130.2	130.2	89.76	-286.6	4,409.5	903.5	643.3	260.19	3.472	
11,600.0	6,910.1	11,570.8	6,907.2	132.5	132.5	89.75	-286.6	4,493.8	903.5	638.6	264.89	3.411	
11,614.1	6,910.0	11,585.0	6,907.1	132.9	132.9	89.75	-286.6	4,508.0	903.5	637.8	265.67	3.401	
11,700.0	6,909.3	11,670.8	6,906.3	135.3	135.3	89.75	-286.6	4,593.8	903.5	633.0	270.46	3.340	
11,712.6	6,909.2	11,683.4	6,906.2	135.6	135.6	89.75	-286.6	4,606.4	903.5	632.3	271.16	3.332	
11,800.0	6,908.5	11,770.8	6,905.4	138.1	138.1	89.74	-286.6	4,693.8	903.5	627.4	276.04	3.273	
11,811.0	6,908.4	11,781.8	6,905.3	138.4	138.4	89.74	-286.6	4,704.8	903.5	626.8	276.65	3.266	
11,900.0	6,907.6	11,870.8	6,904.5	140.9	140.9	89.74	-286.6	4,793.8	903.5	621.8	281.62	3.208	
11,909.4	6,907.5	11,880.2	6,904.4	141.1	141.1	89.74	-286.6	4,803.2	903.5	621.3	282.14	3.202	
12,000.0	6,906.8	11,970.8	6,903.6	143.6	143.7	89.73	-286.6	4,893.8	903.5	616.3	287.20	3.146	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-302 - ORIGINAL WELLBORE - PROP												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	11,978.7	6,903.5	143.9	143.9	89.73	-286.6	4,901.6	903.5	615.8	287.64	3.141	
12,100.0	6,905.9	12,070.8	6,902.7	146.4	146.5	89.73	-286.6	4,993.8	903.5	610.7	292.78	3.086	
12,106.3	6,905.9	12,077.1	6,902.6	146.6	146.6	89.73	-286.6	5,000.1	903.5	610.3	293.13	3.082	
12,200.0	6,905.1	12,170.8	6,901.8	149.2	149.2	89.73	-286.6	5,093.8	903.5	605.1	298.36	3.028	
12,204.7	6,905.1	12,175.5	6,901.7	149.4	149.4	89.73	-286.6	5,098.5	903.5	604.8	298.62	3.025	
12,300.0	6,904.3	12,270.8	6,900.9	152.0	152.0	89.72	-286.6	5,193.8	903.5	599.5	303.95	2.972	
12,303.1	6,904.3	12,273.9	6,900.9	152.1	152.1	89.72	-286.6	5,196.9	903.5	599.3	304.12	2.971	
12,400.0	6,903.4	12,370.8	6,900.0	154.8	154.8	89.72	-286.6	5,293.8	903.5	593.9	309.53	2.919	
12,401.5	6,903.4	12,372.4	6,900.0	154.8	154.9	89.72	-286.6	5,295.3	903.5	593.9	309.62	2.918	
12,500.0	6,902.6	12,470.8	6,899.1	157.6	157.6	89.71	-286.6	5,393.8	903.5	588.4	315.12	2.867	
12,598.4	6,901.8	12,569.2	6,898.2	160.3	160.4	89.71	-286.6	5,492.2	903.5	582.9	320.62	2.818	
12,600.0	6,901.8	12,570.8	6,898.2	160.4	160.4	89.71	-286.6	5,493.8	903.5	582.8	320.71	2.817	
12,696.8	6,901.0	12,667.6	6,897.3	163.1	163.1	89.70	-286.6	5,590.6	903.5	577.4	326.12	2.770	
12,700.0	6,900.9	12,670.8	6,897.3	163.2	163.2	89.70	-286.6	5,593.8	903.5	577.2	326.30	2.769	
12,795.2	6,900.1	12,766.1	6,896.4	165.8	165.9	89.70	-286.6	5,689.0	903.5	571.9	331.62	2.724	
12,800.0	6,900.1	12,770.8	6,896.4	166.0	166.0	89.70	-286.6	5,693.8	903.5	571.6	331.89	2.722	
12,893.7	6,899.3	12,864.5	6,895.5	168.6	168.6	89.70	-286.6	5,787.4	903.5	566.4	337.12	2.680	
12,900.0	6,899.3	12,870.8	6,895.5	168.8	168.8	89.70	-286.6	5,793.8	903.5	566.0	337.48	2.677	
12,992.1	6,898.5	12,962.9	6,894.6	171.3	171.4	89.69	-286.6	5,885.8	903.5	560.8	342.63	2.637	
13,000.0	6,898.4	12,970.8	6,894.6	171.6	171.6	89.69	-286.6	5,893.7	903.5	560.4	343.07	2.634	
13,090.5	6,897.7	13,061.3	6,893.7	174.1	174.1	89.69	-286.6	5,984.3	903.5	555.3	348.13	2.595	
13,100.0	6,897.6	13,070.8	6,893.7	174.4	174.4	89.69	-286.6	5,993.7	903.5	554.8	348.66	2.591	
13,188.9	6,896.9	13,159.8	6,892.9	176.8	176.9	89.68	-286.6	6,082.7	903.5	549.8	353.64	2.555	
13,200.0	6,896.8	13,170.8	6,892.8	177.2	177.2	89.68	-286.6	6,093.7	903.5	549.2	354.26	2.550	
13,287.4	6,896.0	13,258.2	6,892.0	179.6	179.6	89.68	-286.6	6,181.1	903.5	544.3	359.15	2.516	
13,300.0	6,895.9	13,270.8	6,891.9	180.0	180.0	89.68	-286.6	6,193.7	903.5	543.6	359.85	2.511	
13,385.8	6,895.2	13,356.6	6,891.1	182.4	182.4	89.67	-286.6	6,279.5	903.5	538.8	364.65	2.478	
13,400.0	6,895.1	13,370.8	6,891.0	182.7	182.8	89.67	-286.6	6,293.7	903.5	538.0	365.45	2.472	
13,484.2	6,894.4	13,455.0	6,890.2	185.1	185.2	89.67	-286.6	6,378.0	903.5	533.3	370.16	2.441	
13,500.0	6,894.3	13,470.8	6,890.0	185.5	185.6	89.67	-286.6	6,393.7	903.5	532.4	371.04	2.435	
13,582.6	6,893.6	13,553.5	6,889.3	187.9	187.9	89.67	-286.6	6,476.4	903.5	527.8	375.67	2.405	
13,600.0	6,893.4	13,570.8	6,889.1	188.3	188.4	89.66	-286.6	6,493.7	903.5	526.8	376.64	2.399	
13,681.1	6,892.8	13,651.9	6,888.4	190.6	190.7	89.66	-286.7	6,574.8	903.5	522.3	381.18	2.370	
13,700.0	6,892.6	13,670.8	6,888.2	191.1	191.2	89.66	-286.7	6,593.7	903.5	521.3	382.24	2.364	
13,779.5	6,891.9	13,750.3	6,887.5	193.4	193.4	89.66	-286.7	6,673.2	903.5	516.8	386.69	2.336	
13,800.0	6,891.8	13,770.8	6,887.3	193.9	194.0	89.66	-286.7	6,693.7	903.5	515.7	387.84	2.330	
13,877.9	6,891.1	13,848.7	6,886.6	196.1	196.2	89.65	-286.7	6,771.6	903.5	511.3	392.20	2.304	
13,900.0	6,890.9	13,870.8	6,886.4	196.7	196.8	89.65	-286.7	6,793.7	903.5	510.1	393.43	2.296	
13,976.3	6,890.3	13,947.2	6,885.7	198.9	198.9	89.65	-286.7	6,870.1	903.5	505.8	397.71	2.272	
14,000.0	6,890.1	13,970.8	6,885.5	199.5	199.6	89.65	-286.7	6,893.7	903.5	504.5	399.03	2.264	
14,074.8	6,889.5	14,045.6	6,884.9	201.6	201.7	89.64	-286.7	6,968.5	903.5	500.3	403.22	2.241	
14,100.0	6,889.3	14,070.8	6,884.6	202.3	202.4	89.64	-286.7	6,993.7	903.5	498.9	404.63	2.233	
14,173.2	6,888.7	14,144.0	6,884.0	204.4	204.4	89.64	-286.7	7,066.9	903.5	494.8	408.73	2.210	
14,200.0	6,888.4	14,170.8	6,883.7	205.1	205.2	89.64	-286.7	7,093.7	903.5	493.3	410.23	2.202	
14,271.6	6,887.8	14,242.4	6,883.1	207.1	207.2	89.63	-286.7	7,165.3	903.5	489.3	414.25	2.181	
14,300.0	6,887.6	14,270.8	6,882.8	207.9	208.0	89.63	-286.7	7,193.7	903.5	487.7	415.83	2.173	
14,370.0	6,887.0	14,340.9	6,882.2	209.9	210.0	89.63	-286.7	7,263.7	903.5	483.7	419.76	2.152	
14,400.0	6,886.8	14,370.8	6,881.9	210.7	210.8	89.63	-286.7	7,293.7	903.5	482.1	421.44	2.144	
14,468.5	6,886.2	14,439.3	6,881.3	212.6	212.7	89.63	-286.7	7,362.2	903.5	478.2	425.27	2.125	
14,500.0	6,885.9	14,470.8	6,881.0	213.5	213.6	89.62	-286.7	7,393.7	903.5	476.5	427.04	2.116	
14,566.9	6,885.4	14,537.7	6,880.4	215.4	215.5	89.62	-286.7	7,460.6	903.5	472.7	430.79	2.097	
14,600.0	6,885.1	14,570.8	6,880.1	216.3	216.4	89.62	-286.7	7,493.7	903.5	470.9	432.64	2.088	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-302 - ORIGINAL WELLBORE - PROPC												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,613.0	6,885.0	14,583.8	6,880.0	216.7	216.8	89.62	-286.7	7,506.7	903.5	470.1	433.37	2.085 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-312 - ORIGINAL WELLBORE - PROPC												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)	+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	180.00	-32.8	0.0	32.8				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-32.8	0.0	32.8	32.6	0.17	192.941	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-32.8	0.0	32.8	32.6	0.17	189.448	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-32.8	0.0	32.8	32.2	0.61	53.888	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-32.8	0.0	32.8	32.2	0.62	52.663	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-32.8	0.0	32.8	31.7	1.05	31.200	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-32.8	0.0	32.8	31.7	1.07	30.582	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-32.8	0.0	32.8	31.3	1.49	21.956	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-32.8	0.0	32.8	31.3	1.52	21.547	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-32.8	0.0	32.8	30.9	1.94	16.938	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-32.8	0.0	32.8	30.8	1.97	16.633	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-32.8	0.0	32.8	30.4	2.38	13.787	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-32.8	0.0	32.8	30.4	2.42	13.545	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-32.8	0.0	32.8	30.0	2.82	11.624	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-32.8	0.0	32.8	29.9	2.87	11.423	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-32.8	0.0	32.8	29.5	3.26	10.048	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-32.8	0.0	32.8	29.5	3.32	9.876	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-32.8	0.0	32.8	29.1	3.71	8.848	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-32.8	0.0	32.8	29.0	3.77	8.699	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-32.8	0.0	32.8	28.6	4.15	7.904	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-32.8	0.0	32.8	28.6	4.22	7.772	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	180.00	-32.8	0.0	32.8	28.2	4.59	7.143	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-32.8	0.0	32.8	28.1	4.67	7.023	
1,150.0	1,150.0	1,150.0	1,150.0	2.4	2.4	180.00	-32.8	0.0	32.8	27.9	4.89	6.701 CC	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	-147.47	-32.8	0.0	32.9	27.9	5.03	6.544	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-147.72	-32.8	0.0	33.2	28.0	5.12	6.480	
1,279.5	1,279.5	1,279.5	1,279.5	2.7	2.7	-149.85	-32.8	0.0	35.3	29.8	5.47	6.451	
1,300.0	1,299.9	1,299.9	1,299.9	2.8	2.8	-150.64	-32.8	0.0	36.2	30.6	5.56	6.502	
1,377.9	1,377.7	1,378.0	1,378.0	3.0	3.0	-154.01	-32.7	-0.1	40.6	34.7	5.90	6.882	
1,400.0	1,399.7	1,400.1	1,400.1	3.0	3.0	-154.77	-32.6	-0.4	42.1	36.1	6.00	7.019	
1,476.4	1,475.7	1,477.1	1,477.0	3.2	3.2	-156.44	-31.4	-2.4	47.6	41.3	6.33	7.526	
1,500.0	1,499.1	1,500.9	1,500.8	3.2	3.2	-156.70	-30.8	-3.4	49.4	43.0	6.43	7.693	
1,574.8	1,573.2	1,576.3	1,576.1	3.4	3.4	-156.89	-28.2	-7.7	55.6	48.8	6.75	8.229	
1,600.0	1,598.2	1,601.7	1,601.4	3.5	3.4	-156.78	-27.2	-9.5	57.7	50.9	6.86	8.416	
1,673.2	1,670.3	1,675.7	1,675.0	3.7	3.6	-156.06	-23.4	-15.9	64.4	57.2	7.19	8.959	
1,700.0	1,696.6	1,702.7	1,701.8	3.8	3.7	-155.68	-21.7	-18.7	67.0	59.7	7.31	9.164	
1,749.9	1,745.5	1,753.1	1,751.8	3.9	3.8	-154.84	-18.4	-24.4	71.9	64.4	7.54	9.537	
1,771.6	1,766.8	1,775.1	1,773.6	4.0	3.9	-154.42	-16.7	-27.1	74.1	66.4	7.65	9.683	
1,800.0	1,794.5	1,803.8	1,801.9	4.1	3.9	-153.75	-14.5	-30.9	76.8	69.0	7.80	9.846	
1,870.1	1,863.1	1,874.7	1,871.8	4.3	4.1	-151.61	-8.4	-41.2	82.8	74.6	8.19	10.107	
1,900.0	1,892.3	1,905.0	1,901.5	4.4	4.2	-150.49	-5.5	-46.1	85.0	76.7	8.36	10.175	
1,968.5	1,959.4	1,974.0	1,969.1	4.7	4.4	-147.56	1.6	-58.2	89.8	81.0	8.78	10.228	
2,000.0	1,990.2	2,005.3	1,999.7	4.8	4.5	-146.24	5.0	-63.8	92.0	83.0	8.98	10.241	
2,066.9	2,055.6	2,071.9	2,064.9	5.1	4.8	-143.64	12.0	-75.7	96.8	87.3	9.43	10.264	
2,100.0	2,088.0	2,104.8	2,097.1	5.2	4.9	-142.45	15.5	-81.6	99.2	89.5	9.65	10.278	
2,165.3	2,151.9	2,169.9	2,160.7	5.4	5.1	-140.27	22.4	-93.2	104.1	94.0	10.11	10.297	
2,200.0	2,185.8	2,204.4	2,194.4	5.6	5.2	-139.19	26.0	-99.4	106.8	96.4	10.36	10.306	
2,263.8	2,248.2	2,267.9	2,256.5	5.8	5.5	-137.34	32.8	-110.8	111.8	101.0	10.83	10.321	
2,300.0	2,283.6	2,303.9	2,291.8	6.0	5.6	-136.36	36.6	-117.2	114.7	103.6	11.10	10.329	
2,362.2	2,344.5	2,365.8	2,352.4	6.2	5.9	-134.80	43.2	-128.3	119.7	108.1	11.58	10.340	
2,400.0	2,381.4	2,403.5	2,389.2	6.4	6.0	-133.91	47.1	-135.0	122.8	110.9	11.87	10.348	
2,460.6	2,440.7	2,463.8	2,448.2	6.6	6.2	-132.57	53.5	-145.8	127.8	115.5	12.34	10.356	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,503.0	2,486.5	6.8	6.4	-131.76	57.7	-152.8	131.1	118.5	12.65	10.362	
2,559.0	2,537.0	2,561.8	2,544.0	7.0	6.6	-130.61	63.9	-163.3	136.1	123.0	13.13	10.369	
2,600.0	2,577.1	2,602.5	2,583.9	7.2	6.8	-129.87	68.2	-170.6	139.6	126.2	13.46	10.375	
2,657.5	2,633.3	2,659.8	2,639.9	7.4	7.0	-128.88	74.3	-180.9	144.6	130.6	13.93	10.380	
2,700.0	2,674.9	2,702.1	2,681.3	7.6	7.2	-128.20	78.8	-188.5	148.2	134.0	14.27	10.385	
2,755.9	2,729.6	2,757.7	2,735.7	7.9	7.4	-127.34	84.7	-198.4	153.1	138.4	14.74	10.390	
2,800.0	2,772.7	2,801.6	2,778.6	8.0	7.6	-126.71	89.3	-206.3	157.0	141.9	15.10	10.395	
2,854.3	2,825.8	2,855.7	2,831.5	8.3	7.8	-125.97	95.0	-215.9	161.8	146.2	15.56	10.399	
2,900.0	2,870.5	2,901.2	2,876.0	8.5	8.0	-125.38	99.9	-224.1	165.8	149.9	15.94	10.403	
2,952.7	2,922.1	2,953.7	2,927.4	8.7	8.3	-124.73	105.4	-233.5	170.5	154.1	16.38	10.407	
3,000.0	2,968.3	3,000.7	2,973.4	8.9	8.5	-124.18	110.4	-241.9	174.7	157.9	16.78	10.411	
3,051.2	3,018.4	3,051.6	3,023.2	9.1	8.7	-123.62	115.8	-251.0	179.3	162.1	17.22	10.415	
3,100.0	3,066.1	3,100.2	3,070.7	9.3	8.9	-123.10	120.9	-259.7	183.7	166.1	17.63	10.419	
3,149.6	3,114.7	3,149.6	3,119.0	9.5	9.1	-122.60	126.2	-268.5	188.2	170.1	18.05	10.422	
3,200.0	3,164.0	3,199.8	3,168.1	9.8	9.3	-122.12	131.5	-277.5	192.7	174.2	18.49	10.426	
3,248.0	3,210.9	3,247.6	3,214.8	10.0	9.5	-121.69	136.6	-286.1	197.1	178.2	18.90	10.429	
3,300.0	3,261.8	3,299.3	3,265.4	10.2	9.7	-121.23	142.0	-295.3	201.8	182.5	19.34	10.433	
3,346.4	3,307.2	3,345.6	3,310.7	10.4	9.9	-120.85	146.9	-303.6	206.0	186.3	19.74	10.436	
3,400.0	3,359.6	3,398.9	3,362.8	10.6	10.2	-120.42	152.6	-313.1	210.9	190.7	20.21	10.439	
3,444.9	3,403.5	3,443.5	3,406.5	10.8	10.4	-120.08	157.3	-321.1	215.1	194.5	20.59	10.442	
3,500.0	3,457.4	3,498.4	3,460.2	11.1	10.6	-119.67	163.1	-331.0	220.1	199.0	21.07	10.446	
3,543.3	3,499.8	3,541.5	3,502.3	11.3	10.8	-119.37	167.7	-338.7	224.1	202.6	21.45	10.448	
3,600.0	3,555.2	3,597.8	3,557.4	11.5	11.0	-119.05	173.5	-348.5	229.3	207.4	21.91	10.465	
3,641.7	3,596.0	3,639.2	3,598.1	11.7	11.1	-118.99	177.5	-355.2	233.2	211.0	22.21	10.498	
3,700.0	3,653.0	3,696.9	3,655.0	11.9	11.3	-119.15	182.5	-363.7	238.7	216.1	22.62	10.552	
3,740.1	3,692.3	3,736.7	3,694.3	12.1	11.4	-119.41	185.6	-369.0	242.5	219.6	22.88	10.598	
3,800.0	3,750.8	3,795.9	3,753.0	12.4	11.6	-120.03	189.8	-375.9	248.3	225.0	23.26	10.674	
3,838.6	3,788.6	3,834.0	3,790.8	12.6	11.7	-120.56	192.1	-379.9	252.0	228.6	23.48	10.734	
3,900.0	3,848.7	3,894.5	3,850.9	12.8	11.8	-121.60	195.3	-385.2	258.2	234.4	23.82	10.841	
3,937.0	3,884.9	3,930.8	3,887.1	13.0	11.9	-122.33	196.9	-387.9	262.0	238.0	24.00	10.917	
4,000.0	3,946.5	3,992.4	3,948.6	13.3	12.0	-123.76	199.0	-391.6	268.7	244.4	24.29	11.064	
4,035.4	3,981.1	4,026.9	3,983.0	13.4	12.1	-124.64	199.9	-393.1	272.7	248.2	24.43	11.161	
4,100.0	4,044.3	4,089.5	4,045.5	13.7	12.2	-126.40	201.1	-395.1	280.2	255.6	24.67	11.360	
4,133.8	4,077.4	4,122.1	4,078.1	13.9	12.3	-127.39	201.4	-395.6	284.4	259.6	24.77	11.480	
4,200.0	4,142.1	4,186.1	4,142.1	14.2	12.4	-129.42	201.5	-395.8	293.0	268.0	24.95	11.741	
4,232.3	4,173.7	4,217.6	4,173.7	14.3	12.4	-130.41	201.5	-395.8	297.3	272.3	25.04	11.875	
4,300.0	4,239.9	4,283.9	4,239.9	14.6	12.5	-132.39	201.5	-395.8	306.8	281.5	25.22	12.162	
4,330.7	4,270.0	4,313.9	4,270.0	14.7	12.6	-133.25	201.5	-395.8	311.2	285.9	25.30	12.297	
4,400.0	4,337.7	4,381.7	4,337.7	15.0	12.7	-135.10	201.5	-395.8	321.3	295.8	25.49	12.607	
4,429.1	4,366.2	4,410.2	4,366.2	15.2	12.7	-135.84	201.5	-395.8	325.7	300.1	25.56	12.739	
4,500.0	4,435.6	4,479.5	4,435.6	15.5	12.8	-137.57	201.5	-395.8	336.5	310.8	25.75	13.067	
4,527.5	4,462.5	4,506.4	4,462.5	15.6	12.9	-138.22	201.5	-395.8	340.8	315.0	25.82	13.197	
4,600.0	4,533.4	4,577.3	4,533.4	15.9	13.0	-139.83	201.5	-395.8	352.3	326.3	26.02	13.539	
4,626.0	4,558.8	4,602.7	4,558.8	16.0	13.0	-140.39	201.5	-395.8	356.5	330.4	26.09	13.663	
4,673.6	4,605.3	4,649.3	4,605.3	16.3	13.1	-141.37	201.5	-395.8	364.2	338.0	26.22	13.891	
4,700.0	4,631.2	4,675.2	4,631.2	16.4	13.2	-141.94	201.5	-395.8	368.4	342.2	26.29	14.017	
4,724.4	4,655.1	4,699.1	4,655.1	16.4	13.2	-142.44	201.5	-395.8	372.2	345.9	26.34	14.133	
4,800.0	4,729.5	4,773.5	4,729.5	16.7	13.3	-143.78	201.5	-395.8	383.0	356.5	26.51	14.446	
4,822.8	4,752.1	4,796.0	4,752.1	16.7	13.4	-144.14	201.5	-395.8	386.0	359.4	26.57	14.530	
4,900.0	4,828.4	4,872.4	4,828.4	17.0	13.5	-145.18	201.5	-395.8	395.1	368.3	26.76	14.763	
4,921.2	4,849.5	4,893.5	4,849.5	17.0	13.5	-145.43	201.5	-395.8	397.3	370.5	26.81	14.817	
5,000.0	4,927.8	4,971.8	4,927.8	17.2	13.7	-146.19	201.5	-395.8	404.4	377.4	27.02	14.967	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,991.3	4,947.4	17.2	13.7	-146.35	201.5	-395.8	405.9	378.8	27.07	14.995	
5,100.0	5,027.5	5,071.4	5,027.5	17.4	13.8	-146.87	201.5	-395.8	410.9	383.6	27.28	15.060	
5,118.1	5,045.6	5,089.5	5,045.6	17.4	13.9	-146.96	201.5	-395.8	411.8	384.4	27.33	15.065	
5,200.0	5,127.4	5,171.3	5,127.4	17.6	14.0	-147.23	201.5	-395.8	414.5	386.9	27.55	15.043	
5,216.5	5,143.9	5,187.9	5,143.9	17.6	14.0	-147.26	201.5	-395.8	414.8	387.2	27.60	15.030	
5,273.4	5,200.8	5,244.7	5,200.8	17.7	14.1	180.00	201.5	-395.8	415.3	386.9	28.40	14.621	
5,300.0	5,227.4	5,271.3	5,227.4	17.7	14.2	180.00	201.5	-395.8	415.3	386.8	28.49	14.575	
5,314.9	5,242.3	5,286.3	5,242.3	17.7	14.2	180.00	201.5	-395.8	415.3	386.7	28.55	14.548	
5,400.0	5,327.4	5,371.3	5,327.4	17.8	14.4	180.00	201.5	-395.8	415.3	386.4	28.84	14.397	
5,413.4	5,340.8	5,384.7	5,340.8	17.9	14.4	180.00	201.5	-395.8	415.3	386.4	28.89	14.374	
5,500.0	5,427.4	5,471.3	5,427.4	18.0	14.5	180.00	201.5	-395.8	415.3	386.1	29.20	14.223	
5,511.8	5,439.2	5,483.1	5,439.2	18.0	14.6	180.00	201.5	-395.8	415.3	386.0	29.24	14.203	
5,600.0	5,527.4	5,571.3	5,527.4	18.1	14.7	180.00	201.5	-395.8	415.3	385.7	29.55	14.052	
5,610.2	5,537.6	5,581.6	5,537.6	18.1	14.7	180.00	201.5	-395.8	415.3	385.7	29.59	14.034	
5,700.0	5,627.4	5,671.3	5,627.4	18.3	14.9	180.00	201.5	-395.8	415.3	385.4	29.91	13.883	
5,708.6	5,636.0	5,680.0	5,636.0	18.3	14.9	180.00	201.5	-395.8	415.3	385.3	29.94	13.869	
5,800.0	5,727.4	5,771.3	5,727.4	18.4	15.1	180.00	201.5	-395.8	415.3	385.0	30.27	13.718	
5,807.1	5,734.5	5,778.4	5,734.5	18.4	15.1	180.00	201.5	-395.8	415.3	385.0	30.30	13.706	
5,900.0	5,827.4	5,871.3	5,827.4	18.6	15.3	180.00	201.5	-395.8	415.3	384.7	30.64	13.555	
5,905.5	5,832.9	5,876.8	5,832.9	18.6	15.3	180.00	201.5	-395.8	415.3	384.6	30.66	13.547	
6,000.0	5,927.4	5,971.3	5,927.4	18.7	15.4	180.00	201.5	-395.8	415.3	384.3	31.00	13.396	
6,003.9	5,931.3	5,975.3	5,931.3	18.7	15.5	180.00	201.5	-395.8	415.3	384.3	31.02	13.390	
6,100.0	6,027.4	6,071.3	6,027.4	18.9	15.6	180.00	201.5	-395.8	415.3	383.9	31.37	13.239	
6,102.3	6,029.7	6,073.7	6,029.7	18.9	15.6	180.00	201.5	-395.8	415.3	383.9	31.38	13.236	
6,200.0	6,127.4	6,171.3	6,127.4	19.0	15.8	180.00	201.5	-395.8	415.3	383.6	31.74	13.085	
6,200.8	6,128.2	6,172.1	6,128.2	19.0	15.8	180.00	201.5	-395.8	415.3	383.5	31.74	13.084	
6,299.2	6,226.6	6,270.5	6,226.6	19.2	16.0	180.00	201.5	-395.8	415.3	383.2	32.10	12.935	
6,301.4	6,228.8	6,272.7	6,228.8	19.2	16.0	180.00	201.5	-395.8	415.3	383.2	32.11	12.932	
6,350.0	6,277.4	6,321.3	6,277.4	19.3	16.1	90.04	201.5	-394.5	415.3	383.6	31.73	13.089	
6,397.6	6,324.7	6,369.0	6,324.8	19.3	16.1	90.09	201.5	-390.0	415.3	383.5	31.83	13.046	
6,400.0	6,327.1	6,371.4	6,327.2	19.3	16.1	90.09	201.5	-389.7	415.3	383.5	31.84	13.044	
6,450.0	6,376.3	6,421.4	6,376.5	19.3	16.2	90.14	201.5	-381.4	415.3	383.4	31.91	13.015	
6,496.0	6,421.1	6,467.6	6,421.4	19.3	16.2	90.18	201.5	-370.8	415.3	383.3	31.94	13.000	
6,500.0	6,424.9	6,471.5	6,425.2	19.3	16.2	90.19	201.5	-369.7	415.3	383.3	31.95	12.999	
6,550.0	6,472.4	6,521.6	6,473.0	19.3	16.2	90.23	201.5	-354.7	415.3	383.3	31.96	12.994	
6,594.5	6,513.8	6,566.2	6,514.5	19.3	16.2	90.27	201.5	-338.5	415.3	383.3	31.96	12.995	
6,600.0	6,518.8	6,571.8	6,519.6	19.3	16.2	90.28	201.5	-336.3	415.3	383.3	31.96	12.996	
6,650.0	6,563.8	6,621.9	6,564.9	19.3	16.2	90.32	201.5	-314.7	415.3	383.3	31.95	12.998	
6,692.9	6,601.1	6,664.9	6,602.4	19.2	16.2	90.36	201.5	-293.7	415.3	383.3	31.96	12.996	
6,700.0	6,607.1	6,672.1	6,608.5	19.2	16.2	90.36	201.5	-290.0	415.3	383.3	31.96	12.995	
6,750.0	6,648.6	6,722.3	6,650.3	19.2	16.2	90.40	201.5	-262.2	415.3	383.3	31.99	12.981	
6,791.3	6,681.4	6,763.8	6,683.4	19.1	16.2	90.43	201.5	-237.1	415.3	383.2	32.06	12.953	
6,800.0	6,688.1	6,772.5	6,690.1	19.1	16.2	90.44	201.5	-231.6	415.3	383.2	32.08	12.945	
6,850.0	6,725.3	6,822.7	6,727.7	19.1	16.2	90.48	201.5	-198.3	415.3	383.1	32.24	12.881	
6,889.7	6,753.2	6,862.7	6,755.8	19.0	16.3	90.50	201.5	-169.9	415.3	382.9	32.44	12.803	
6,900.0	6,760.1	6,873.0	6,762.8	19.0	16.3	90.51	201.5	-162.4	415.3	382.8	32.50	12.780	
6,950.0	6,792.3	6,923.2	6,795.4	19.0	16.4	90.54	201.5	-124.1	415.3	382.4	32.87	12.635	
6,988.2	6,815.1	6,961.6	6,818.4	18.9	16.6	90.56	201.5	-93.4	415.3	382.1	33.25	12.491	
7,000.0	6,821.8	6,973.5	6,825.2	18.9	16.6	90.57	201.5	-83.6	415.3	381.9	33.38	12.442	
7,050.0	6,848.3	7,023.8	6,852.1	18.9	16.9	90.60	201.5	-41.1	415.3	381.3	34.04	12.199	
7,086.6	6,865.9	7,060.6	6,869.8	18.9	17.2	90.61	201.5	-8.8	415.3	380.7	34.64	11.989	
7,100.0	6,871.9	7,074.1	6,875.9	18.9	17.3	90.62	201.5	3.2	415.3	380.4	34.88	11.908	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	7,124.4	6,896.6	18.8	17.8	90.64	201.5	49.0	415.3	379.4	35.88	11.576	
7,185.0	6,904.7	7,159.7	6,909.2	18.8	18.2	90.65	201.5	82.0	415.3	378.6	36.69	11.321	
7,200.0	6,909.5	7,174.8	6,914.0	18.9	18.4	90.66	201.5	96.3	415.3	378.3	37.05	11.210	
7,250.0	6,923.4	7,225.1	6,928.1	19.3	19.1	90.67	201.5	144.6	415.3	376.9	38.38	10.820	
7,283.4	6,930.8	7,258.8	6,935.6	19.8	19.6	90.68	201.5	177.4	415.3	376.0	39.36	10.551	
7,300.0	6,933.9	7,275.5	6,938.7	20.0	19.8	90.68	201.5	193.8	415.3	375.5	39.87	10.418	
7,350.0	6,940.9	7,325.8	6,945.9	20.8	20.7	90.69	201.5	243.6	415.3	373.8	41.48	10.013	
7,381.9	6,943.6	7,357.9	6,948.6	21.4	21.2	90.69	201.5	275.6	415.3	372.7	42.57	9.756	
7,400.0	6,944.5	7,376.2	6,949.5	21.7	21.5	90.69	201.5	293.8	415.3	372.1	43.20	9.613	
7,432.4	6,945.0	7,408.8	6,950.0	22.3	22.1	90.69	201.5	326.4	415.3	371.0	44.37	9.361	
7,480.3	6,944.6	7,456.7	6,949.5	23.2	23.1	90.69	201.5	374.3	415.3	369.1	46.18	8.993	
7,500.0	6,944.4	7,476.4	6,949.4	23.6	23.4	90.68	201.5	394.0	415.3	368.4	46.93	8.850	
7,578.7	6,943.7	7,555.1	6,948.6	25.2	25.0	90.68	201.5	472.8	415.3	365.2	50.12	8.287	
7,600.0	6,943.6	7,576.4	6,948.5	25.6	25.5	90.67	201.5	494.0	415.3	364.3	50.99	8.145	
7,677.1	6,942.9	7,653.5	6,947.8	27.3	27.2	90.67	201.5	571.2	415.3	361.0	54.33	7.645	
7,700.0	6,942.7	7,676.4	6,947.5	27.8	27.7	90.66	201.5	594.0	415.3	360.0	55.32	7.507	
7,775.6	6,942.1	7,752.0	6,946.9	29.5	29.4	90.66	201.5	669.6	415.3	356.6	58.75	7.069	
7,800.0	6,941.9	7,776.4	6,946.6	30.1	30.0	90.65	201.5	694.0	415.3	355.5	59.86	6.938	
7,874.0	6,941.3	7,850.4	6,946.0	31.8	31.7	90.65	201.5	768.0	415.3	352.0	63.35	6.556	
7,900.0	6,941.1	7,876.4	6,945.7	32.4	32.3	90.64	201.5	794.0	415.3	350.7	64.58	6.431	
7,972.4	6,940.4	7,948.8	6,945.1	34.2	34.1	90.64	201.5	866.4	415.3	347.2	68.08	6.100	
8,000.0	6,940.2	7,976.4	6,944.8	34.9	34.8	90.64	201.5	894.0	415.3	345.9	69.42	5.982	
8,070.8	6,939.6	8,047.2	6,944.2	36.6	36.5	90.63	201.5	964.9	415.3	342.4	72.93	5.695	
8,100.0	6,939.4	8,076.4	6,943.9	37.3	37.3	90.63	201.5	994.0	415.3	340.9	74.38	5.584	
8,169.3	6,938.8	8,145.7	6,943.3	39.1	39.0	90.62	201.5	1,063.3	415.3	337.4	77.87	5.333	
8,200.0	6,938.5	8,176.4	6,943.0	39.8	39.8	90.62	201.5	1,094.0	415.3	335.9	79.42	5.229	
8,267.7	6,938.0	8,244.1	6,942.4	41.6	41.5	90.61	201.5	1,161.7	415.3	332.4	82.89	5.011	
8,300.0	6,937.7	8,276.4	6,942.1	42.4	42.4	90.61	201.5	1,194.0	415.3	330.8	84.54	4.912	
8,366.1	6,937.2	8,342.5	6,941.5	44.1	44.1	90.60	201.5	1,260.1	415.3	327.3	87.96	4.721	
8,400.0	6,936.9	8,376.4	6,941.2	45.0	44.9	90.60	201.5	1,294.0	415.3	325.6	89.72	4.629	
8,464.5	6,936.3	8,440.9	6,940.6	46.6	46.6	90.59	201.5	1,358.5	415.3	322.2	93.09	4.461	
8,500.0	6,936.0	8,476.4	6,940.3	47.6	47.6	90.59	201.5	1,394.0	415.3	320.4	94.95	4.374	
8,563.0	6,935.5	8,539.4	6,939.7	49.2	49.2	90.58	201.5	1,457.0	415.3	317.0	98.26	4.226	
8,600.0	6,935.2	8,576.4	6,939.4	50.2	50.2	90.58	201.5	1,494.0	415.3	315.1	100.22	4.144	
8,661.4	6,934.7	8,637.8	6,938.8	51.8	51.8	90.57	201.5	1,555.4	415.3	311.8	103.47	4.014	
8,700.0	6,934.4	8,676.4	6,938.5	52.8	52.9	90.57	201.5	1,594.0	415.3	309.8	105.52	3.936	
8,759.8	6,933.9	8,736.2	6,937.9	54.4	54.5	90.56	201.5	1,653.8	415.3	306.6	108.72	3.820	
8,800.0	6,933.5	8,776.4	6,937.6	55.5	55.5	90.56	201.5	1,694.0	415.3	304.4	110.86	3.746	
8,858.2	6,933.0	8,834.6	6,937.0	57.1	57.1	90.55	201.5	1,752.2	415.3	301.3	113.98	3.644	
8,900.0	6,932.7	8,876.4	6,936.7	58.2	58.2	90.55	201.5	1,794.0	415.3	299.1	116.23	3.573	
8,956.7	6,932.2	8,933.1	6,936.1	59.7	59.7	90.54	201.5	1,850.6	415.3	296.0	119.28	3.482	
9,000.0	6,931.8	8,976.4	6,935.8	60.9	60.9	90.54	201.5	1,894.0	415.3	293.7	121.61	3.415	
9,055.1	6,931.4	9,031.5	6,935.3	62.4	62.4	90.53	201.5	1,949.1	415.3	290.7	124.59	3.333	
9,100.0	6,931.0	9,076.4	6,934.8	63.6	63.6	90.53	201.5	1,994.0	415.3	288.3	127.02	3.270	
9,153.5	6,930.6	9,129.9	6,934.4	65.0	65.1	90.52	201.5	2,047.5	415.3	285.4	129.92	3.197	
9,200.0	6,930.2	9,176.4	6,933.9	66.3	66.3	90.52	201.5	2,094.0	415.3	282.9	132.44	3.136	
9,251.9	6,929.7	9,228.3	6,933.5	67.7	67.8	90.51	201.5	2,145.9	415.3	280.0	135.27	3.070	
9,300.0	6,929.3	9,276.4	6,933.0	69.0	69.1	90.51	201.5	2,194.0	415.3	277.4	137.88	3.012	
9,350.4	6,928.9	9,326.8	6,932.6	70.4	70.4	90.51	201.5	2,244.3	415.3	274.7	140.63	2.953	
9,400.0	6,928.5	9,376.4	6,932.1	71.7	71.8	90.50	201.5	2,294.0	415.3	272.0	143.34	2.897	
9,448.8	6,928.1	9,425.2	6,931.7	73.0	73.1	90.50	201.5	2,342.8	415.3	269.3	146.01	2.844	
9,500.0	6,927.7	9,476.4	6,931.2	74.4	74.5	90.49	201.5	2,394.0	415.3	266.5	148.81	2.791	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-312 - ORIGINAL WELLBORE - PROPC												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	9,523.6	6,930.8	75.7	75.8	90.49	201.5	2,441.2	415.3	263.9	151.39	2.743	
9,600.0	6,926.8	9,576.4	6,930.3	77.2	77.3	90.48	201.5	2,493.9	415.3	261.0	154.28	2.692	
9,645.6	6,926.4	9,622.0	6,929.9	78.4	78.5	90.48	201.5	2,539.6	415.3	258.5	156.79	2.649	
9,700.0	6,926.0	9,676.4	6,929.4	79.9	80.0	90.47	201.5	2,593.9	415.3	255.5	159.77	2.599	
9,744.1	6,925.6	9,720.5	6,929.0	81.1	81.2	90.47	201.5	2,638.0	415.3	253.1	162.19	2.561	
9,800.0	6,925.2	9,776.4	6,928.5	82.6	82.8	90.46	201.5	2,693.9	415.3	250.0	165.27	2.513	
9,842.5	6,924.8	9,818.9	6,928.1	83.8	83.9	90.46	201.5	2,736.4	415.3	247.7	167.61	2.478	
9,900.0	6,924.3	9,876.4	6,927.6	85.4	85.5	90.45	201.5	2,793.9	415.3	244.5	170.77	2.432	
9,940.9	6,924.0	9,917.3	6,927.2	86.5	86.6	90.45	201.5	2,834.9	415.3	242.3	173.03	2.400	
10,000.0	6,923.5	9,976.4	6,926.7	88.1	88.3	90.44	201.5	2,893.9	415.3	239.0	176.28	2.356	
10,039.3	6,923.2	10,015.7	6,926.3	89.2	89.4	90.44	201.5	2,933.3	415.3	236.8	178.45	2.327	
10,100.0	6,922.6	10,076.4	6,925.8	90.9	91.0	90.43	201.5	2,993.9	415.3	233.5	181.80	2.284	
10,137.8	6,922.3	10,114.2	6,925.4	91.9	92.1	90.43	201.5	3,031.7	415.3	231.4	183.89	2.258	
10,200.0	6,921.8	10,176.4	6,924.9	93.7	93.8	90.42	201.5	3,093.9	415.3	228.0	187.33	2.217	
10,236.2	6,921.5	10,212.6	6,924.6	94.7	94.8	90.42	201.5	3,130.1	415.3	226.0	189.33	2.194	
10,300.0	6,921.0	10,276.4	6,924.0	96.4	96.6	90.41	201.5	3,193.9	415.3	222.4	192.86	2.153	
10,334.6	6,920.7	10,311.0	6,923.7	97.4	97.5	90.41	201.5	3,228.5	415.3	220.5	194.77	2.132	
10,400.0	6,920.1	10,376.4	6,923.1	99.2	99.3	90.40	201.5	3,293.9	415.3	216.9	198.39	2.093	
10,433.0	6,919.9	10,409.4	6,922.8	100.1	100.2	90.40	201.5	3,327.0	415.3	215.1	200.22	2.074	
10,500.0	6,919.3	10,476.4	6,922.2	101.9	102.1	90.39	201.5	3,393.9	415.3	211.4	203.93	2.036	
10,531.5	6,919.0	10,507.9	6,921.9	102.8	103.0	90.39	201.5	3,425.4	415.3	209.6	205.67	2.019	
10,600.0	6,918.5	10,576.4	6,921.3	104.7	104.9	90.39	201.5	3,493.9	415.3	205.8	209.47	1.983	
10,629.9	6,918.2	10,606.3	6,921.0	105.5	105.7	90.38	201.5	3,523.8	415.3	204.2	211.13	1.967	
10,700.0	6,917.6	10,676.4	6,920.4	107.5	107.6	90.38	201.5	3,593.9	415.3	200.3	215.02	1.931	
10,728.3	6,917.4	10,704.7	6,920.1	108.3	108.4	90.37	201.5	3,622.2	415.3	198.7	216.59	1.917	
10,800.0	6,916.8	10,776.4	6,919.5	110.3	110.4	90.37	201.5	3,693.9	415.3	194.7	220.57	1.883	
10,826.7	6,916.6	10,803.1	6,919.2	111.0	111.2	90.36	201.5	3,720.6	415.3	193.2	222.06	1.870	
10,900.0	6,916.0	10,876.4	6,918.5	113.0	113.2	90.36	201.5	3,793.9	415.3	189.2	226.13	1.837	
10,925.2	6,915.8	10,901.6	6,918.3	113.7	113.9	90.35	201.5	3,819.1	415.3	187.8	227.53	1.825	
11,000.0	6,915.1	10,976.4	6,917.6	115.8	116.0	90.35	201.5	3,893.9	415.3	183.6	231.69	1.793	
11,023.6	6,914.9	11,000.0	6,917.4	116.5	116.6	90.34	201.5	3,917.5	415.3	182.3	233.00	1.782	
11,100.0	6,914.3	11,076.4	6,916.7	118.6	118.8	90.34	201.5	3,993.9	415.3	178.1	237.25	1.751	
11,122.0	6,914.1	11,098.4	6,916.5	119.2	119.4	90.33	201.5	4,015.9	415.3	176.8	238.47	1.742	
11,200.0	6,913.5	11,176.4	6,915.8	121.4	121.5	90.33	201.5	4,093.9	415.3	172.5	242.81	1.710	
11,220.4	6,913.3	11,196.8	6,915.6	121.9	122.1	90.33	201.5	4,114.3	415.3	171.4	243.95	1.702	
11,300.0	6,912.6	11,276.4	6,914.9	124.1	124.3	90.32	201.5	4,193.9	415.3	166.9	248.38	1.672	
11,318.9	6,912.5	11,295.3	6,914.8	124.7	124.9	90.32	201.5	4,212.8	415.3	165.9	249.43	1.665	
11,363.8	6,912.1	11,340.2	6,914.4	125.9	126.1	90.31	201.5	4,257.7	415.3	163.4	251.93	1.648	
11,400.0	6,911.8	11,376.4	6,914.0	126.9	127.1	90.31	201.5	4,293.9	415.3	161.4	253.94	1.635	
11,417.3	6,911.6	11,393.7	6,913.9	127.4	127.6	90.31	201.5	4,311.2	415.3	160.4	254.91	1.629	
11,500.0	6,911.0	11,476.4	6,913.1	129.7	129.9	90.30	201.5	4,393.9	415.3	155.8	259.52	1.600	
11,515.7	6,910.8	11,492.1	6,913.0	130.2	130.3	90.30	201.5	4,409.6	415.3	154.9	260.39	1.595	
11,600.0	6,910.1	11,576.4	6,912.2	132.5	132.7	90.29	201.5	4,493.9	415.3	150.2	265.09	1.567	
11,614.1	6,910.0	11,590.5	6,912.1	132.9	133.1	90.29	201.5	4,508.0	415.3	149.4	265.88	1.562	
11,700.0	6,909.3	11,676.4	6,911.3	135.3	135.5	90.28	201.5	4,593.9	415.3	144.6	270.66	1.534	
11,712.6	6,909.2	11,689.0	6,911.2	135.6	135.8	90.28	201.5	4,606.4	415.3	143.9	271.36	1.530	
11,800.0	6,908.5	11,776.4	6,910.4	138.1	138.3	90.27	201.5	4,693.9	415.3	139.1	276.24	1.503	
11,811.0	6,908.4	11,787.4	6,910.3	138.4	138.6	90.27	201.5	4,704.9	415.3	138.4	276.85	1.500	
11,900.0	6,907.6	11,876.4	6,909.5	140.9	141.1	90.26	201.5	4,793.9	415.3	133.5	281.82	1.474 Level 3	
11,909.4	6,907.5	11,885.8	6,909.4	141.1	141.3	90.26	201.5	4,803.3	415.3	133.0	282.34	1.471 Level 3	
12,000.0	6,906.8	11,976.4	6,908.6	143.6	143.8	90.25	201.5	4,893.8	415.3	127.9	287.40	1.445 Level 3	
12,007.8	6,906.7	11,984.2	6,908.5	143.9	144.1	90.25	201.5	4,901.7	415.3	127.5	287.83	1.443 Level 3	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-312 - ORIGINAL WELLBORE - PROP												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,100.0	6,905.9	12,076.4	6,907.7	146.4	146.6	90.24	201.5	4,993.8	415.3	122.3	292.98	1.418	Level 3
12,106.3	6,905.9	12,082.7	6,907.6	146.6	146.8	90.24	201.5	5,000.1	415.3	122.0	293.33	1.416	Level 3
12,200.0	6,905.1	12,176.4	6,906.8	149.2	149.4	90.23	201.5	5,093.8	415.3	116.7	298.56	1.391	Level 3
12,204.7	6,905.1	12,181.1	6,906.7	149.4	149.6	90.23	201.5	5,098.5	415.3	116.5	298.82	1.390	Level 3
12,300.0	6,904.3	12,276.4	6,905.9	152.0	152.2	90.22	201.5	5,193.8	415.3	111.2	304.14	1.365	Level 3
12,303.1	6,904.3	12,279.5	6,905.9	152.1	152.3	90.22	201.5	5,197.0	415.3	111.0	304.32	1.365	Level 3
12,400.0	6,903.4	12,376.4	6,905.0	154.8	155.0	90.21	201.5	5,293.8	415.3	105.6	309.73	1.341	Level 3
12,401.5	6,903.4	12,377.9	6,905.0	154.8	155.1	90.21	201.5	5,295.4	415.3	105.5	309.82	1.340	Level 3
12,500.0	6,902.6	12,476.4	6,904.1	157.6	157.8	90.20	201.5	5,393.8	415.3	100.0	315.32	1.317	Level 3
12,598.4	6,901.8	12,574.8	6,903.2	160.3	160.6	90.19	201.5	5,492.2	415.3	94.5	320.82	1.295	Level 3
12,600.0	6,901.8	12,576.4	6,903.2	160.4	160.6	90.19	201.5	5,493.8	415.3	94.4	320.90	1.294	Level 3
12,696.8	6,901.0	12,673.2	6,902.3	163.1	163.3	90.18	201.5	5,590.6	415.3	89.0	326.32	1.273	Level 3
12,700.0	6,900.9	12,676.4	6,902.3	163.2	163.4	90.18	201.5	5,593.8	415.3	88.8	326.49	1.272	Level 3
12,795.2	6,900.1	12,771.6	6,901.4	165.8	166.1	90.17	201.5	5,689.1	415.3	83.5	331.82	1.252	Level 3
12,800.0	6,900.1	12,776.4	6,901.4	166.0	166.2	90.17	201.5	5,693.8	415.3	83.2	332.08	1.251	Level 3
12,893.7	6,899.3	12,870.1	6,900.5	168.6	168.8	90.16	201.5	5,787.5	415.3	78.0	337.32	1.231	Level 2
12,900.0	6,899.3	12,876.4	6,900.5	168.8	169.0	90.16	201.5	5,793.8	415.3	77.6	337.67	1.230	Level 2
12,992.1	6,898.5	12,968.5	6,899.6	171.3	171.6	90.16	201.5	5,885.9	415.3	72.5	342.82	1.211	Level 2
13,000.0	6,898.4	12,976.4	6,899.6	171.6	171.8	90.15	201.5	5,893.8	415.3	72.0	343.27	1.210	Level 2
13,090.5	6,897.7	13,066.9	6,898.7	174.1	174.3	90.15	201.5	5,984.3	415.3	67.0	348.33	1.192	Level 2
13,100.0	6,897.6	13,076.4	6,898.7	174.4	174.6	90.15	201.5	5,993.8	415.3	66.4	348.86	1.190	Level 2
13,188.9	6,896.9	13,165.3	6,897.9	176.8	177.1	90.14	201.5	6,082.7	415.3	61.5	353.83	1.174	Level 2
13,200.0	6,896.8	13,176.4	6,897.8	177.2	177.4	90.14	201.5	6,093.8	415.3	60.9	354.45	1.172	Level 2
13,287.4	6,896.0	13,263.8	6,897.0	179.6	179.8	90.13	201.5	6,181.2	415.3	56.0	359.34	1.156	Level 2
13,300.0	6,895.9	13,276.4	6,896.9	180.0	180.2	90.13	201.5	6,193.8	415.3	55.3	360.05	1.153	Level 2
13,385.8	6,895.2	13,362.2	6,896.1	182.4	182.6	90.12	201.5	6,279.6	415.3	50.5	364.85	1.138	Level 2
13,400.0	6,895.1	13,376.4	6,895.9	182.7	183.0	90.12	201.5	6,293.8	415.3	49.7	365.64	1.136	Level 2
13,484.2	6,894.4	13,460.6	6,895.2	185.1	185.3	90.11	201.5	6,378.0	415.3	45.0	370.35	1.121	Level 2
13,500.0	6,894.3	13,476.4	6,895.0	185.5	185.8	90.11	201.5	6,393.8	415.3	44.1	371.24	1.119	Level 2
13,582.6	6,893.6	13,559.0	6,894.3	187.9	188.1	90.10	201.5	6,476.4	415.3	39.4	375.86	1.105	Level 2
13,600.0	6,893.4	13,576.4	6,894.1	188.3	188.6	90.10	201.5	6,493.8	415.3	38.5	376.83	1.102	Level 2
13,681.1	6,892.8	13,657.5	6,893.4	190.6	190.8	90.09	201.5	6,574.9	415.3	33.9	381.37	1.089	Level 2
13,700.0	6,892.6	13,676.4	6,893.2	191.1	191.4	90.09	201.5	6,593.8	415.3	32.9	382.43	1.086	Level 2
13,779.5	6,891.9	13,755.9	6,892.5	193.4	193.6	90.08	201.5	6,673.3	415.3	28.4	386.88	1.073	Level 2
13,800.0	6,891.8	13,776.4	6,892.3	193.9	194.2	90.08	201.5	6,693.8	415.3	27.3	388.03	1.070	Level 2
13,877.9	6,891.1	13,854.3	6,891.6	196.1	196.3	90.07	201.5	6,771.7	415.3	22.9	392.39	1.058	Level 2
13,900.0	6,890.9	13,876.4	6,891.4	196.7	197.0	90.07	201.5	6,793.8	415.3	21.7	393.63	1.055	Level 2
13,976.3	6,890.3	13,952.7	6,890.7	198.9	199.1	90.06	201.5	6,870.1	415.3	17.4	397.90	1.044	Level 2
14,000.0	6,890.1	13,976.4	6,890.5	199.5	199.8	90.06	201.5	6,893.8	415.3	16.1	399.23	1.040	Level 2
14,074.8	6,889.5	14,051.2	6,889.9	201.6	201.9	90.05	201.5	6,968.5	415.3	11.9	403.41	1.029	Level 2
14,100.0	6,889.3	14,076.4	6,889.6	202.3	202.6	90.05	201.5	6,993.8	415.3	10.5	404.83	1.026	Level 2
14,173.2	6,888.7	14,149.6	6,889.0	204.4	204.6	90.04	201.5	7,067.0	415.3	6.4	408.92	1.016	Level 2
14,200.0	6,888.4	14,176.4	6,888.7	205.1	205.4	90.04	201.5	7,093.8	415.3	4.9	410.43	1.012	Level 2
14,271.6	6,887.8	14,248.0	6,888.1	207.1	207.4	90.03	201.5	7,165.4	415.3	0.9	414.44	1.002	Level 2
14,300.0	6,887.6	14,276.4	6,887.8	207.9	208.2	90.03	201.5	7,193.8	415.3	-0.7	416.03	0.998	Level 1
14,370.0	6,887.0	14,346.4	6,887.2	209.9	210.1	90.02	201.5	7,263.8	415.3	-4.6	419.95	0.989	Level 1
14,400.0	6,886.8	14,376.4	6,886.9	210.7	211.0	90.02	201.5	7,293.7	415.3	-6.3	421.63	0.985	Level 1
14,468.5	6,886.2	14,444.9	6,886.3	212.6	212.9	90.01	201.5	7,362.2	415.3	-10.2	425.46	0.976	Level 1
14,500.0	6,885.9	14,476.4	6,886.0	213.5	213.8	90.01	201.5	7,393.7	415.3	-11.9	427.23	0.972	Level 1
14,566.9	6,885.4	14,543.3	6,885.4	215.4	215.6	90.00	201.5	7,460.6	415.3	-15.7	430.98	0.964	Level 1
14,600.0	6,885.1	14,576.4	6,885.1	216.3	216.6	90.00	201.5	7,493.7	415.3	-17.5	432.83	0.960	Level 1
14,613.0	6,885.0	14,589.4	6,885.0	216.7	216.9	90.00	201.5	7,506.8	415.3	-18.2	433.56	0.958	Level 1, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-332 - ORIGINAL WELLBORE - PROP												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-91.1	0.0	91.1				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-91.1	0.0	91.1	90.9	0.17	533.232	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-91.1	0.0	91.1	90.9	0.18	519.499	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-91.1	0.0	91.1	90.5	0.61	149.139	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-91.1	0.0	91.1	90.5	0.62	145.759	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-91.1	0.0	91.1	90.0	1.05	86.482	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-91.1	0.0	91.1	90.0	1.07	84.772	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-91.1	0.0	91.1	89.6	1.50	60.897	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-91.1	0.0	91.1	89.6	1.52	59.765	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-91.1	0.0	91.1	89.1	1.94	46.994	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-91.1	0.0	91.1	89.1	1.97	46.151	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-91.1	0.0	91.1	88.7	2.38	38.260	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-91.1	0.0	91.1	88.7	2.42	37.589	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-91.1	0.0	91.1	88.3	2.82	32.263	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-91.1	0.0	91.1	88.2	2.87	31.707	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-91.1	0.0	91.1	87.8	3.27	27.892	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-91.1	0.0	91.1	87.8	3.32	27.416	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-91.1	0.0	91.1	87.4	3.71	24.563	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-91.1	0.0	91.1	87.3	3.77	24.148	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-91.1	0.0	91.1	86.9	4.15	21.945	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-91.1	0.0	91.1	86.9	4.22	21.577	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-91.1	0.0	91.1	86.5	4.59	19.831	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-91.1	0.0	91.1	86.4	4.67	19.500	
1,150.0	1,150.0	1,151.0	1,151.0	2.4	2.4	-180.00	-91.1	0.0	91.1	86.2	4.90	18.605 CC, ES	
1,181.1	1,181.1	1,182.1	1,182.1	2.5	2.5	-147.37	-91.1	0.0	91.2	86.2	5.03	18.119	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-147.46	-91.1	0.0	91.4	86.3	5.12	17.864	
1,279.5	1,279.5	1,280.5	1,280.5	2.7	2.7	-148.25	-91.1	0.0	93.6	88.1	5.47	17.095	
1,300.0	1,299.9	1,300.9	1,300.9	2.8	2.8	-148.56	-91.1	0.0	94.4	88.8	5.56	16.970	
1,377.9	1,377.7	1,378.7	1,378.7	3.0	3.0	-150.07	-91.1	0.0	98.8	92.9	5.91	16.727	
1,400.0	1,399.7	1,400.7	1,400.7	3.0	3.0	-150.58	-91.1	0.0	100.4	94.4	6.01	16.723	
1,476.4	1,475.7	1,475.9	1,475.9	3.2	3.2	-152.47	-91.2	-0.1	107.3	100.9	6.33	16.939	
1,500.0	1,499.1	1,498.6	1,498.6	3.2	3.2	-153.01	-91.4	-0.2	110.0	103.6	6.43	17.110	
1,574.8	1,573.2	1,570.3	1,570.2	3.4	3.3	-154.42	-93.3	-1.3	120.8	114.1	6.72	17.978	
1,600.0	1,598.2	1,594.2	1,594.2	3.5	3.4	-154.81	-94.2	-1.8	125.2	118.4	6.82	18.366	
1,673.2	1,670.3	1,663.4	1,663.2	3.7	3.5	-155.66	-98.0	-4.0	140.0	132.9	7.11	19.699	
1,700.0	1,696.6	1,688.5	1,688.2	3.8	3.6	-155.89	-99.7	-4.9	146.2	139.0	7.21	20.269	
1,749.9	1,745.5	1,734.8	1,734.3	3.9	3.6	-156.20	-103.3	-7.1	158.7	151.3	7.41	21.415	
1,771.6	1,766.8	1,754.9	1,754.3	4.0	3.7	-156.34	-105.1	-8.1	164.6	157.1	7.51	21.925	
1,800.0	1,794.5	1,781.0	1,780.3	4.1	3.7	-156.46	-107.6	-9.5	172.4	164.7	7.63	22.592	
1,870.1	1,863.1	1,845.0	1,843.8	4.3	3.9	-156.50	-114.6	-13.6	192.4	184.5	7.94	24.226	
1,900.0	1,892.3	1,872.1	1,870.6	4.4	3.9	-156.43	-118.0	-15.5	201.3	193.2	8.08	24.930	
1,968.5	1,959.4	1,933.8	1,931.5	4.7	4.1	-156.14	-126.4	-20.3	222.5	214.1	8.39	26.513	
2,000.0	1,990.2	1,961.9	1,959.1	4.8	4.2	-155.95	-130.6	-22.7	232.6	224.1	8.54	27.240	
2,066.9	2,055.6	2,021.0	2,017.3	5.1	4.3	-155.46	-140.2	-28.3	254.8	246.0	8.86	28.766	
2,100.0	2,088.0	2,050.0	2,045.6	5.2	4.4	-155.18	-145.3	-31.2	266.2	257.2	9.02	29.508	
2,165.3	2,151.9	2,111.2	2,105.5	5.4	4.6	-154.63	-156.4	-37.6	288.9	279.5	9.35	30.894	
2,200.0	2,185.8	2,143.7	2,137.3	5.6	4.7	-154.37	-162.2	-40.9	300.9	291.4	9.53	31.588	
2,263.8	2,248.2	2,203.5	2,195.7	5.8	4.9	-153.94	-173.0	-47.1	323.1	313.3	9.85	32.790	
2,300.0	2,283.6	2,237.4	2,228.9	6.0	5.0	-153.72	-179.1	-50.6	335.7	325.7	10.04	33.431	
2,362.2	2,344.5	2,295.7	2,285.9	6.2	5.2	-153.38	-189.6	-56.7	357.4	347.0	10.37	34.463	
2,400.0	2,381.4	2,331.1	2,320.6	6.4	5.3	-153.19	-196.0	-60.4	370.6	360.0	10.57	35.045	
2,460.6	2,440.7	2,387.9	2,376.1	6.6	5.5	-152.92	-206.2	-66.2	391.7	380.8	10.90	35.940	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,424.8	2,412.2	6.8	5.6	-152.76	-212.9	-70.1	405.4	394.3	11.11	36.488	
2,559.0	2,537.0	2,480.1	2,466.3	7.0	5.8	-152.53	-222.9	-75.8	426.0	414.6	11.43	37.260	
2,600.0	2,577.1	2,518.5	2,503.9	7.2	6.0	-152.39	-229.8	-79.8	440.3	428.6	11.66	37.766	
2,657.5	2,633.3	2,572.3	2,556.5	7.4	6.2	-152.20	-239.5	-85.4	460.3	448.4	11.98	38.436	
2,700.0	2,674.9	2,612.2	2,595.5	7.6	6.4	-152.08	-246.7	-89.5	475.2	463.0	12.21	38.907	
2,755.9	2,729.6	2,664.5	2,646.7	7.9	6.6	-151.92	-256.1	-94.9	494.7	482.1	12.53	39.489	
2,800.0	2,772.7	2,705.8	2,687.1	8.0	6.7	-151.81	-263.5	-99.2	510.1	497.3	12.77	39.927	
2,854.3	2,825.8	2,756.7	2,736.9	8.3	6.9	-151.68	-272.7	-104.5	529.0	515.9	13.08	40.436	
2,900.0	2,870.5	2,799.5	2,778.8	8.5	7.1	-151.57	-280.4	-108.9	545.0	531.6	13.34	40.845	
2,952.7	2,922.1	2,849.0	2,827.1	8.7	7.3	-151.46	-289.3	-114.0	563.4	549.7	13.64	41.290	
3,000.0	2,968.3	2,893.2	2,870.4	8.9	7.5	-151.36	-297.3	-118.6	579.9	566.0	13.92	41.672	
3,051.2	3,018.4	2,941.2	2,917.3	9.1	7.7	-151.27	-306.0	-123.6	597.7	583.5	14.21	42.063	
3,100.0	3,066.1	2,986.9	2,962.1	9.3	7.9	-151.18	-314.2	-128.3	614.8	600.3	14.49	42.421	
3,149.6	3,114.7	3,033.4	3,007.5	9.5	8.1	-151.10	-322.6	-133.2	632.1	617.3	14.78	42.766	
3,200.0	3,164.0	3,080.6	3,053.7	9.8	8.3	-151.02	-331.1	-138.1	649.7	634.6	15.07	43.102	
3,248.0	3,210.9	3,125.6	3,097.7	10.0	8.5	-150.94	-339.2	-142.7	666.5	651.1	15.35	43.407	
3,300.0	3,261.8	3,174.3	3,145.3	10.2	8.7	-150.87	-348.0	-147.8	684.6	669.0	15.66	43.723	
3,346.4	3,307.2	3,217.8	3,187.9	10.4	8.8	-150.81	-355.8	-152.3	700.9	684.9	15.93	43.992	
3,400.0	3,359.6	3,268.0	3,237.0	10.6	9.1	-150.74	-364.9	-157.5	719.6	703.3	16.25	44.290	
3,444.9	3,403.5	3,310.0	3,278.1	10.8	9.2	-150.68	-372.4	-161.8	735.2	718.7	16.51	44.529	
3,500.0	3,457.4	3,361.7	3,328.6	11.1	9.5	-150.62	-381.7	-167.2	754.5	737.7	16.84	44.811	
3,543.3	3,499.8	3,402.2	3,368.3	11.3	9.6	-150.57	-389.1	-171.4	769.6	752.5	17.09	45.023	
3,600.0	3,555.2	3,455.4	3,420.3	11.5	9.9	-150.51	-398.6	-176.9	789.4	772.0	17.43	45.289	
3,641.7	3,596.0	3,494.5	3,458.5	11.7	10.0	-150.46	-405.7	-181.0	804.0	786.3	17.68	45.478	
3,700.0	3,653.0	3,549.0	3,511.9	11.9	10.3	-150.41	-415.5	-186.6	824.4	806.3	18.03	45.731	
3,740.1	3,692.3	3,586.7	3,548.7	12.1	10.4	-150.37	-422.3	-190.5	838.4	820.1	18.27	45.898	
3,800.0	3,750.8	3,642.7	3,603.6	12.4	10.7	-150.31	-432.4	-196.3	859.3	840.7	18.62	46.139	
3,838.6	3,788.6	3,678.9	3,638.9	12.6	10.8	-150.28	-438.9	-200.1	872.8	853.9	18.86	46.288	
3,900.0	3,848.7	3,736.4	3,695.2	12.8	11.1	-150.23	-449.3	-206.0	894.3	875.0	19.22	46.517	
3,937.0	3,884.9	3,771.1	3,729.1	13.0	11.2	-150.20	-455.5	-209.6	907.2	887.7	19.45	46.649	
4,000.0	3,946.5	3,830.1	3,786.8	13.3	11.5	-150.15	-466.2	-215.8	929.2	909.4	19.83	46.868	
4,035.4	3,981.1	3,863.3	3,819.3	13.4	11.6	-150.12	-472.2	-219.2	941.6	921.5	20.04	46.986	
4,100.0	4,044.3	3,923.8	3,878.5	13.7	11.9	-150.08	-483.1	-225.5	964.1	943.7	20.43	47.194	
4,133.8	4,077.4	3,955.5	3,909.5	13.9	12.1	-150.05	-488.8	-228.8	976.0	955.3	20.63	47.300	
4,200.0	4,142.1	4,017.5	3,970.1	14.2	12.3	-150.01	-499.9	-235.2	999.1	978.1	21.03	47.499	
4,232.3	4,173.7	4,047.7	3,999.7	14.3	12.5	-149.99	-505.4	-238.3	1,010.4	989.1	21.23	47.593	
4,300.0	4,239.9	4,111.2	4,061.8	14.6	12.7	-149.94	-516.8	-244.9	1,034.0	1,012.4	21.64	47.784	
4,330.7	4,270.0	4,139.9	4,089.9	14.7	12.9	-149.93	-522.0	-247.9	1,044.8	1,022.9	21.83	47.867	
4,400.0	4,337.7	4,204.9	4,153.4	15.0	13.2	-149.89	-533.7	-254.6	1,069.0	1,046.7	22.25	48.050	
4,429.1	4,366.2	4,232.2	4,180.1	15.2	13.3	-149.87	-538.6	-257.4	1,079.2	1,056.7	22.42	48.125	
4,500.0	4,435.6	4,298.6	4,245.0	15.5	13.6	-149.83	-550.6	-264.3	1,103.9	1,081.1	22.86	48.300	
4,527.5	4,462.5	4,324.4	4,270.3	15.6	13.7	-149.81	-555.3	-267.0	1,113.6	1,090.5	23.02	48.366	
4,600.0	4,533.4	4,392.2	4,336.7	15.9	14.0	-149.78	-567.5	-274.0	1,138.9	1,115.4	23.47	48.535	
4,626.0	4,558.8	4,416.6	4,360.5	16.0	14.1	-149.76	-571.9	-276.6	1,148.0	1,124.3	23.62	48.594	
4,673.6	4,605.3	4,461.2	4,404.1	16.3	14.3	-149.74	-579.9	-281.2	1,164.6	1,140.7	23.91	48.699	
4,700.0	4,631.2	4,486.0	4,428.4	16.4	14.4	-149.82	-584.4	-283.8	1,173.7	1,149.6	24.09	48.721	
4,724.4	4,655.1	4,508.9	4,450.8	16.4	14.5	-149.89	-588.5	-286.1	1,182.0	1,157.8	24.24	48.759	
4,800.0	4,729.5	4,580.4	4,520.7	16.7	14.8	-150.06	-601.4	-293.5	1,206.5	1,181.8	24.71	48.834	
4,822.8	4,752.1	4,602.1	4,542.0	16.7	14.9	-150.09	-605.3	-295.8	1,213.6	1,188.8	24.84	48.853	
4,900.0	4,828.4	4,675.8	4,614.0	17.0	15.3	-150.18	-618.6	-303.4	1,236.4	1,211.1	25.30	48.878	
4,921.2	4,849.5	4,696.1	4,633.9	17.0	15.4	-150.19	-622.3	-305.5	1,242.4	1,217.0	25.42	48.883	
5,000.0	4,927.8	4,771.9	4,708.0	17.2	15.7	-150.19	-635.9	-313.4	1,263.5	1,237.6	25.86	48.864	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,790.9	4,726.6	17.2	15.8	-150.18	-639.3	-315.4	1,268.4	1,242.5	25.96	48.858	
5,100.0	5,027.5	4,868.6	4,802.7	17.4	16.1	-150.10	-653.3	-323.4	1,287.6	1,261.2	26.38	48.801	
5,118.1	5,045.6	4,886.2	4,819.8	17.4	16.2	-150.08	-656.5	-325.2	1,291.7	1,265.2	26.48	48.787	
5,200.0	5,127.4	4,965.9	4,897.8	17.6	16.6	-149.92	-670.9	-333.5	1,308.8	1,282.0	26.88	48.694	
5,216.5	5,143.9	4,982.1	4,913.6	17.6	16.6	-149.88	-673.8	-335.2	1,312.1	1,285.1	26.96	48.675	
5,273.4	5,200.8	5,037.6	4,968.0	17.7	16.9	177.58	-683.8	-340.9	1,322.6	1,290.6	31.95	41.397	
5,300.0	5,227.4	5,063.7	4,993.4	17.7	17.0	177.71	-688.5	-343.6	1,327.3	1,295.2	32.09	41.360	
5,314.9	5,242.3	5,078.3	5,007.7	17.7	17.1	177.78	-691.1	-345.2	1,329.9	1,297.8	32.17	41.337	
5,400.0	5,327.4	5,161.5	5,089.1	17.8	17.5	178.18	-706.1	-353.8	1,345.0	1,312.4	32.64	41.208	
5,413.4	5,340.8	5,174.5	5,101.9	17.9	17.5	178.24	-708.5	-355.1	1,347.4	1,314.7	32.71	41.188	
5,500.0	5,427.4	5,259.3	5,184.8	18.0	17.9	178.64	-723.7	-363.9	1,362.9	1,329.7	33.19	41.058	
5,511.8	5,439.2	5,277.1	5,202.2	18.0	18.0	178.72	-726.9	-365.7	1,365.0	1,331.7	33.28	41.019	
5,600.0	5,527.4	5,424.9	5,347.6	18.1	18.4	179.29	-749.6	-378.8	1,378.5	1,344.6	33.84	40.735	
5,610.2	5,537.6	5,442.2	5,364.7	18.1	18.5	179.34	-751.9	-380.1	1,379.8	1,345.9	33.90	40.702	
5,700.0	5,627.4	5,595.3	5,516.7	18.3	18.9	179.73	-767.7	-389.2	1,389.0	1,354.6	34.40	40.378	
5,708.6	5,636.0	5,610.1	5,531.5	18.3	18.9	179.76	-768.9	-389.9	1,389.7	1,355.3	34.44	40.346	
5,800.0	5,727.4	5,767.6	5,688.6	18.4	19.2	179.95	-777.1	-394.6	1,394.5	1,359.6	34.87	39.989	
5,807.1	5,734.5	5,779.8	5,700.9	18.4	19.2	179.96	-777.5	-394.8	1,394.7	1,359.8	34.90	39.959	
5,900.0	5,827.4	5,907.3	5,828.4	18.6	19.4	179.98	-778.5	-395.4	1,395.3	1,360.0	35.24	39.597	
5,905.5	5,832.9	5,912.8	5,833.9	18.6	19.4	179.98	-778.5	-395.4	1,395.3	1,360.0	35.25	39.579	
6,000.0	5,927.4	6,007.3	5,928.4	18.7	19.5	179.98	-778.5	-395.4	1,395.3	1,359.7	35.53	39.273	
6,003.9	5,931.3	6,011.3	5,932.3	18.7	19.5	179.98	-778.5	-395.4	1,395.3	1,359.7	35.54	39.260	
6,100.0	6,027.4	6,107.3	6,028.4	18.9	19.6	179.98	-778.5	-395.4	1,395.3	1,359.5	35.82	38.951	
6,102.3	6,029.7	6,109.7	6,030.7	18.9	19.6	179.98	-778.5	-395.4	1,395.3	1,359.4	35.83	38.943	
6,200.0	6,127.4	6,207.3	6,128.4	19.0	19.7	179.98	-778.5	-395.4	1,395.3	1,359.2	36.12	38.630	
6,200.8	6,128.2	6,208.1	6,129.2	19.0	19.7	179.98	-778.5	-395.4	1,395.3	1,359.2	36.12	38.628	
6,299.2	6,226.6	6,306.5	6,227.6	19.2	19.9	179.98	-778.5	-395.4	1,395.3	1,358.9	36.42	38.315	
6,300.2	6,227.6	6,307.5	6,228.6	19.2	19.9	179.98	-778.5	-395.4	1,395.3	1,358.9	36.42	38.312	
6,301.4	6,228.8	6,308.7	6,229.8	19.2	19.9	179.98	-778.5	-395.4	1,395.3	1,358.9	36.42	38.308	
6,350.0	6,277.4	6,357.3	6,278.3	19.3	19.9	89.98	-778.5	-393.7	1,395.3	1,363.3	31.94	43.685	
6,397.6	6,324.7	6,404.9	6,325.7	19.3	20.0	89.98	-778.5	-388.8	1,395.3	1,363.2	32.03	43.562	
6,400.0	6,327.1	6,407.3	6,328.0	19.3	20.0	89.98	-778.5	-388.5	1,395.3	1,363.2	32.03	43.558	
6,450.0	6,376.3	6,457.2	6,377.2	19.3	20.0	89.98	-778.5	-379.9	1,395.3	1,363.2	32.08	43.488	
6,496.0	6,421.1	6,503.2	6,421.9	19.3	20.0	89.97	-778.5	-368.9	1,395.3	1,363.2	32.10	43.469	
6,500.0	6,424.9	6,507.2	6,425.7	19.3	20.0	89.97	-778.5	-367.8	1,395.3	1,363.2	32.10	43.469	
6,550.0	6,472.4	6,557.1	6,473.2	19.3	20.0	89.97	-778.5	-352.4	1,395.3	1,363.2	32.08	43.489	
6,594.5	6,513.8	6,601.6	6,514.5	19.3	19.9	89.97	-778.5	-336.0	1,395.3	1,363.2	32.05	43.529	
6,600.0	6,518.8	6,607.1	6,519.5	19.3	19.9	89.97	-778.5	-333.8	1,395.3	1,363.2	32.05	43.535	
6,650.0	6,563.8	6,657.0	6,564.4	19.3	19.9	89.97	-778.5	-311.9	1,395.3	1,363.3	32.01	43.591	
6,692.9	6,601.1	6,699.9	6,601.7	19.2	19.9	89.97	-778.5	-290.7	1,395.3	1,363.3	31.98	43.632	
6,700.0	6,607.1	6,707.0	6,607.7	19.2	19.9	89.97	-778.5	-287.0	1,395.3	1,363.3	31.97	43.637	
6,750.0	6,648.6	6,756.9	6,649.1	19.2	19.8	89.97	-778.5	-259.2	1,395.3	1,363.3	31.97	43.646	
6,791.3	6,681.4	6,798.2	6,681.8	19.1	19.8	89.96	-778.5	-234.0	1,395.3	1,363.3	32.00	43.607	
6,800.0	6,688.1	6,806.9	6,688.5	19.1	19.8	89.96	-778.5	-228.5	1,395.3	1,363.3	32.01	43.592	
6,850.0	6,725.3	6,856.8	6,725.7	19.1	19.7	89.96	-778.5	-195.1	1,395.3	1,363.2	32.12	43.444	
6,889.7	6,753.2	6,896.5	6,753.5	19.0	19.7	89.96	-778.5	-166.8	1,395.3	1,363.0	32.27	43.236	
6,900.0	6,760.1	6,906.7	6,760.4	19.0	19.6	89.96	-778.5	-159.2	1,395.3	1,363.0	32.32	43.173	
6,950.0	6,792.3	6,956.7	6,792.6	19.0	19.6	89.96	-778.5	-121.1	1,395.3	1,362.6	32.64	42.753	
6,988.2	6,815.1	6,994.8	6,815.3	18.9	19.5	89.96	-778.5	-90.4	1,395.3	1,362.3	32.98	42.312	
7,000.0	6,821.8	7,006.6	6,822.0	18.9	19.5	89.96	-778.5	-80.7	1,395.3	1,362.2	33.09	42.165	
7,050.0	6,848.3	7,056.5	6,848.5	18.9	19.5	89.96	-778.5	-38.4	1,395.3	1,361.6	33.70	41.402	
7,086.6	6,865.9	7,093.1	6,866.0	18.9	19.4	89.96	-778.5	-6.4	1,395.3	1,361.0	34.26	40.725	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-332 - ORIGINAL WELLBORE - PROP												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,106.5	6,872.0	18.9	19.4	89.96	-778.5	5.6	1,395.3	1,360.8	34.48	40.469	
7,150.0	6,892.3	7,156.4	6,892.4	18.8	19.4	89.96	-778.5	51.2	1,395.3	1,359.8	35.43	39.383	
7,185.0	6,904.7	7,191.4	6,904.8	18.8	19.3	89.96	-778.5	83.9	1,395.3	1,359.1	36.21	38.535	
7,200.0	6,909.5	7,206.3	6,909.6	18.9	19.3	89.96	-778.5	98.0	1,395.3	1,358.7	36.55	38.172	
7,250.0	6,923.4	7,256.3	6,923.4	19.3	19.3	89.96	-778.5	146.0	1,395.3	1,357.4	37.84	36.871	
7,283.4	6,930.8	7,289.7	6,930.8	19.8	19.4	89.96	-778.5	178.6	1,395.3	1,356.5	38.80	35.959	
7,300.0	6,933.9	7,306.2	6,933.9	20.0	19.5	89.96	-778.5	194.8	1,395.3	1,356.0	39.29	35.516	
7,350.0	6,940.9	7,356.1	6,941.0	20.8	20.3	89.96	-778.5	244.2	1,395.3	1,354.4	40.87	34.143	
7,381.9	6,943.6	7,388.0	6,943.7	21.4	20.8	89.96	-778.5	276.0	1,395.3	1,353.3	41.94	33.266	
7,400.0	6,944.5	7,406.1	6,944.6	21.7	21.2	89.96	-778.5	294.0	1,395.3	1,352.7	42.56	32.783	
7,432.4	6,945.0	7,438.4	6,945.1	22.3	21.7	89.96	-778.5	326.4	1,395.3	1,351.6	43.71	31.921	
7,432.8	6,945.0	7,438.8	6,945.1	22.3	21.8	89.96	-778.5	326.8	1,395.3	1,351.6	43.72	31.910	
7,480.3	6,944.6	7,486.3	6,944.5	23.2	22.7	89.96	-778.5	374.3	1,395.3	1,349.8	45.50	30.667	
7,500.0	6,944.4	7,506.0	6,944.2	23.6	23.1	89.95	-778.5	394.0	1,395.3	1,349.0	46.24	30.172	
7,578.7	6,943.7	7,584.8	6,943.3	25.2	24.7	89.94	-778.5	472.7	1,395.3	1,345.9	49.42	28.235	
7,600.0	6,943.6	7,606.0	6,943.0	25.6	25.1	89.94	-778.5	494.0	1,395.3	1,345.0	50.28	27.748	
7,677.1	6,942.9	7,683.2	6,942.1	27.3	26.8	89.92	-778.5	571.1	1,395.3	1,341.7	53.61	26.026	
7,700.0	6,942.7	7,706.0	6,941.8	27.8	27.3	89.92	-778.5	594.0	1,395.3	1,340.7	54.60	25.553	
7,775.6	6,942.1	7,781.6	6,940.8	29.5	29.0	89.91	-778.5	669.5	1,395.3	1,337.3	58.03	24.046	
7,800.0	6,941.9	7,806.0	6,940.5	30.1	29.6	89.90	-778.5	693.9	1,395.3	1,336.1	59.14	23.594	
7,874.0	6,941.3	7,880.0	6,939.6	31.8	31.3	89.89	-778.5	767.9	1,395.3	1,332.7	62.62	22.282	
7,900.0	6,941.1	7,906.0	6,939.3	32.4	32.0	89.89	-778.5	793.9	1,395.3	1,331.4	63.85	21.854	
7,972.4	6,940.4	7,978.4	6,938.4	34.2	33.7	89.87	-778.5	866.4	1,395.3	1,327.9	67.35	20.716	
8,000.0	6,940.2	8,006.0	6,938.0	34.9	34.4	89.87	-778.5	893.9	1,395.3	1,326.6	68.69	20.313	
8,070.8	6,939.6	8,076.9	6,937.2	36.6	36.1	89.86	-778.5	964.8	1,395.3	1,323.1	72.20	19.326	
8,100.0	6,939.4	8,106.0	6,936.8	37.3	36.9	89.85	-778.5	993.9	1,395.3	1,321.6	73.65	18.946	
8,169.3	6,938.8	8,175.3	6,936.0	39.1	38.6	89.84	-778.5	1,063.2	1,395.3	1,318.1	77.14	18.088	
8,200.0	6,938.5	8,206.0	6,935.6	39.8	39.4	89.84	-778.5	1,093.9	1,395.3	1,316.6	78.69	17.732	
8,267.7	6,938.0	8,273.7	6,934.7	41.6	41.1	89.83	-778.5	1,161.6	1,395.3	1,313.1	82.15	16.984	
8,300.0	6,937.7	8,306.0	6,934.3	42.4	41.9	89.82	-778.5	1,193.9	1,395.3	1,311.5	83.81	16.649	
8,366.1	6,937.2	8,372.1	6,933.5	44.1	43.7	89.81	-778.5	1,260.0	1,395.3	1,308.1	87.23	15.995	
8,400.0	6,936.9	8,406.0	6,933.1	45.0	44.5	89.80	-778.5	1,293.9	1,395.3	1,306.3	88.99	15.680	
8,464.5	6,936.3	8,470.6	6,932.3	46.6	46.2	89.79	-778.5	1,358.4	1,395.3	1,302.9	92.36	15.107	
8,500.0	6,936.0	8,506.0	6,931.9	47.6	47.1	89.79	-778.5	1,393.9	1,395.3	1,301.1	94.21	14.810	
8,563.0	6,935.5	8,569.0	6,931.1	49.2	48.8	89.78	-778.5	1,456.9	1,395.3	1,297.8	97.53	14.306	
8,600.0	6,935.2	8,606.0	6,930.6	50.2	49.8	89.77	-778.5	1,493.9	1,395.3	1,295.8	99.49	14.025	
8,661.4	6,934.7	8,667.4	6,929.9	51.8	51.4	89.76	-778.5	1,555.3	1,395.3	1,292.5	102.74	13.580	
8,700.0	6,934.4	8,706.0	6,929.4	52.8	52.4	89.75	-778.5	1,593.9	1,395.3	1,290.5	104.79	13.315	
8,759.8	6,933.9	8,765.8	6,928.6	54.4	54.0	89.74	-778.5	1,653.7	1,395.3	1,287.3	107.99	12.921	
8,800.0	6,933.5	8,806.0	6,928.1	55.5	55.1	89.74	-778.5	1,693.9	1,395.3	1,285.2	110.13	12.669	
8,858.2	6,933.0	8,864.3	6,927.4	57.1	56.6	89.73	-778.5	1,752.1	1,395.3	1,282.0	113.26	12.320	
8,900.0	6,932.7	8,906.0	6,926.9	58.2	57.8	89.72	-778.5	1,793.9	1,395.3	1,279.8	115.50	12.081	
8,956.7	6,932.2	8,962.7	6,926.2	59.7	59.3	89.71	-778.5	1,850.5	1,395.3	1,276.7	118.55	11.770	
9,000.0	6,931.8	9,006.0	6,925.7	60.9	60.5	89.70	-778.5	1,893.8	1,395.3	1,274.4	120.88	11.542	
9,055.1	6,931.4	9,061.1	6,925.0	62.4	61.9	89.70	-778.5	1,948.9	1,395.3	1,271.4	123.86	11.265	
9,100.0	6,931.0	9,106.0	6,924.4	63.6	63.2	89.69	-778.5	1,993.8	1,395.3	1,269.0	126.29	11.048	
9,153.5	6,930.6	9,159.5	6,923.8	65.0	64.6	89.68	-778.5	2,047.4	1,395.3	1,266.1	129.20	10.800	
9,200.0	6,930.2	9,206.0	6,923.2	66.3	65.9	89.67	-778.5	2,093.8	1,395.3	1,263.6	131.72	10.593	
9,251.9	6,929.7	9,258.0	6,922.5	67.7	67.3	89.66	-778.5	2,145.8	1,395.3	1,260.8	134.54	10.371	
9,300.0	6,929.3	9,306.0	6,921.9	69.0	68.6	89.66	-778.5	2,193.8	1,395.3	1,258.1	137.16	10.173	
9,350.4	6,928.9	9,356.4	6,921.3	70.4	70.0	89.65	-778.5	2,244.2	1,395.3	1,255.4	139.91	9.973	
9,400.0	6,928.5	9,406.0	6,920.7	71.7	71.3	89.64	-778.5	2,293.8	1,395.3	1,252.7	142.61	9.784	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-332 - ORIGINAL WELLBORE - PROP												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,454.8	6,920.1	73.0	72.6	89.63	-778.5	2,342.6	1,395.3	1,250.0	145.28	9.604	
9,500.0	6,927.7	9,506.0	6,919.5	74.4	74.0	89.62	-778.5	2,393.8	1,395.3	1,247.2	148.08	9.423	
9,547.2	6,927.3	9,553.2	6,918.9	75.7	75.3	89.61	-778.5	2,441.0	1,395.3	1,244.6	150.67	9.261	
9,600.0	6,926.8	9,606.0	6,918.2	77.2	76.8	89.61	-778.5	2,493.8	1,395.3	1,241.8	153.56	9.086	
9,645.6	6,926.4	9,651.7	6,917.7	78.4	78.0	89.60	-778.5	2,539.4	1,395.3	1,239.2	156.07	8.941	
9,700.0	6,926.0	9,706.0	6,917.0	79.9	79.5	89.59	-778.5	2,593.8	1,395.3	1,236.3	159.05	8.773	
9,744.1	6,925.6	9,750.1	6,916.4	81.1	80.7	89.58	-778.5	2,637.9	1,395.3	1,233.8	161.47	8.641	
9,800.0	6,925.2	9,806.0	6,915.7	82.6	82.3	89.57	-778.5	2,693.8	1,395.3	1,230.8	164.55	8.480	
9,842.5	6,924.8	9,848.5	6,915.2	83.8	83.4	89.57	-778.5	2,736.3	1,395.3	1,228.4	166.88	8.361	
9,900.0	6,924.3	9,906.0	6,914.5	85.4	85.0	89.56	-778.5	2,793.8	1,395.3	1,225.3	170.05	8.205	
9,940.9	6,924.0	9,946.9	6,914.0	86.5	86.1	89.55	-778.5	2,834.7	1,395.3	1,223.0	172.31	8.098	
10,000.0	6,923.5	10,006.0	6,913.3	88.1	87.8	89.54	-778.5	2,893.8	1,395.3	1,219.8	175.56	7.948	
10,039.3	6,923.2	10,045.4	6,912.8	89.2	88.8	89.53	-778.5	2,933.1	1,395.3	1,217.6	177.73	7.851	
10,100.0	6,922.6	10,106.0	6,912.0	90.9	90.5	89.52	-778.5	2,993.8	1,395.3	1,214.2	181.08	7.706	
10,137.8	6,922.3	10,143.8	6,911.6	91.9	91.6	89.52	-778.5	3,031.5	1,395.3	1,212.2	183.17	7.618	
10,200.0	6,921.8	10,206.0	6,910.8	93.7	93.3	89.51	-778.5	3,093.7	1,395.3	1,208.7	186.61	7.477	
10,236.2	6,921.5	10,242.2	6,910.3	94.7	94.3	89.50	-778.5	3,129.9	1,395.3	1,206.7	188.61	7.398	
10,300.0	6,921.0	10,306.0	6,909.5	96.4	96.0	89.49	-778.5	3,193.7	1,395.3	1,203.2	192.14	7.262	
10,334.6	6,920.7	10,340.6	6,909.1	97.4	97.0	89.48	-778.5	3,228.4	1,395.3	1,201.3	194.05	7.191	
10,400.0	6,920.1	10,406.0	6,908.3	99.2	98.8	89.47	-778.5	3,293.7	1,395.3	1,197.7	197.67	7.059	
10,433.0	6,919.9	10,439.1	6,907.9	100.1	99.7	89.47	-778.5	3,326.8	1,395.3	1,195.8	199.50	6.994	
10,500.0	6,919.3	10,506.0	6,907.1	101.9	101.6	89.46	-778.5	3,393.7	1,395.3	1,192.1	203.21	6.867	
10,531.5	6,919.0	10,537.5	6,906.7	102.8	102.4	89.45	-778.5	3,425.2	1,395.3	1,190.4	204.95	6.808	
10,600.0	6,918.5	10,606.0	6,905.8	104.7	104.3	89.44	-778.5	3,493.7	1,395.4	1,186.6	208.75	6.684	
10,629.9	6,918.2	10,635.9	6,905.5	105.5	105.2	89.43	-778.5	3,523.6	1,395.4	1,184.9	210.41	6.632	
10,700.0	6,917.6	10,706.0	6,904.6	107.5	107.1	89.42	-778.5	3,593.7	1,395.4	1,181.1	214.30	6.511	
10,728.3	6,917.4	10,734.3	6,904.2	108.3	107.9	89.42	-778.5	3,622.0	1,395.4	1,179.5	215.87	6.464	
10,800.0	6,916.8	10,806.0	6,903.4	110.3	109.9	89.41	-778.5	3,693.7	1,395.4	1,175.5	219.85	6.347	
10,826.7	6,916.6	10,832.7	6,903.0	111.0	110.6	89.40	-778.5	3,720.4	1,395.4	1,174.0	221.34	6.304	
10,900.0	6,916.0	10,906.0	6,902.1	113.0	112.7	89.39	-778.5	3,793.7	1,395.4	1,170.0	225.41	6.190	
10,925.2	6,915.8	10,931.2	6,901.8	113.7	113.4	89.39	-778.5	3,818.9	1,395.4	1,168.6	226.81	6.152	
11,000.0	6,915.1	11,006.0	6,900.9	115.8	115.4	89.37	-778.5	3,893.7	1,395.4	1,164.4	230.96	6.042	
11,023.6	6,914.9	11,029.6	6,900.6	116.5	116.1	89.37	-778.5	3,917.3	1,395.4	1,163.1	232.28	6.007	
11,100.0	6,914.3	11,106.0	6,899.6	118.6	118.2	89.36	-778.5	3,993.7	1,395.4	1,158.8	236.52	5.900	
11,122.0	6,914.1	11,128.0	6,899.4	119.2	118.8	89.35	-778.5	4,015.7	1,395.4	1,157.6	237.75	5.869	
11,200.0	6,913.5	11,206.0	6,898.4	121.4	121.0	89.34	-778.5	4,093.7	1,395.4	1,153.3	242.09	5.764	
11,220.4	6,913.3	11,226.4	6,898.1	121.9	121.6	89.34	-778.5	4,114.1	1,395.4	1,152.2	243.22	5.737	
11,300.0	6,912.6	11,306.0	6,897.2	124.1	123.8	89.32	-778.5	4,193.7	1,395.4	1,147.7	247.65	5.634	
11,318.9	6,912.5	11,324.9	6,896.9	124.7	124.3	89.32	-778.5	4,212.5	1,395.4	1,146.7	248.70	5.611	
11,400.0	6,911.8	11,406.0	6,895.9	126.9	126.6	89.31	-778.5	4,293.6	1,395.4	1,142.2	253.22	5.511	
11,417.3	6,911.6	11,423.3	6,895.7	127.4	127.0	89.30	-778.5	4,310.9	1,395.4	1,141.2	254.18	5.490	
11,500.0	6,911.0	11,506.0	6,894.7	129.7	129.3	89.29	-778.5	4,393.6	1,395.4	1,136.6	258.79	5.392	
11,515.7	6,910.8	11,521.7	6,894.5	130.2	129.8	89.29	-778.5	4,409.4	1,395.4	1,135.7	259.67	5.374	
11,600.0	6,910.1	11,606.0	6,893.4	132.5	132.1	89.27	-778.5	4,493.6	1,395.4	1,131.0	264.36	5.278	
11,614.1	6,910.0	11,620.1	6,893.3	132.9	132.5	89.27	-778.5	4,507.8	1,395.4	1,130.3	265.15	5.263	
11,700.0	6,909.3	11,706.0	6,892.2	135.3	134.9	89.26	-778.5	4,593.6	1,395.4	1,125.5	269.93	5.169	
11,712.6	6,909.2	11,718.6	6,892.0	135.6	135.3	89.26	-778.5	4,606.2	1,395.4	1,124.8	270.64	5.156	
11,800.0	6,908.5	11,806.0	6,891.0	138.1	137.7	89.24	-778.5	4,693.6	1,395.4	1,119.9	275.51	5.065	
11,811.0	6,908.4	11,817.0	6,890.8	138.4	138.0	89.24	-778.5	4,704.6	1,395.4	1,119.3	276.12	5.054	
11,900.0	6,907.6	11,906.0	6,889.7	140.9	140.5	89.22	-778.5	4,793.6	1,395.4	1,114.3	281.09	4.964	
11,909.4	6,907.5	11,915.4	6,889.6	141.1	140.7	89.22	-778.5	4,803.0	1,395.4	1,113.8	281.61	4.955	
12,000.0	6,906.8	12,006.0	6,888.5	143.6	143.3	89.21	-778.5	4,893.6	1,395.4	1,108.8	286.66	4.868	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	12,013.8	6,888.4	143.9	143.5	89.21	-778.5	4,901.4	1,395.4	1,108.3	287.10	4.860	
12,100.0	6,905.9	12,106.0	6,887.2	146.4	146.1	89.19	-778.5	4,993.6	1,395.4	1,103.2	292.24	4.775	
12,106.3	6,905.9	12,112.3	6,887.2	146.6	146.2	89.19	-778.5	4,999.9	1,395.4	1,102.8	292.59	4.769	
12,200.0	6,905.1	12,206.0	6,886.0	149.2	148.9	89.17	-778.5	5,093.6	1,395.4	1,097.6	297.83	4.685	
12,204.7	6,905.1	12,210.7	6,885.9	149.4	149.0	89.17	-778.5	5,098.3	1,395.4	1,097.3	298.09	4.681	
12,300.0	6,904.3	12,306.0	6,884.8	152.0	151.6	89.16	-778.5	5,193.6	1,395.4	1,092.0	303.41	4.599	
12,303.1	6,904.3	12,309.1	6,884.7	152.1	151.7	89.16	-778.5	5,196.7	1,395.4	1,091.9	303.58	4.597	
12,400.0	6,903.4	12,406.0	6,883.5	154.8	154.4	89.14	-778.5	5,293.6	1,395.4	1,086.5	308.99	4.516	
12,401.5	6,903.4	12,407.5	6,883.5	154.8	154.5	89.14	-778.5	5,295.1	1,395.4	1,086.4	309.08	4.515	
12,500.0	6,902.6	12,506.0	6,882.3	157.6	157.2	89.12	-778.5	5,393.5	1,395.5	1,080.9	314.58	4.436	
12,598.4	6,901.8	12,604.4	6,881.1	160.3	160.0	89.11	-778.5	5,491.9	1,395.5	1,075.4	320.07	4.360	
12,600.0	6,901.8	12,606.0	6,881.0	160.4	160.0	89.11	-778.5	5,493.5	1,395.5	1,075.3	320.16	4.359	
12,696.8	6,901.0	12,702.8	6,879.8	163.1	162.7	89.09	-778.5	5,590.4	1,395.5	1,069.9	325.57	4.286	
12,700.0	6,900.9	12,706.0	6,879.8	163.2	162.8	89.09	-778.5	5,593.5	1,395.5	1,069.7	325.75	4.284	
12,795.2	6,900.1	12,801.2	6,878.6	165.8	165.5	89.08	-778.5	5,688.8	1,395.5	1,064.4	331.07	4.215	
12,800.0	6,900.1	12,806.0	6,878.6	166.0	165.6	89.07	-778.5	5,693.5	1,395.5	1,064.1	331.34	4.212	
12,893.7	6,899.3	12,899.7	6,877.4	168.6	168.2	89.06	-778.5	5,787.2	1,395.5	1,058.9	336.57	4.146	
12,900.0	6,899.3	12,906.0	6,877.3	168.8	168.4	89.06	-778.5	5,793.5	1,395.5	1,058.6	336.93	4.142	
12,992.1	6,898.5	12,998.1	6,876.2	171.3	171.0	89.04	-778.5	5,885.6	1,395.5	1,053.4	342.07	4.079	
13,000.0	6,898.4	13,006.0	6,876.1	171.6	171.2	89.04	-778.5	5,893.5	1,395.5	1,053.0	342.52	4.074	
13,090.5	6,897.7	13,096.5	6,875.0	174.1	173.7	89.03	-778.5	5,984.0	1,395.5	1,047.9	347.58	4.015	
13,100.0	6,897.6	13,106.0	6,874.9	174.4	174.0	89.02	-778.5	5,993.5	1,395.5	1,047.4	348.11	4.009	
13,188.9	6,896.9	13,194.9	6,873.8	176.8	176.5	89.01	-778.5	6,082.4	1,395.5	1,042.4	353.08	3.952	
13,200.0	6,896.8	13,206.0	6,873.6	177.2	176.8	89.01	-778.5	6,093.5	1,395.5	1,041.8	353.70	3.945	
13,287.4	6,896.0	13,293.4	6,872.5	179.6	179.2	88.99	-778.5	6,180.9	1,395.5	1,036.9	358.58	3.892	
13,300.0	6,895.9	13,306.0	6,872.4	180.0	179.6	88.99	-778.5	6,193.5	1,395.5	1,036.2	359.29	3.884	
13,385.8	6,895.2	13,391.8	6,871.3	182.4	182.0	88.98	-778.5	6,279.3	1,395.5	1,031.4	364.09	3.833	
13,400.0	6,895.1	13,406.0	6,871.1	182.7	182.4	88.97	-778.5	6,293.5	1,395.5	1,030.6	364.88	3.825	
13,484.2	6,894.4	13,490.2	6,870.1	185.1	184.7	88.96	-778.5	6,377.7	1,395.5	1,025.9	369.59	3.776	
13,500.0	6,894.3	13,506.0	6,869.9	185.5	185.2	88.96	-778.5	6,393.5	1,395.5	1,025.1	370.47	3.767	
13,582.6	6,893.6	13,588.6	6,868.9	187.9	187.5	88.94	-778.5	6,476.1	1,395.5	1,020.4	375.10	3.720	
13,600.0	6,893.4	13,606.0	6,868.7	188.3	188.0	88.94	-778.5	6,493.5	1,395.5	1,019.5	376.07	3.711	
13,681.1	6,892.8	13,687.1	6,867.7	190.6	190.2	88.93	-778.5	6,574.5	1,395.5	1,014.9	380.60	3.667	
13,700.0	6,892.6	13,706.0	6,867.4	191.1	190.8	88.92	-778.5	6,593.4	1,395.5	1,013.9	381.66	3.656	
13,779.5	6,891.9	13,785.5	6,866.4	193.4	193.0	88.91	-778.5	6,672.9	1,395.6	1,009.4	386.11	3.614	
13,800.0	6,891.8	13,806.0	6,866.2	193.9	193.6	88.91	-778.5	6,693.4	1,395.6	1,008.3	387.26	3.604	
13,877.9	6,891.1	13,883.9	6,865.2	196.1	195.8	88.90	-778.5	6,771.4	1,395.6	1,003.9	391.62	3.564	
13,900.0	6,890.9	13,906.0	6,864.9	196.7	196.4	88.89	-778.5	6,793.4	1,395.6	1,002.7	392.85	3.552	
13,976.3	6,890.3	13,982.3	6,864.0	198.9	198.5	88.88	-778.5	6,869.8	1,395.6	998.4	397.13	3.514	
14,000.0	6,890.1	14,006.0	6,863.7	199.5	199.2	88.87	-778.5	6,893.4	1,395.6	997.1	398.45	3.503	
14,074.8	6,889.5	14,080.7	6,862.8	201.6	201.3	88.86	-778.5	6,968.2	1,395.6	992.9	402.63	3.466	
14,100.0	6,889.3	14,106.0	6,862.5	202.3	202.0	88.86	-778.5	6,993.4	1,395.6	991.5	404.05	3.454	
14,173.2	6,888.7	14,179.2	6,861.6	204.4	204.0	88.85	-778.5	7,066.6	1,395.6	987.4	408.14	3.419	
14,200.0	6,888.4	14,206.0	6,861.2	205.1	204.8	88.84	-778.5	7,093.4	1,395.6	985.9	409.64	3.407	
14,271.6	6,887.8	14,277.6	6,860.3	207.1	206.8	88.83	-778.5	7,165.0	1,395.6	981.9	413.65	3.374	
14,300.0	6,887.6	14,306.0	6,860.0	207.9	207.6	88.82	-778.5	7,193.4	1,395.6	980.4	415.24	3.361	
14,370.0	6,887.0	14,376.0	6,859.1	209.9	209.5	88.81	-778.5	7,263.4	1,395.6	976.4	419.16	3.330	
14,400.0	6,886.8	14,406.0	6,858.7	210.7	210.4	88.81	-778.5	7,293.4	1,395.6	974.8	420.84	3.316	
14,468.5	6,886.2	14,474.4	6,857.9	212.6	212.3	88.80	-778.5	7,361.9	1,395.6	970.9	424.67	3.286	
14,500.0	6,885.9	14,506.0	6,857.5	213.5	213.2	88.79	-778.5	7,393.4	1,395.6	969.2	426.44	3.273	
14,566.9	6,885.4	14,572.9	6,856.7	215.4	215.0	88.78	-778.5	7,460.3	1,395.6	965.4	430.18	3.244	
14,600.0	6,885.1	14,606.1	6,856.2	216.3	216.0	88.77	-778.5	7,493.5	1,395.6	963.6	432.04	3.230	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27H-332 - ORIGINAL WELLBORE - PROPC												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,613.0	6,885.0	14,619.1	6,856.0	216.7	216.3	88.77	-778.5	7,506.5	1,395.6	962.9	432.77	3.225 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-134.8	0.0	134.8				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-134.8	0.0	134.8	134.6	0.17	789.183	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-134.8	0.0	134.8	134.6	0.18	768.858	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-134.8	0.0	134.8	134.2	0.61	220.725	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-134.8	0.0	134.8	134.2	0.62	215.723	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-134.8	0.0	134.8	133.7	1.05	127.993	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-134.8	0.0	134.8	133.7	1.07	125.462	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-134.8	0.0	134.8	133.3	1.50	90.128	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-134.8	0.0	134.8	133.3	1.52	88.453	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-134.8	0.0	134.8	132.9	1.94	69.552	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-134.8	0.0	134.8	132.8	1.97	68.304	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-134.8	0.0	134.8	132.4	2.38	56.624	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-134.8	0.0	134.8	132.4	2.42	55.632	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-134.8	0.0	134.8	132.0	2.82	47.750	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-134.8	0.0	134.8	131.9	2.87	46.926	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-134.8	0.0	134.8	131.5	3.27	41.280	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-134.8	0.0	134.8	131.5	3.32	40.576	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-134.8	0.0	134.8	131.1	3.71	36.354	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-134.8	0.0	134.8	131.0	3.77	35.740	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-134.8	0.0	134.8	130.6	4.15	32.478	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-134.8	0.0	134.8	130.6	4.22	31.933	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-134.8	0.0	134.8	130.2	4.59	29.349	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-134.8	0.0	134.8	130.1	4.67	28.860	
1,133.0	1,133.0	1,134.0	1,134.0	2.4	2.4	-180.00	-134.8	0.0	134.8	130.0	4.82	27.972 CC	
1,150.0	1,150.0	1,150.0	1,150.0	2.4	2.4	-180.00	-134.8	0.0	134.8	129.9	4.89	27.548 ES	
1,181.1	1,181.1	1,180.7	1,180.7	2.5	2.5	-147.33	-135.0	0.0	135.1	130.1	5.02	26.897	
1,200.0	1,200.0	1,198.8	1,198.8	2.6	2.5	-147.35	-135.2	-0.1	135.6	130.5	5.10	26.581	
1,279.5	1,279.5	1,274.7	1,274.7	2.7	2.7	-147.56	-137.4	-0.8	140.0	134.6	5.41	25.875	
1,300.0	1,299.9	1,294.2	1,294.1	2.8	2.7	-147.64	-138.3	-1.0	141.7	136.3	5.49	25.822	
1,377.9	1,377.7	1,368.0	1,367.8	3.0	2.8	-148.01	-142.7	-2.4	150.8	145.0	5.80	25.998	
1,400.0	1,399.7	1,388.8	1,388.5	3.0	2.9	-148.14	-144.3	-2.9	154.0	148.1	5.89	26.160	
1,476.4	1,475.7	1,460.1	1,459.5	3.2	3.0	-148.59	-150.9	-4.8	167.4	161.3	6.20	27.021	
1,500.0	1,499.1	1,482.0	1,481.2	3.2	3.1	-148.73	-153.2	-5.5	172.3	166.0	6.29	27.385	
1,574.8	1,573.2	1,550.6	1,549.3	3.4	3.2	-149.18	-161.6	-8.0	189.9	183.3	6.60	28.768	
1,600.0	1,598.2	1,573.4	1,571.9	3.5	3.3	-149.33	-164.7	-9.0	196.6	189.9	6.70	29.319	
1,673.2	1,670.3	1,638.9	1,636.6	3.7	3.4	-149.71	-174.7	-12.0	218.0	211.0	7.01	31.090	
1,700.0	1,696.6	1,662.5	1,659.8	3.8	3.5	-149.84	-178.6	-13.1	226.6	219.5	7.12	31.811	
1,749.9	1,745.5	1,706.0	1,702.5	3.9	3.6	-150.06	-186.3	-15.5	243.7	236.3	7.33	33.225	
1,771.6	1,766.8	1,724.8	1,721.0	4.0	3.7	-150.22	-189.8	-16.5	251.5	244.1	7.43	33.838	
1,800.0	1,794.5	1,749.1	1,744.8	4.1	3.7	-150.40	-194.6	-17.9	261.9	254.3	7.56	34.638	
1,870.1	1,863.1	1,808.7	1,802.9	4.3	3.9	-150.72	-207.0	-21.7	288.4	280.5	7.88	36.593	
1,900.0	1,892.3	1,833.8	1,827.3	4.4	4.0	-150.81	-212.6	-23.3	300.1	292.1	8.02	37.424	
1,968.5	1,959.4	1,890.7	1,882.4	4.7	4.2	-150.94	-226.0	-27.4	327.8	319.5	8.34	39.297	
2,000.0	1,990.2	1,916.5	1,907.4	4.8	4.3	-150.97	-232.4	-29.3	340.9	332.4	8.49	40.151	
2,066.9	2,055.6	1,970.7	1,959.6	5.1	4.6	-150.97	-246.6	-33.5	369.6	360.7	8.81	41.934	
2,100.0	2,088.0	2,000.0	1,987.6	5.2	4.7	-150.94	-254.7	-36.0	384.1	375.1	8.98	42.778	
2,165.3	2,151.9	2,048.8	2,034.2	5.4	4.9	-150.86	-268.8	-40.2	413.6	404.3	9.29	44.501	
2,200.0	2,185.8	2,075.9	2,059.8	5.6	5.1	-150.80	-276.9	-42.6	429.6	420.1	9.46	45.391	
2,263.8	2,248.2	2,130.3	2,111.4	5.8	5.3	-150.67	-293.6	-47.6	459.5	449.7	9.80	46.901	
2,300.0	2,283.6	2,162.2	2,141.6	6.0	5.5	-150.60	-303.5	-50.6	476.6	466.6	9.99	47.708	
2,362.2	2,344.5	2,217.1	2,193.6	6.2	5.8	-150.49	-320.4	-55.7	505.8	495.5	10.31	49.050	
2,400.0	2,381.4	2,250.5	2,225.2	6.4	6.0	-150.43	-330.7	-58.8	523.6	513.1	10.51	49.803	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWID												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,304.0	2,275.8	6.6	6.3	-150.34	-347.2	-63.7	552.1	541.3	10.84	50.948	
2,500.0	2,479.2	2,338.7	2,308.7	6.8	6.5	-150.29	-357.9	-66.9	570.6	559.6	11.05	51.640	
2,559.0	2,537.0	2,390.8	2,358.0	7.0	6.8	-150.21	-374.0	-71.7	598.4	587.0	11.37	52.625	
2,600.0	2,577.1	2,427.0	2,392.3	7.2	7.0	-150.16	-385.1	-75.1	617.6	606.0	11.60	53.266	
2,657.5	2,633.3	2,477.7	2,440.3	7.4	7.3	-150.10	-400.8	-79.8	644.7	632.7	11.91	54.115	
2,700.0	2,674.9	2,515.2	2,475.8	7.6	7.5	-150.06	-412.4	-83.2	664.7	652.5	12.15	54.711	
2,755.9	2,729.6	2,564.6	2,522.5	7.9	7.8	-150.01	-427.6	-87.8	690.9	678.5	12.46	55.447	
2,800.0	2,772.7	2,603.5	2,559.4	8.0	8.0	-149.97	-439.6	-91.4	711.7	699.0	12.71	56.001	
2,854.3	2,825.8	2,651.4	2,604.7	8.3	8.3	-149.92	-454.4	-95.8	737.2	724.2	13.02	56.641	
2,900.0	2,870.5	2,691.7	2,642.9	8.5	8.6	-149.89	-466.8	-99.6	758.7	745.4	13.27	57.156	
2,952.7	2,922.1	2,738.3	2,687.0	8.7	8.8	-149.85	-481.2	-103.9	783.5	769.9	13.58	57.715	
3,000.0	2,968.3	2,780.0	2,726.4	8.9	9.1	-149.82	-494.0	-107.7	805.7	791.9	13.85	58.195	
3,051.2	3,018.4	2,825.1	2,769.2	9.1	9.4	-149.79	-507.9	-111.9	829.8	815.7	14.14	58.686	
3,100.0	3,066.1	2,868.2	2,810.0	9.3	9.6	-149.76	-521.2	-115.9	852.8	838.3	14.42	59.133	
3,149.6	3,114.7	2,912.0	2,851.4	9.5	9.9	-149.73	-534.7	-119.9	876.1	861.4	14.71	59.566	
3,200.0	3,164.0	2,956.5	2,893.5	9.8	10.2	-149.70	-548.5	-124.1	899.8	884.8	15.00	59.984	
3,248.0	3,210.9	2,998.9	2,933.7	10.0	10.5	-149.68	-561.5	-128.0	922.4	907.1	15.28	60.365	
3,300.0	3,261.8	3,044.7	2,977.1	10.2	10.7	-149.65	-575.7	-132.2	946.8	931.2	15.58	60.757	
3,346.4	3,307.2	3,085.7	3,015.9	10.4	11.0	-149.63	-588.3	-136.0	968.7	952.8	15.86	61.093	
3,400.0	3,359.6	3,133.0	3,060.6	10.6	11.3	-149.61	-602.9	-140.4	993.8	977.7	16.17	61.463	
3,444.9	3,403.5	3,172.6	3,098.1	10.8	11.5	-149.59	-615.1	-144.1	1,015.0	998.5	16.43	61.760	
3,500.0	3,457.4	3,221.2	3,144.2	11.1	11.9	-149.56	-630.1	-148.6	1,040.9	1,024.1	16.76	62.109	
3,543.3	3,499.8	3,259.4	3,180.4	11.3	12.1	-149.55	-641.9	-152.1	1,061.2	1,044.2	17.01	62.371	
3,600.0	3,555.2	3,309.5	3,227.7	11.5	12.4	-149.53	-657.3	-156.7	1,087.9	1,070.6	17.35	62.702	
3,641.7	3,596.0	3,346.3	3,262.6	11.7	12.6	-149.51	-668.7	-160.1	1,107.5	1,089.9	17.60	62.934	
3,700.0	3,653.0	3,397.7	3,311.3	11.9	13.0	-149.49	-684.6	-164.9	1,134.9	1,117.0	17.94	63.247	
3,740.1	3,692.3	3,433.1	3,344.8	12.1	13.2	-149.48	-695.5	-168.2	1,153.8	1,135.6	18.18	63.453	
3,800.0	3,750.8	3,486.0	3,394.8	12.4	13.5	-149.46	-711.8	-173.0	1,182.0	1,163.4	18.54	63.750	
3,838.6	3,788.6	3,520.0	3,427.0	12.6	13.7	-149.45	-722.3	-176.2	1,200.1	1,181.3	18.77	63.933	
3,900.0	3,848.7	3,574.2	3,478.4	12.8	14.1	-149.43	-739.0	-181.2	1,229.0	1,209.9	19.14	64.215	
3,937.0	3,884.9	3,606.9	3,509.3	13.0	14.3	-149.42	-749.1	-184.2	1,246.4	1,227.0	19.36	64.378	
4,000.0	3,946.5	3,662.5	3,561.9	13.3	14.7	-149.40	-766.2	-189.4	1,276.0	1,256.3	19.74	64.645	
4,035.4	3,981.1	3,693.7	3,591.5	13.4	14.9	-149.39	-775.9	-192.3	1,292.7	1,272.8	19.95	64.791	
4,100.0	4,044.3	3,750.7	3,645.5	13.7	15.2	-149.38	-793.4	-197.5	1,323.1	1,302.7	20.34	65.046	
4,133.8	4,077.4	3,780.6	3,673.7	13.9	15.4	-149.37	-802.6	-200.3	1,339.0	1,318.5	20.54	65.175	
4,200.0	4,142.1	3,838.9	3,729.0	14.2	15.8	-149.35	-820.7	-205.7	1,370.1	1,349.2	20.94	65.419	
4,232.3	4,173.7	3,867.4	3,756.0	14.3	16.0	-149.35	-829.4	-208.3	1,385.3	1,364.1	21.14	65.533	
4,300.0	4,239.9	3,927.2	3,812.6	14.6	16.4	-149.33	-847.9	-213.9	1,417.1	1,395.6	21.55	65.766	
4,330.7	4,270.0	3,954.3	3,838.2	14.7	16.5	-149.33	-856.2	-216.4	1,431.6	1,409.8	21.73	65.868	
4,400.0	4,337.7	4,015.4	3,896.1	15.0	16.9	-149.31	-875.1	-222.0	1,464.2	1,442.0	22.15	66.091	
4,429.1	4,366.2	4,041.1	3,920.4	15.2	17.1	-149.31	-883.0	-224.4	1,477.9	1,455.5	22.33	66.182	
4,500.0	4,435.6	4,103.7	3,979.6	15.5	17.5	-149.29	-902.3	-230.2	1,511.2	1,488.4	22.76	66.395	
4,527.5	4,462.5	4,128.0	4,002.7	15.6	17.6	-149.29	-909.8	-232.4	1,524.2	1,501.2	22.93	66.475	
4,600.0	4,533.4	4,191.9	4,063.2	15.9	18.1	-149.27	-929.5	-238.3	1,558.2	1,534.9	23.37	66.680	
4,626.0	4,558.8	4,214.9	4,084.9	16.0	18.2	-149.27	-936.6	-240.5	1,570.5	1,546.9	23.53	66.751	
4,673.6	4,605.3	4,256.8	4,124.6	16.3	18.5	-149.26	-949.6	-244.4	1,592.8	1,569.0	23.82	66.879	
4,700.0	4,631.2	4,280.2	4,146.8	16.4	18.6	-149.40	-956.8	-246.5	1,605.2	1,581.2	24.01	66.863	
4,724.4	4,655.1	4,301.9	4,167.3	16.4	18.8	-149.51	-963.5	-248.5	1,616.4	1,592.2	24.17	66.876	
4,800.0	4,729.5	4,369.5	4,231.3	16.7	19.2	-149.84	-984.3	-254.8	1,650.2	1,625.5	24.68	66.876	
4,822.8	4,752.1	4,390.1	4,250.8	16.7	19.3	-149.92	-990.7	-256.7	1,660.1	1,635.2	24.82	66.876	
4,900.0	4,828.4	4,460.1	4,317.0	17.0	19.8	-150.17	-1,012.2	-263.2	1,692.5	1,667.1	25.32	66.844	
4,921.2	4,849.5	4,479.5	4,335.4	17.0	19.9	-150.23	-1,018.2	-264.9	1,701.1	1,675.6	25.45	66.836	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,551.8	4,403.9	17.2	20.4	-150.41	-1,040.5	-271.6	1,732.0	1,706.0	25.94	66.778	
5,019.7	4,947.4	4,569.9	4,421.1	17.2	20.5	-150.45	-1,046.1	-273.3	1,739.4	1,713.4	26.05	66.766	
5,100.0	5,027.5	4,644.5	4,491.7	17.4	21.0	-150.56	-1,069.1	-280.2	1,768.7	1,742.2	26.52	66.690	
5,118.1	5,045.6	4,661.4	4,507.7	17.4	21.1	-150.58	-1,074.3	-281.8	1,775.1	1,748.5	26.62	66.675	
5,200.0	5,127.4	4,738.2	4,580.4	17.6	21.6	-150.63	-1,098.0	-288.9	1,802.7	1,775.6	27.07	66.586	
5,216.5	5,143.9	4,753.8	4,595.1	17.6	21.7	-150.63	-1,102.8	-290.3	1,808.0	1,780.8	27.16	66.569	
5,273.4	5,200.8	4,807.5	4,646.0	17.7	22.0	176.69	-1,119.4	-295.3	1,825.8	1,788.2	37.58	48.585	
5,300.0	5,227.4	4,832.7	4,669.8	17.7	22.2	176.78	-1,127.2	-297.6	1,833.9	1,796.1	37.77	48.551	
5,314.9	5,242.3	4,846.8	4,683.2	17.7	22.3	176.83	-1,131.5	-298.9	1,838.4	1,800.5	37.88	48.530	
5,400.0	5,327.4	4,927.3	4,759.4	17.8	22.8	177.11	-1,156.4	-306.4	1,864.4	1,825.9	38.51	48.409	
5,413.4	5,340.8	4,940.0	4,771.4	17.9	22.9	177.16	-1,160.3	-307.6	1,868.4	1,829.8	38.61	48.391	
5,500.0	5,427.4	5,022.0	4,849.1	18.0	23.4	177.44	-1,185.6	-315.1	1,894.9	1,855.7	39.26	48.270	
5,511.8	5,439.2	5,033.2	4,859.6	18.0	23.5	177.48	-1,189.0	-316.2	1,898.5	1,859.2	39.34	48.254	
5,600.0	5,527.4	5,116.7	4,938.7	18.1	24.0	177.75	-1,214.8	-323.9	1,925.5	1,885.5	40.00	48.134	
5,610.2	5,537.6	5,126.4	4,947.8	18.1	24.1	177.78	-1,217.8	-324.8	1,928.6	1,888.6	40.08	48.120	
5,700.0	5,627.4	5,211.4	5,028.3	18.3	24.7	178.06	-1,244.0	-332.7	1,956.2	1,915.4	40.75	48.000	
5,708.6	5,636.0	5,219.5	5,036.1	18.3	24.7	178.08	-1,246.5	-333.4	1,958.8	1,918.0	40.82	47.988	
5,800.0	5,727.4	5,306.0	5,117.9	18.4	25.3	178.35	-1,273.2	-341.4	1,986.9	1,945.4	41.51	47.868	
5,807.1	5,734.5	5,312.7	5,124.3	18.4	25.3	178.37	-1,275.2	-342.0	1,989.0	1,947.5	41.56	47.859	
5,900.0	5,827.4	5,423.1	5,228.8	18.6	26.0	178.70	-1,309.1	-352.2	2,017.6	1,975.2	42.35	47.641	
5,905.5	5,832.9	5,439.1	5,244.1	18.6	26.1	178.75	-1,313.8	-353.6	2,019.2	1,976.7	42.43	47.591	
6,000.0	5,927.4	5,722.6	5,517.8	18.7	27.2	179.39	-1,383.9	-374.6	2,042.5	1,998.9	43.68	46.761	
6,003.9	5,931.3	5,734.6	5,529.6	18.7	27.2	179.41	-1,386.3	-375.3	2,043.3	1,999.6	43.73	46.730	
6,100.0	6,027.4	6,036.1	5,827.3	18.9	28.0	179.80	-1,430.9	-388.7	2,057.5	2,012.8	44.70	46.029	
6,102.3	6,029.7	6,043.5	5,834.7	18.9	28.1	179.81	-1,431.6	-388.9	2,057.7	2,013.0	44.72	46.015	
6,200.0	6,127.4	6,337.7	6,128.4	19.0	28.5	179.92	-1,445.2	-393.0	2,062.0	2,016.7	45.31	45.507	
6,200.8	6,128.2	6,338.5	6,129.2	19.0	28.5	179.92	-1,445.2	-393.0	2,062.0	2,016.7	45.31	45.505	
6,220.5	6,147.9	6,358.2	6,148.9	19.1	28.5	179.92	-1,445.2	-393.0	2,062.0	2,016.6	45.36	45.453	
6,299.2	6,226.6	6,436.3	6,226.8	19.2	28.6	179.81	-1,445.2	-388.8	2,062.0	2,016.4	45.56	45.259	
6,301.4	6,228.8	6,438.5	6,229.0	19.2	28.6	179.80	-1,445.2	-388.6	2,062.0	2,016.4	45.57	45.253	
6,350.0	6,277.4	6,486.1	6,276.1	19.3	28.6	89.65	-1,445.2	-381.8	2,062.0	2,028.5	33.50	61.544	
6,397.6	6,324.7	6,532.5	6,321.5	19.3	28.6	89.51	-1,445.2	-372.1	2,062.1	2,028.5	33.57	61.433	
6,400.0	6,327.1	6,534.8	6,323.7	19.3	28.6	89.50	-1,445.2	-371.6	2,062.1	2,028.5	33.57	61.428	
6,450.0	6,376.3	6,583.1	6,370.2	19.3	28.6	89.36	-1,445.2	-358.3	2,062.1	2,028.5	33.60	61.381	
6,496.0	6,421.1	6,627.3	6,411.8	19.3	28.6	89.22	-1,445.2	-343.4	2,062.2	2,028.6	33.59	61.390	
6,500.0	6,424.9	6,631.1	6,415.3	19.3	28.6	89.21	-1,445.2	-342.0	2,062.2	2,028.6	33.59	61.391	
6,550.0	6,472.4	6,678.8	6,459.0	19.3	28.5	89.07	-1,445.2	-322.8	2,062.3	2,028.7	33.56	61.445	
6,594.5	6,513.8	6,720.9	6,496.4	19.3	28.5	88.95	-1,445.2	-303.5	2,062.3	2,028.8	33.53	61.513	
6,600.0	6,518.8	6,726.1	6,501.0	19.3	28.5	88.94	-1,445.2	-301.0	2,062.4	2,028.8	33.52	61.522	
6,650.0	6,563.8	6,773.2	6,541.2	19.3	28.5	88.81	-1,445.2	-276.6	2,062.4	2,029.0	33.48	61.602	
6,692.9	6,601.1	6,813.4	6,574.3	19.2	28.4	88.70	-1,445.2	-253.7	2,062.5	2,029.1	33.46	61.651	
6,700.0	6,607.1	6,820.1	6,579.6	19.2	28.4	88.68	-1,445.2	-249.7	2,062.5	2,029.1	33.45	61.656	
6,750.0	6,648.6	6,866.7	6,615.9	19.2	28.4	88.57	-1,445.2	-220.5	2,062.6	2,029.2	33.46	61.654	
6,791.3	6,681.4	6,905.0	6,644.4	19.1	28.4	88.47	-1,445.2	-194.8	2,062.7	2,029.2	33.49	61.585	
6,800.0	6,688.1	6,913.0	6,650.1	19.1	28.3	88.46	-1,445.2	-189.3	2,062.7	2,029.2	33.51	61.561	
6,850.0	6,725.3	6,959.2	6,682.1	19.1	28.3	88.35	-1,445.2	-156.0	2,062.9	2,029.2	33.63	61.342	
6,889.7	6,753.2	6,995.7	6,705.8	19.0	28.3	88.27	-1,445.2	-128.2	2,062.9	2,029.1	33.79	61.050	
6,900.0	6,760.1	7,005.1	6,711.7	19.0	28.3	88.26	-1,445.2	-120.9	2,063.0	2,029.1	33.84	60.964	
6,950.0	6,792.3	7,050.0	6,738.4	19.0	28.2	88.17	-1,445.2	-84.8	2,063.1	2,028.9	34.15	60.404	
6,988.2	6,815.1	7,085.7	6,758.0	18.9	28.2	88.11	-1,445.2	-54.9	2,063.1	2,028.6	34.50	59.797	
7,000.0	6,821.8	7,096.5	6,763.7	18.9	28.2	88.09	-1,445.2	-45.7	2,063.1	2,028.5	34.61	59.613	
7,050.0	6,848.3	7,142.0	6,785.8	18.9	28.2	88.02	-1,445.2	-6.0	2,063.2	2,028.0	35.20	58.611	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,865.9	7,175.2	6,800.4	18.9	28.2	87.97	-1,445.2	23.8	2,063.3	2,027.5	35.74	57.726	
7,100.0	6,871.9	7,187.3	6,805.4	18.9	28.2	87.95	-1,445.2	34.9	2,063.3	2,027.4	35.95	57.400	
7,150.0	6,892.3	7,232.6	6,822.3	18.8	28.2	87.90	-1,445.2	76.8	2,063.4	2,026.5	36.85	56.001	
7,185.0	6,904.7	7,264.2	6,832.5	18.8	28.2	87.87	-1,445.2	106.8	2,063.4	2,025.8	37.58	54.911	
7,200.0	6,909.5	7,277.7	6,836.5	18.9	28.2	87.86	-1,445.2	119.7	2,063.4	2,025.5	37.90	54.441	
7,250.0	6,923.4	7,322.8	6,847.9	19.3	28.2	87.82	-1,445.2	163.3	2,063.5	2,024.4	39.10	52.769	
7,283.4	6,930.8	7,352.9	6,854.0	19.8	28.2	87.80	-1,445.2	192.8	2,063.5	2,023.5	39.99	51.604	
7,300.0	6,933.9	7,367.8	6,856.6	20.0	28.3	87.80	-1,445.2	207.5	2,063.5	2,023.1	40.44	51.021	
7,350.0	6,940.9	7,412.8	6,862.5	20.8	28.4	87.78	-1,445.2	252.1	2,063.5	2,021.6	41.91	49.239	
7,381.9	6,943.6	7,441.5	6,864.7	21.4	28.4	87.78	-1,445.2	280.6	2,063.5	2,020.6	42.90	48.096	
7,400.0	6,944.5	7,457.8	6,865.5	21.7	28.5	87.78	-1,445.2	296.9	2,063.5	2,020.1	43.48	47.461	
7,432.4	6,945.0	7,487.1	6,866.0	22.3	28.6	87.78	-1,445.2	326.2	2,063.5	2,019.0	44.55	46.323	
7,480.3	6,944.6	7,535.0	6,865.9	23.2	28.8	87.79	-1,445.2	374.1	2,063.5	2,017.2	46.30	44.565	
7,500.0	6,944.4	7,554.7	6,865.8	23.6	28.9	87.79	-1,445.2	393.8	2,063.5	2,016.5	47.03	43.874	
7,578.7	6,943.7	7,633.4	6,865.6	25.2	29.6	87.80	-1,445.2	472.5	2,063.5	2,013.4	50.12	41.170	
7,600.0	6,943.6	7,654.7	6,865.5	25.6	29.8	87.80	-1,445.2	493.8	2,063.5	2,012.5	50.98	40.479	
7,677.1	6,942.9	7,731.8	6,865.3	27.3	30.7	87.82	-1,445.2	570.9	2,063.5	2,009.3	54.23	38.050	
7,700.0	6,942.7	7,754.7	6,865.2	27.8	31.0	87.82	-1,445.2	593.8	2,063.5	2,008.3	55.21	37.374	
7,775.6	6,942.1	7,830.2	6,865.0	29.5	32.2	87.83	-1,445.2	669.3	2,063.5	2,004.9	58.57	35.230	
7,800.0	6,941.9	7,854.7	6,865.0	30.1	32.7	87.84	-1,445.2	693.8	2,063.5	2,003.8	59.67	34.580	
7,874.0	6,941.3	7,928.7	6,864.8	31.8	34.1	87.85	-1,445.2	767.8	2,063.5	2,000.4	63.10	32.703	
7,900.0	6,941.1	7,954.7	6,864.7	32.4	34.6	87.85	-1,445.2	793.8	2,063.4	1,999.1	64.31	32.084	
7,972.4	6,940.4	8,027.1	6,864.5	34.2	36.1	87.86	-1,445.2	866.2	2,063.4	1,995.7	67.77	30.447	
8,000.0	6,940.2	8,054.7	6,864.4	34.9	36.7	87.87	-1,445.2	893.8	2,063.4	1,994.3	69.10	29.861	
8,070.8	6,939.6	8,125.5	6,864.2	36.6	38.2	87.88	-1,445.2	964.6	2,063.4	1,990.8	72.57	28.435	
8,100.0	6,939.4	8,154.7	6,864.1	37.3	38.9	87.88	-1,445.2	993.8	2,063.4	1,989.4	74.00	27.883	
8,169.3	6,938.8	8,223.9	6,863.9	39.1	40.5	87.89	-1,445.2	1,063.0	2,063.4	1,985.9	77.46	26.638	
8,200.0	6,938.5	8,254.6	6,863.8	39.8	41.2	87.90	-1,445.2	1,093.8	2,063.4	1,984.4	79.00	26.118	
8,267.7	6,938.0	8,322.3	6,863.7	41.6	42.8	87.91	-1,445.2	1,161.5	2,063.4	1,980.9	82.43	25.031	
8,300.0	6,937.7	8,354.6	6,863.6	42.4	43.6	87.91	-1,445.2	1,193.8	2,063.4	1,979.3	84.08	24.541	
8,366.1	6,937.2	8,420.8	6,863.4	44.1	45.2	87.92	-1,445.2	1,259.9	2,063.4	1,975.9	87.47	23.588	
8,400.0	6,936.9	8,454.6	6,863.3	45.0	46.1	87.93	-1,445.2	1,293.7	2,063.3	1,974.1	89.22	23.126	
8,464.5	6,936.3	8,519.2	6,863.1	46.6	47.7	87.94	-1,445.2	1,358.3	2,063.3	1,970.8	92.57	22.289	
8,500.0	6,936.0	8,554.6	6,863.0	47.6	48.6	87.94	-1,445.2	1,393.7	2,063.3	1,968.9	94.42	21.853	
8,563.0	6,935.5	8,617.6	6,862.8	49.2	50.2	87.95	-1,445.2	1,456.7	2,063.3	1,965.6	97.71	21.116	
8,600.0	6,935.2	8,654.6	6,862.7	50.2	51.1	87.96	-1,445.2	1,493.7	2,063.3	1,963.6	99.66	20.704	
8,661.4	6,934.7	8,716.0	6,862.6	51.8	52.7	87.97	-1,445.2	1,555.1	2,063.3	1,960.4	102.90	20.052	
8,700.0	6,934.4	8,754.6	6,862.5	52.8	53.7	87.98	-1,445.2	1,593.7	2,063.3	1,958.3	104.94	19.662	
8,759.8	6,933.9	8,814.5	6,862.3	54.4	55.2	87.98	-1,445.2	1,653.6	2,063.3	1,955.2	108.12	19.084	
8,800.0	6,933.5	8,854.6	6,862.2	55.5	56.3	87.99	-1,445.2	1,693.7	2,063.3	1,953.0	110.25	18.714	
8,858.2	6,933.0	8,912.9	6,862.0	57.1	57.8	88.00	-1,445.2	1,752.0	2,063.3	1,949.9	113.36	18.200	
8,900.0	6,932.7	8,954.6	6,861.9	58.2	58.9	88.01	-1,445.2	1,793.7	2,063.2	1,947.6	115.60	17.849	
8,956.7	6,932.2	9,011.3	6,861.7	59.7	60.4	88.01	-1,445.2	1,850.4	2,063.2	1,944.6	118.64	17.391	
9,000.0	6,931.8	9,054.6	6,861.6	60.9	61.5	88.02	-1,445.2	1,893.7	2,063.2	1,942.3	120.96	17.057	
9,055.1	6,931.4	9,109.7	6,861.5	62.4	63.0	88.03	-1,445.2	1,948.8	2,063.2	1,939.3	123.93	16.648	
9,100.0	6,931.0	9,154.6	6,861.3	63.6	64.1	88.04	-1,445.2	1,993.7	2,063.2	1,936.9	126.35	16.329	
9,153.5	6,930.6	9,208.2	6,861.2	65.0	65.6	88.05	-1,445.2	2,047.3	2,063.2	1,934.0	129.25	15.963	
9,200.0	6,930.2	9,254.6	6,861.1	66.3	66.8	88.05	-1,445.2	2,093.7	2,063.2	1,931.4	131.76	15.658	
9,251.9	6,929.7	9,306.6	6,860.9	67.7	68.2	88.06	-1,445.2	2,145.7	2,063.2	1,928.6	134.58	15.331	
9,300.0	6,929.3	9,354.6	6,860.8	69.0	69.5	88.07	-1,445.2	2,193.7	2,063.2	1,926.0	137.19	15.039	
9,350.4	6,928.9	9,405.0	6,860.6	70.4	70.8	88.08	-1,445.2	2,244.1	2,063.2	1,923.2	139.93	14.745	
9,400.0	6,928.5	9,454.6	6,860.5	71.7	72.2	88.08	-1,445.2	2,293.7	2,063.2	1,920.5	142.63	14.465	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MW/D												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,503.4	6,860.4	73.0	73.5	88.09	-1,445.2	2,342.5	2,063.1	1,917.9	145.29	14.200	
9,500.0	6,927.7	9,554.6	6,860.2	74.4	74.8	88.10	-1,445.2	2,393.7	2,063.1	1,915.1	148.08	13.932	
9,547.2	6,927.3	9,601.9	6,860.1	75.7	76.1	88.11	-1,445.2	2,441.0	2,063.1	1,912.5	150.66	13.694	
9,600.0	6,926.8	9,654.6	6,859.9	77.2	77.5	88.11	-1,445.2	2,493.7	2,063.1	1,909.6	153.55	13.436	
9,645.6	6,926.4	9,700.3	6,859.8	78.4	78.8	88.12	-1,445.2	2,539.4	2,063.1	1,907.1	156.05	13.221	
9,700.0	6,926.0	9,754.6	6,859.7	79.9	80.2	88.13	-1,445.2	2,593.7	2,063.1	1,904.1	159.02	12.973	
9,744.1	6,925.6	9,798.7	6,859.5	81.1	81.4	88.14	-1,445.2	2,637.8	2,063.1	1,901.6	161.44	12.779	
9,800.0	6,925.2	9,854.6	6,859.4	82.6	83.0	88.15	-1,445.2	2,693.7	2,063.1	1,898.6	164.51	12.541	
9,842.5	6,924.8	9,897.1	6,859.3	83.8	84.1	88.15	-1,445.2	2,736.2	2,063.1	1,896.2	166.84	12.365	
9,900.0	6,924.3	9,954.6	6,859.1	85.4	85.7	88.16	-1,445.2	2,793.7	2,063.1	1,893.1	170.01	12.135	
9,940.9	6,924.0	9,995.5	6,859.0	86.5	86.8	88.17	-1,445.2	2,834.6	2,063.1	1,890.8	172.26	11.977	
10,000.0	6,923.5	10,054.6	6,858.8	88.1	88.4	88.18	-1,445.2	2,893.7	2,063.0	1,887.5	175.51	11.755	
10,039.3	6,923.2	10,094.0	6,858.7	89.2	89.5	88.18	-1,445.2	2,933.1	2,063.0	1,885.4	177.68	11.611	
10,100.0	6,922.6	10,154.6	6,858.5	90.9	91.1	88.19	-1,445.2	2,993.7	2,063.0	1,882.0	181.02	11.397	
10,137.8	6,922.3	10,192.4	6,858.4	91.9	92.2	88.20	-1,445.2	3,031.5	2,063.0	1,879.9	183.10	11.267	
10,200.0	6,921.8	10,254.6	6,858.3	93.7	93.9	88.21	-1,445.2	3,093.7	2,063.0	1,876.5	186.53	11.060	
10,236.2	6,921.5	10,290.8	6,858.2	94.7	94.9	88.21	-1,445.2	3,129.9	2,063.0	1,874.5	188.53	10.942	
10,300.0	6,921.0	10,354.6	6,858.0	96.4	96.6	88.22	-1,445.2	3,193.7	2,063.0	1,870.9	192.06	10.742	
10,334.6	6,920.7	10,389.2	6,857.9	97.4	97.6	88.23	-1,445.2	3,228.3	2,063.0	1,869.0	193.97	10.636	
10,400.0	6,920.1	10,454.6	6,857.7	99.2	99.4	88.24	-1,445.2	3,293.7	2,063.0	1,865.4	197.58	10.441	
10,433.0	6,919.9	10,487.7	6,857.6	100.1	100.3	88.24	-1,445.2	3,326.8	2,063.0	1,863.6	199.41	10.345	
10,500.0	6,919.3	10,554.6	6,857.4	101.9	102.1	88.25	-1,445.2	3,393.7	2,063.0	1,859.8	203.12	10.157	
10,531.5	6,919.0	10,586.1	6,857.3	102.8	103.0	88.26	-1,445.2	3,425.2	2,063.0	1,858.1	204.86	10.070	
10,600.0	6,918.5	10,654.6	6,857.1	104.7	104.8	88.27	-1,445.2	3,493.7	2,062.9	1,854.3	208.65	9.887	
10,629.9	6,918.2	10,684.5	6,857.1	105.5	105.7	88.27	-1,445.2	3,523.6	2,062.9	1,852.6	210.31	9.809	
10,700.0	6,917.6	10,754.6	6,856.9	107.5	107.6	88.28	-1,445.2	3,593.7	2,062.9	1,848.7	214.20	9.631	
10,728.3	6,917.4	10,782.9	6,856.8	108.3	108.4	88.29	-1,445.2	3,622.0	2,062.9	1,847.2	215.77	9.561	
10,800.0	6,916.8	10,854.6	6,856.6	110.3	110.4	88.30	-1,445.2	3,693.7	2,062.9	1,843.2	219.74	9.388	
10,826.7	6,916.6	10,881.4	6,856.5	111.0	111.1	88.30	-1,445.2	3,720.5	2,062.9	1,841.7	221.23	9.325	
10,900.0	6,916.0	10,954.6	6,856.3	113.0	113.1	88.32	-1,445.2	3,793.7	2,062.9	1,837.6	225.29	9.157	
10,925.2	6,915.8	10,979.8	6,856.2	113.7	113.8	88.32	-1,445.2	3,818.9	2,062.9	1,836.2	226.69	9.100	
11,000.0	6,915.1	11,054.6	6,856.0	115.8	115.9	88.33	-1,445.2	3,893.7	2,062.9	1,832.0	230.84	8.936	
11,023.6	6,914.9	11,078.2	6,856.0	116.5	116.5	88.33	-1,445.2	3,917.3	2,062.9	1,830.7	232.16	8.886	
11,100.0	6,914.3	11,154.6	6,855.7	118.6	118.6	88.35	-1,445.2	3,993.7	2,062.9	1,826.5	236.40	8.726	
11,122.0	6,914.1	11,176.6	6,855.7	119.2	119.2	88.35	-1,445.2	4,015.7	2,062.9	1,825.2	237.62	8.681	
11,200.0	6,913.5	11,254.6	6,855.5	121.4	121.4	88.36	-1,445.2	4,093.7	2,062.8	1,820.9	241.96	8.526	
11,220.4	6,913.3	11,275.1	6,855.4	121.9	122.0	88.36	-1,445.2	4,114.1	2,062.8	1,819.7	243.10	8.486	
11,300.0	6,912.6	11,354.6	6,855.2	124.1	124.2	88.38	-1,445.2	4,193.7	2,062.8	1,815.3	247.52	8.334	
11,318.9	6,912.5	11,373.5	6,855.1	124.7	124.7	88.38	-1,445.2	4,212.6	2,062.8	1,814.3	248.57	8.299	
11,400.0	6,911.8	11,454.6	6,854.9	126.9	126.9	88.39	-1,445.2	4,293.7	2,062.8	1,809.7	253.09	8.151	
11,417.3	6,911.6	11,471.9	6,854.9	127.4	127.4	88.39	-1,445.2	4,311.0	2,062.8	1,808.8	254.05	8.120	
11,500.0	6,911.0	11,554.6	6,854.6	129.7	129.7	88.41	-1,445.2	4,393.7	2,062.8	1,804.1	258.65	7.975	
11,515.7	6,910.8	11,570.3	6,854.6	130.2	130.1	88.41	-1,445.2	4,409.4	2,062.8	1,803.3	259.53	7.948	
11,600.0	6,910.1	11,654.6	6,854.4	132.5	132.5	88.42	-1,445.2	4,493.7	2,062.8	1,798.6	264.22	7.807	
11,614.1	6,910.0	11,668.7	6,854.3	132.9	132.9	88.43	-1,445.2	4,507.8	2,062.8	1,797.8	265.01	7.784	
11,700.0	6,909.3	11,754.6	6,854.1	135.3	135.3	88.44	-1,445.2	4,593.7	2,062.8	1,793.0	269.79	7.646	
11,712.6	6,909.2	11,767.2	6,854.0	135.6	135.6	88.44	-1,445.2	4,606.3	2,062.8	1,792.3	270.49	7.626	
11,800.0	6,908.5	11,854.6	6,853.8	138.1	138.0	88.45	-1,445.2	4,693.7	2,062.8	1,787.4	275.37	7.491	
11,811.0	6,908.4	11,865.6	6,853.8	138.4	138.3	88.46	-1,445.2	4,704.7	2,062.8	1,786.8	275.98	7.474	
11,900.0	6,907.6	11,954.6	6,853.5	140.9	140.8	88.47	-1,445.2	4,793.7	2,062.7	1,781.8	280.94	7.342	
11,909.4	6,907.5	11,964.0	6,853.5	141.1	141.1	88.47	-1,445.2	4,803.1	2,062.7	1,781.3	281.47	7.329	
12,000.0	6,906.8	12,054.6	6,853.2	143.6	143.6	88.48	-1,445.2	4,893.7	2,062.7	1,776.2	286.52	7.199	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	12,062.4	6,853.2	143.9	143.8	88.49	-1,445.2	4,901.5	2,062.7	1,775.8	286.96	7.188	
12,100.0	6,905.9	12,154.6	6,853.0	146.4	146.4	88.50	-1,445.2	4,993.7	2,062.7	1,770.6	292.10	7.062	
12,106.3	6,905.9	12,160.9	6,852.9	146.6	146.5	88.50	-1,445.2	5,000.0	2,062.7	1,770.3	292.45	7.053	
12,200.0	6,905.1	12,254.6	6,852.7	149.2	149.1	88.52	-1,445.2	5,093.7	2,062.7	1,765.0	297.68	6.929	
12,204.7	6,905.1	12,259.3	6,852.7	149.4	149.3	88.52	-1,445.2	5,098.4	2,062.7	1,764.8	297.94	6.923	
12,300.0	6,904.3	12,354.6	6,852.4	152.0	151.9	88.53	-1,445.2	5,193.7	2,062.7	1,759.4	303.26	6.802	
12,303.1	6,904.3	12,357.7	6,852.4	152.1	152.0	88.53	-1,445.2	5,196.8	2,062.7	1,759.3	303.43	6.798	
12,400.0	6,903.4	12,454.6	6,852.1	154.8	154.7	88.55	-1,445.2	5,293.7	2,062.7	1,753.8	308.84	6.679	
12,401.5	6,903.4	12,456.1	6,852.1	154.8	154.8	88.55	-1,445.2	5,295.2	2,062.7	1,753.7	308.93	6.677	
12,500.0	6,902.6	12,554.6	6,851.8	157.6	157.5	88.56	-1,445.2	5,393.7	2,062.7	1,748.2	314.43	6.560	
12,598.4	6,901.8	12,653.0	6,851.6	160.3	160.2	88.58	-1,445.2	5,492.1	2,062.6	1,742.7	319.92	6.447	
12,600.0	6,901.8	12,654.6	6,851.6	160.4	160.3	88.58	-1,445.2	5,493.7	2,062.6	1,742.6	320.01	6.446	
12,696.8	6,901.0	12,751.4	6,851.3	163.1	163.0	88.59	-1,445.2	5,590.5	2,062.6	1,737.2	325.42	6.338	
12,700.0	6,900.9	12,754.6	6,851.3	163.2	163.1	88.59	-1,445.2	5,593.7	2,062.6	1,737.0	325.60	6.335	
12,795.2	6,900.1	12,849.8	6,851.0	165.8	165.7	88.61	-1,445.2	5,688.9	2,062.6	1,731.7	330.92	6.233	
12,800.0	6,900.1	12,854.6	6,851.0	166.0	165.8	88.61	-1,445.2	5,693.7	2,062.6	1,731.4	331.19	6.228	
12,893.7	6,899.3	12,948.3	6,850.7	168.6	168.5	88.62	-1,445.2	5,787.3	2,062.6	1,726.2	336.42	6.131	
12,900.0	6,899.3	12,954.6	6,850.7	168.8	168.6	88.62	-1,445.2	5,793.7	2,062.6	1,725.8	336.78	6.125	
12,992.1	6,898.5	13,046.7	6,850.5	171.3	171.2	88.64	-1,445.2	5,885.8	2,062.6	1,720.7	341.93	6.032	
13,000.0	6,898.4	13,054.6	6,850.4	171.6	171.4	88.64	-1,445.2	5,893.7	2,062.6	1,720.2	342.37	6.024	
13,090.5	6,897.7	13,145.1	6,850.2	174.1	173.9	88.65	-1,445.2	5,984.2	2,062.6	1,715.2	347.43	5.937	
13,100.0	6,897.6	13,154.6	6,850.2	174.4	174.2	88.65	-1,445.2	5,993.7	2,062.6	1,714.6	347.96	5.928	
13,188.9	6,896.9	13,243.5	6,849.9	176.8	176.7	88.67	-1,445.2	6,082.6	2,062.6	1,709.6	352.93	5.844	
13,200.0	6,896.8	13,254.6	6,849.9	177.2	177.0	88.67	-1,445.2	6,093.7	2,062.6	1,709.0	353.55	5.834	
13,287.4	6,896.0	13,341.9	6,849.6	179.6	179.4	88.68	-1,445.2	6,181.0	2,062.6	1,704.1	358.44	5.754	
13,300.0	6,895.9	13,354.6	6,849.6	180.0	179.8	88.69	-1,445.2	6,193.7	2,062.6	1,703.4	359.15	5.743	
13,385.8	6,895.2	13,440.4	6,849.4	182.4	182.2	88.70	-1,445.2	6,279.5	2,062.5	1,698.6	363.95	5.667	
13,400.0	6,895.1	13,454.6	6,849.3	182.7	182.6	88.70	-1,445.2	6,293.7	2,062.5	1,697.8	364.74	5.655	
13,484.2	6,894.4	13,538.8	6,849.1	185.1	184.9	88.71	-1,445.2	6,377.9	2,062.5	1,693.1	369.45	5.583	
13,500.0	6,894.3	13,554.6	6,849.0	185.5	185.4	88.72	-1,445.2	6,393.6	2,062.5	1,692.2	370.33	5.569	
13,582.6	6,893.6	13,637.2	6,848.8	187.9	187.7	88.73	-1,445.2	6,476.3	2,062.5	1,687.6	374.96	5.501	
13,600.0	6,893.4	13,654.6	6,848.8	188.3	188.2	88.73	-1,445.2	6,493.6	2,062.5	1,686.6	375.93	5.486	
13,681.1	6,892.8	13,735.6	6,848.5	190.6	190.4	88.74	-1,445.2	6,574.7	2,062.5	1,682.0	380.47	5.421	
13,700.0	6,892.6	13,754.6	6,848.5	191.1	191.0	88.75	-1,445.2	6,593.6	2,062.5	1,681.0	381.53	5.406	
13,779.5	6,891.9	13,834.1	6,848.3	193.4	193.2	88.76	-1,445.2	6,673.1	2,062.5	1,676.5	385.98	5.344	
13,800.0	6,891.8	13,854.6	6,848.2	193.9	193.7	88.76	-1,445.2	6,693.6	2,062.5	1,675.4	387.12	5.328	
13,877.9	6,891.1	13,932.5	6,848.0	196.1	195.9	88.77	-1,445.2	6,771.6	2,062.5	1,671.0	391.49	5.268	
13,900.0	6,890.9	13,954.6	6,847.9	196.7	196.5	88.78	-1,445.2	6,793.6	2,062.5	1,669.8	392.72	5.252	
13,976.3	6,890.3	14,030.9	6,847.7	198.9	198.7	88.79	-1,445.2	6,870.0	2,062.5	1,665.5	397.00	5.195	
14,000.0	6,890.1	14,054.6	6,847.7	199.5	199.3	88.79	-1,445.2	6,893.6	2,062.5	1,664.2	398.32	5.178	
14,074.8	6,889.5	14,129.3	6,847.4	201.6	201.4	88.80	-1,445.2	6,968.4	2,062.5	1,660.0	402.51	5.124	
14,100.0	6,889.3	14,154.6	6,847.4	202.3	202.1	88.81	-1,445.2	6,993.6	2,062.5	1,658.5	403.92	5.106	
14,173.2	6,888.7	14,227.8	6,847.2	204.4	204.2	88.82	-1,445.2	7,066.8	2,062.5	1,654.4	408.02	5.055	
14,200.0	6,888.4	14,254.6	6,847.1	205.1	204.9	88.82	-1,445.2	7,093.6	2,062.5	1,652.9	409.52	5.036	
14,271.6	6,887.8	14,326.2	6,846.9	207.1	206.9	88.83	-1,445.2	7,165.3	2,062.4	1,648.9	413.53	4.987	
14,300.0	6,887.6	14,354.6	6,846.8	207.9	207.7	88.84	-1,445.2	7,193.6	2,062.4	1,647.3	415.12	4.968	
14,370.0	6,887.0	14,424.6	6,846.6	209.9	209.7	88.85	-1,445.2	7,263.7	2,062.4	1,643.4	419.04	4.922	
14,400.0	6,886.8	14,454.6	6,846.5	210.7	210.5	88.85	-1,445.2	7,293.6	2,062.4	1,641.7	420.72	4.902	
14,468.5	6,886.2	14,523.0	6,846.3	212.6	212.4	88.86	-1,445.2	7,362.1	2,062.4	1,637.9	424.56	4.858	
14,500.0	6,885.9	14,554.6	6,846.3	213.5	213.3	88.87	-1,445.2	7,393.6	2,062.4	1,636.1	426.32	4.838	
14,566.9	6,885.4	14,622.5	6,846.1	215.4	215.2	88.88	-1,445.2	7,461.6	2,062.4	1,632.3	430.10	4.795	
14,600.0	6,885.1	14,655.6	6,846.0	216.3	216.1	88.89	-1,445.2	7,494.7	2,062.4	1,630.4	431.96	4.775	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	14,668.7	6,846.0	216.7	216.5	88.89	-1,445.2	7,507.7	2,062.4	1,629.7	432.69	4.766 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-153.0	0.0	153.0				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-153.0	0.0	153.0	152.8	0.17	895.830	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-153.0	0.0	153.0	152.8	0.18	872.758	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-153.0	0.0	153.0	152.4	0.61	250.553	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-153.0	0.0	153.0	152.4	0.62	244.875	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-153.0	0.0	153.0	152.0	1.05	145.289	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-153.0	0.0	153.0	151.9	1.07	142.417	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-153.0	0.0	153.0	151.5	1.50	102.307	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-153.0	0.0	153.0	151.5	1.52	100.406	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-153.0	0.0	153.0	151.1	1.94	78.951	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-153.0	0.0	153.0	151.0	1.97	77.534	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-153.0	0.0	153.0	150.6	2.38	64.276	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-153.0	0.0	153.0	150.6	2.42	63.150	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-153.0	0.0	153.0	150.2	2.82	54.202	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-153.0	0.0	153.0	150.1	2.87	53.267	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-153.0	0.0	153.0	149.7	3.27	46.858	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-153.0	0.0	153.0	149.7	3.32	46.059	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-153.0	0.0	153.0	149.3	3.71	41.266	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-153.0	0.0	153.0	149.2	3.77	40.569	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-153.0	0.0	153.0	148.9	4.15	36.867	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-153.0	0.0	153.0	148.8	4.22	36.249	
1,036.2	1,036.2	1,037.2	1,037.2	2.2	2.2	-180.00	-153.0	0.0	153.0	148.6	4.38	34.904 CC	
1,082.7	1,082.7	1,082.0	1,082.0	2.3	2.3	-179.98	-153.2	0.0	153.2	148.6	4.58	33.448 ES	
1,100.0	1,100.0	1,098.5	1,098.5	2.3	2.3	-179.96	-153.4	-0.1	153.4	148.8	4.65	32.986	
1,150.0	1,150.0	1,146.0	1,146.0	2.4	2.4	-179.85	-154.6	-0.4	154.6	149.8	4.85	31.906	
1,181.1	1,181.1	1,175.5	1,175.5	2.5	2.5	-147.07	-155.7	-0.7	156.0	151.0	4.97	31.387	
1,200.0	1,200.0	1,193.4	1,193.4	2.6	2.5	-147.03	-156.5	-0.9	157.0	152.0	5.04	31.143	
1,279.5	1,279.5	1,268.6	1,268.6	2.7	2.6	-146.99	-161.1	-2.1	164.0	158.6	5.36	30.597	
1,300.0	1,299.9	1,287.8	1,287.6	2.8	2.7	-147.01	-162.6	-2.5	166.4	161.0	5.44	30.583	
1,377.9	1,377.7	1,360.7	1,360.1	3.0	2.8	-147.17	-169.3	-4.3	177.9	172.1	5.76	30.897	
1,400.0	1,399.7	1,381.2	1,380.4	3.0	2.8	-147.24	-171.5	-4.8	181.8	176.0	5.85	31.095	
1,476.4	1,475.7	1,451.4	1,450.1	3.2	3.0	-147.52	-180.2	-7.1	197.6	191.5	6.16	32.068	
1,500.0	1,499.1	1,472.9	1,471.3	3.2	3.1	-147.62	-183.1	-7.9	203.2	196.9	6.26	32.464	
1,574.8	1,573.2	1,540.2	1,537.8	3.4	3.2	-147.94	-193.5	-10.6	223.0	216.5	6.57	33.932	
1,600.0	1,598.2	1,562.5	1,559.8	3.5	3.3	-148.05	-197.2	-11.6	230.4	223.8	6.68	34.508	
1,673.2	1,670.3	1,626.6	1,622.7	3.7	3.5	-148.36	-209.0	-14.7	254.0	247.0	6.99	36.340	
1,700.0	1,696.6	1,649.7	1,645.3	3.8	3.5	-148.47	-213.5	-15.9	263.4	256.3	7.10	37.079	
1,749.9	1,745.5	1,692.1	1,686.7	3.9	3.7	-148.65	-222.3	-18.2	281.8	274.5	7.32	38.522	
1,771.6	1,766.8	1,710.4	1,704.6	4.0	3.7	-148.82	-226.3	-19.2	290.3	282.9	7.42	39.145	
1,800.0	1,794.5	1,734.2	1,727.7	4.1	3.8	-149.00	-231.7	-20.6	301.4	293.9	7.54	39.952	
1,870.1	1,863.1	1,792.1	1,783.8	4.3	4.0	-149.36	-245.5	-24.2	329.9	322.0	7.87	41.922	
1,900.0	1,892.3	1,816.5	1,807.4	4.4	4.1	-149.48	-251.6	-25.8	342.4	334.4	8.01	42.761	
1,968.5	1,959.4	1,871.8	1,860.6	4.7	4.4	-149.67	-266.3	-29.7	371.9	363.6	8.33	44.636	
2,000.0	1,990.2	1,900.0	1,887.6	4.8	4.5	-149.73	-274.1	-31.7	385.9	377.4	8.49	45.459	
2,066.9	2,055.6	1,949.5	1,934.8	5.1	4.7	-149.80	-288.5	-35.5	416.3	407.5	8.80	47.283	
2,100.0	2,088.0	1,975.2	1,959.2	5.2	4.9	-149.82	-296.3	-37.5	431.7	422.7	8.96	48.154	
2,165.3	2,151.9	2,025.2	2,006.5	5.4	5.1	-149.82	-312.0	-41.7	462.9	453.6	9.29	49.848	
2,200.0	2,185.8	2,051.4	2,031.1	5.6	5.3	-149.81	-320.6	-43.9	479.8	470.3	9.46	50.722	
2,263.8	2,248.2	2,101.0	2,077.6	5.8	5.6	-149.76	-337.4	-48.3	511.5	501.7	9.78	52.283	
2,300.0	2,283.6	2,132.3	2,106.9	6.0	5.8	-149.72	-348.1	-51.1	529.7	519.7	9.97	53.108	
2,362.2	2,344.5	2,186.1	2,157.2	6.2	6.1	-149.67	-366.5	-56.0	560.9	550.6	10.30	54.457	
2,400.0	2,381.4	2,218.8	2,187.8	6.4	6.3	-149.64	-377.7	-58.9	579.9	569.4	10.50	55.226	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,271.2	2,236.8	6.6	6.6	-149.59	-395.7	-63.6	610.3	599.5	10.83	56.376	
2,500.0	2,479.2	2,305.3	2,268.7	6.8	6.8	-149.56	-407.4	-66.6	630.1	619.0	11.04	57.087	
2,559.0	2,537.0	2,356.4	2,316.4	7.0	7.2	-149.53	-424.8	-71.2	659.7	648.3	11.36	58.073	
2,600.0	2,577.1	2,391.8	2,349.5	7.2	7.4	-149.50	-437.0	-74.4	680.2	668.7	11.58	58.727	
2,657.5	2,633.3	2,441.5	2,396.0	7.4	7.7	-149.47	-454.0	-78.9	709.1	697.2	11.90	59.580	
2,700.0	2,674.9	2,478.3	2,430.4	7.6	7.9	-149.45	-466.6	-82.2	730.4	718.3	12.14	60.181	
2,755.9	2,729.6	2,526.6	2,475.7	7.9	8.3	-149.42	-483.2	-86.5	758.5	746.0	12.45	60.924	
2,800.0	2,772.7	2,564.8	2,511.3	8.0	8.5	-149.40	-496.2	-89.9	780.6	767.9	12.70	61.478	
2,854.3	2,825.8	2,611.8	2,555.3	8.3	8.8	-149.38	-512.3	-94.2	807.9	794.9	13.00	62.126	
2,900.0	2,870.5	2,651.3	2,592.2	8.5	9.1	-149.36	-525.8	-97.7	830.8	817.5	13.26	62.639	
2,952.7	2,922.1	2,696.9	2,634.9	8.7	9.4	-149.34	-541.5	-101.8	857.3	843.7	13.56	63.205	
3,000.0	2,968.3	2,737.8	2,673.1	8.9	9.7	-149.33	-555.5	-105.5	881.0	867.1	13.83	63.682	
3,051.2	3,018.4	2,782.0	2,714.5	9.1	10.0	-149.31	-570.6	-109.4	906.6	892.5	14.13	64.176	
3,100.0	3,066.1	2,824.3	2,754.0	9.3	10.3	-149.29	-585.1	-113.2	931.1	916.7	14.41	64.623	
3,149.6	3,114.7	2,867.2	2,794.1	9.5	10.5	-149.28	-599.8	-117.1	956.0	941.3	14.70	65.055	
3,200.0	3,164.0	2,910.8	2,834.9	9.8	10.8	-149.26	-614.7	-121.0	981.3	966.3	14.99	65.475	
3,248.0	3,210.9	2,952.3	2,873.8	10.0	11.1	-149.25	-628.9	-124.7	1,005.4	990.2	15.27	65.853	
3,300.0	3,261.8	2,997.3	2,915.8	10.2	11.4	-149.24	-644.3	-128.7	1,031.5	1,015.9	15.57	66.247	
3,346.4	3,307.2	3,037.4	2,953.4	10.4	11.7	-149.23	-658.1	-132.4	1,054.8	1,039.0	15.84	66.580	
3,400.0	3,359.6	3,083.8	2,996.7	10.6	12.0	-149.22	-674.0	-136.5	1,081.7	1,065.5	16.16	66.950	
3,444.9	3,403.5	3,122.6	3,033.0	10.8	12.3	-149.21	-687.3	-140.0	1,104.2	1,087.8	16.42	67.245	
3,500.0	3,457.4	3,170.3	3,077.6	11.1	12.6	-149.19	-703.6	-144.3	1,131.9	1,115.1	16.75	67.593	
3,543.3	3,499.8	3,207.7	3,112.6	11.3	12.9	-149.18	-716.4	-147.6	1,153.6	1,136.6	17.00	67.854	
3,600.0	3,555.2	3,256.8	3,158.5	11.5	13.2	-149.17	-733.2	-152.0	1,182.1	1,164.7	17.34	68.182	
3,641.7	3,596.0	3,292.8	3,192.2	11.7	13.5	-149.17	-745.6	-155.3	1,203.0	1,185.4	17.58	68.413	
3,700.0	3,653.0	3,343.2	3,239.4	11.9	13.8	-149.16	-762.8	-159.8	1,232.2	1,214.3	17.93	68.723	
3,740.1	3,692.3	3,378.0	3,271.9	12.1	14.1	-149.15	-774.7	-162.9	1,252.4	1,234.2	18.17	68.928	
3,800.0	3,750.8	3,429.7	3,320.3	12.4	14.4	-149.14	-792.5	-167.6	1,282.4	1,263.9	18.53	69.222	
3,838.6	3,788.6	3,463.1	3,351.5	12.6	14.7	-149.13	-803.9	-170.6	1,301.8	1,283.0	18.76	69.403	
3,900.0	3,848.7	3,516.2	3,401.2	12.8	15.0	-149.12	-822.1	-175.3	1,332.6	1,313.5	19.12	69.683	
3,937.0	3,884.9	3,548.2	3,431.1	13.0	15.2	-149.12	-833.0	-178.2	1,351.2	1,331.8	19.35	69.844	
4,000.0	3,946.5	3,602.7	3,482.1	13.3	15.6	-149.11	-851.7	-183.1	1,382.8	1,363.1	19.72	70.109	
4,035.4	3,981.1	3,633.4	3,510.7	13.4	15.8	-149.10	-862.2	-185.8	1,400.6	1,380.6	19.94	70.252	
4,100.0	4,044.3	3,689.2	3,563.0	13.7	16.2	-149.10	-881.3	-190.8	1,433.0	1,412.6	20.32	70.505	
4,133.8	4,077.4	3,718.5	3,590.3	13.9	16.4	-149.09	-891.4	-193.5	1,450.0	1,429.4	20.53	70.632	
4,200.0	4,142.1	3,775.7	3,643.9	14.2	16.8	-149.08	-910.9	-198.6	1,483.2	1,462.2	20.93	70.873	
4,232.3	4,173.7	3,803.6	3,670.0	14.3	17.0	-149.08	-920.5	-201.1	1,499.4	1,478.2	21.12	70.986	
4,300.0	4,239.9	3,862.2	3,724.7	14.6	17.4	-149.07	-940.6	-206.4	1,533.3	1,511.8	21.53	71.215	
4,330.7	4,270.0	3,888.8	3,749.6	14.7	17.6	-149.07	-949.7	-208.8	1,548.7	1,527.0	21.72	71.316	
4,400.0	4,337.7	3,948.7	3,805.6	15.0	18.0	-149.06	-970.2	-214.1	1,583.5	1,561.4	22.14	71.535	
4,429.1	4,366.2	3,973.9	3,829.2	15.2	18.2	-149.06	-978.8	-216.4	1,598.1	1,575.8	22.31	71.624	
4,500.0	4,435.6	4,035.2	3,886.5	15.5	18.7	-149.05	-999.8	-221.9	1,633.7	1,611.0	22.74	71.835	
4,527.5	4,462.5	4,059.0	3,908.8	15.6	18.8	-149.05	-1,008.0	-224.0	1,647.5	1,624.6	22.91	71.913	
4,600.0	4,533.4	4,121.7	3,967.4	15.9	19.3	-149.04	-1,029.4	-229.7	1,683.9	1,660.5	23.35	72.115	
4,626.0	4,558.8	4,144.2	3,988.4	16.0	19.4	-149.04	-1,037.1	-231.7	1,696.9	1,673.4	23.51	72.185	
4,673.6	4,605.3	4,185.3	4,026.9	16.3	19.7	-149.03	-1,051.2	-235.4	1,720.8	1,697.0	23.80	72.310	
4,700.0	4,631.2	4,208.3	4,048.4	16.4	19.9	-149.19	-1,059.1	-237.4	1,734.0	1,710.0	23.99	72.274	
4,724.4	4,655.1	4,229.5	4,068.2	16.4	20.0	-149.32	-1,066.4	-239.3	1,746.0	1,721.8	24.16	72.270	
4,800.0	4,729.5	4,295.9	4,130.3	16.7	20.5	-149.69	-1,089.1	-245.3	1,782.2	1,757.5	24.68	72.221	
4,822.8	4,752.1	4,316.1	4,149.2	16.7	20.6	-149.79	-1,096.0	-247.1	1,792.8	1,768.0	24.83	72.207	
4,900.0	4,828.4	4,384.8	4,213.5	17.0	21.1	-150.08	-1,119.6	-253.3	1,827.7	1,802.4	25.34	72.129	
4,921.2	4,849.5	4,403.9	4,231.3	17.0	21.2	-150.15	-1,126.1	-255.0	1,837.0	1,811.5	25.48	72.110	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MW/D												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,475.1	4,297.9	17.2	21.7	-150.38	-1,150.5	-261.4	1,870.5	1,844.5	25.98	72.012	
5,019.7	4,947.4	4,492.9	4,314.6	17.2	21.9	-150.43	-1,156.6	-263.0	1,878.6	1,852.5	26.10	71.991	
5,100.0	5,027.5	4,566.4	4,383.3	17.4	22.4	-150.59	-1,181.7	-269.6	1,910.6	1,884.0	26.58	71.879	
5,118.1	5,045.6	4,583.1	4,398.9	17.4	22.5	-150.62	-1,187.4	-271.1	1,917.6	1,890.9	26.69	71.858	
5,200.0	5,127.4	4,658.8	4,469.7	17.6	23.0	-150.72	-1,213.4	-277.9	1,947.9	1,920.7	27.15	71.738	
5,216.5	5,143.9	4,674.2	4,484.1	17.6	23.2	-150.73	-1,218.7	-279.2	1,953.8	1,926.6	27.24	71.717	
5,273.4	5,200.8	4,727.2	4,533.7	17.7	23.5	176.55	-1,236.8	-284.0	1,973.5	1,934.4	39.15	50.408	
5,300.0	5,227.4	4,752.1	4,557.0	17.7	23.7	176.63	-1,245.3	-286.2	1,982.5	1,943.2	39.36	50.373	
5,314.9	5,242.3	4,766.1	4,570.1	17.7	23.8	176.68	-1,250.1	-287.5	1,987.6	1,948.1	39.47	50.350	
5,400.0	5,327.4	4,845.6	4,644.5	17.8	24.4	176.94	-1,277.4	-294.6	2,016.4	1,976.3	40.15	50.227	
5,413.4	5,340.8	4,858.1	4,656.2	17.9	24.5	176.98	-1,281.7	-295.7	2,020.9	1,980.7	40.25	50.207	
5,500.0	5,427.4	4,939.2	4,731.9	18.0	25.0	177.24	-1,309.4	-303.0	2,050.3	2,009.4	40.94	50.084	
5,511.8	5,439.2	4,950.2	4,742.2	18.0	25.1	177.28	-1,313.2	-304.0	2,054.4	2,013.3	41.03	50.067	
5,600.0	5,527.4	5,032.7	4,819.4	18.1	25.7	177.53	-1,341.4	-311.4	2,084.3	2,042.6	41.73	49.944	
5,610.2	5,537.6	5,042.2	4,828.3	18.1	25.8	177.56	-1,344.7	-312.3	2,087.8	2,046.0	41.82	49.930	
5,700.0	5,627.4	5,126.2	4,906.9	18.3	26.3	177.81	-1,373.5	-319.8	2,118.4	2,075.8	42.53	49.807	
5,708.6	5,636.0	5,134.3	4,914.4	18.3	26.4	177.84	-1,376.2	-320.5	2,121.3	2,078.7	42.60	49.795	
5,800.0	5,727.4	5,219.7	4,994.3	18.4	27.0	178.09	-1,405.5	-328.2	2,152.5	2,109.1	43.33	49.672	
5,807.1	5,734.5	5,226.3	5,000.5	18.4	27.1	178.10	-1,407.8	-328.8	2,154.9	2,111.5	43.39	49.663	
5,900.0	5,827.4	5,313.3	5,081.8	18.6	27.7	178.35	-1,437.5	-336.6	2,186.6	2,142.4	44.14	49.540	
5,905.5	5,832.9	5,318.4	5,086.6	18.6	27.7	178.36	-1,439.3	-337.0	2,188.5	2,144.3	44.18	49.533	
6,000.0	5,927.4	5,406.8	5,169.3	18.7	28.3	178.60	-1,469.5	-345.0	2,220.7	2,175.8	44.94	49.411	
6,003.9	5,931.3	5,410.4	5,172.7	18.7	28.4	178.61	-1,470.8	-345.3	2,222.1	2,177.1	44.98	49.406	
6,100.0	6,027.4	5,761.1	5,507.2	18.9	30.0	179.37	-1,572.0	-371.8	2,250.2	2,203.4	46.75	48.136	
6,102.3	6,029.7	5,770.6	5,516.4	18.9	30.0	179.39	-1,574.2	-372.4	2,250.7	2,203.9	46.79	48.107	
6,200.0	6,127.4	6,175.7	5,915.5	19.0	31.2	179.84	-1,639.7	-389.6	2,266.5	2,218.4	48.10	47.123	
6,200.8	6,128.2	6,179.0	5,918.7	19.0	31.2	179.84	-1,640.0	-389.6	2,266.6	2,218.5	48.11	47.117	
6,299.2	6,226.6	6,488.3	6,227.6	19.2	31.6	179.93	-1,652.8	-393.0	2,269.6	2,220.9	48.68	46.620	
6,301.4	6,228.8	6,490.5	6,229.8	19.2	31.6	179.93	-1,652.8	-393.0	2,269.6	2,220.9	48.69	46.614	
6,350.0	6,277.4	6,538.9	6,278.1	19.3	31.6	89.92	-1,652.8	-390.9	2,269.6	2,235.4	34.20	66.364	
6,397.6	6,324.7	6,586.3	6,325.2	19.3	31.7	89.91	-1,652.8	-385.8	2,269.6	2,235.3	34.28	66.209	
6,400.0	6,327.1	6,588.6	6,327.6	19.3	31.7	89.91	-1,652.8	-385.4	2,269.6	2,235.3	34.28	66.202	
6,450.0	6,376.3	6,638.4	6,376.5	19.3	31.7	89.90	-1,652.8	-376.5	2,269.6	2,235.3	34.33	66.119	
6,496.0	6,421.1	6,684.2	6,420.9	19.3	31.7	89.89	-1,652.8	-365.4	2,269.6	2,235.3	34.33	66.106	
6,500.0	6,424.9	6,688.1	6,424.6	19.3	31.7	89.89	-1,652.8	-364.3	2,269.6	2,235.3	34.33	66.105	
6,550.0	6,472.4	6,737.8	6,471.8	19.3	31.7	89.88	-1,652.8	-348.7	2,269.6	2,235.3	34.31	66.148	
6,594.5	6,513.8	6,781.9	6,512.8	19.3	31.6	89.87	-1,652.8	-332.1	2,269.6	2,235.3	34.27	66.220	
6,600.0	6,518.8	6,787.4	6,517.8	19.3	31.6	89.87	-1,652.8	-329.9	2,269.6	2,235.3	34.27	66.229	
6,650.0	6,563.8	6,837.1	6,562.3	19.3	31.6	89.87	-1,652.8	-308.0	2,269.6	2,235.4	34.22	66.328	
6,692.9	6,601.1	6,879.7	6,599.2	19.2	31.6	89.86	-1,652.8	-286.7	2,269.6	2,235.4	34.18	66.403	
6,700.0	6,607.1	6,886.7	6,605.2	19.2	31.6	89.86	-1,652.8	-283.0	2,269.6	2,235.4	34.17	66.416	
6,750.0	6,648.6	6,936.3	6,646.2	19.2	31.5	89.85	-1,652.8	-255.2	2,269.6	2,235.5	34.15	66.460	
6,791.3	6,681.4	6,977.3	6,678.6	19.1	31.5	89.85	-1,652.8	-230.1	2,269.6	2,235.5	34.16	66.432	
6,800.0	6,688.1	6,985.9	6,685.2	19.1	31.5	89.85	-1,652.8	-224.6	2,269.6	2,235.4	34.17	66.424	
6,850.0	6,725.3	7,035.5	6,722.0	19.1	31.5	89.84	-1,652.8	-191.3	2,269.6	2,235.4	34.25	66.265	
6,889.7	6,753.2	7,074.9	6,749.5	19.0	31.4	89.84	-1,652.8	-163.2	2,269.6	2,235.2	34.38	66.014	
6,900.0	6,760.1	7,085.0	6,756.4	19.0	31.4	89.84	-1,652.8	-155.6	2,269.6	2,235.2	34.42	65.943	
6,950.0	6,792.3	7,134.6	6,788.2	19.0	31.4	89.84	-1,652.8	-117.7	2,269.6	2,234.9	34.69	65.421	
6,988.2	6,815.1	7,172.4	6,810.7	18.9	31.4	89.84	-1,652.8	-87.3	2,269.6	2,234.6	35.00	64.854	
7,000.0	6,821.8	7,184.1	6,817.3	18.9	31.4	89.83	-1,652.8	-77.6	2,269.6	2,234.5	35.10	64.669	
7,050.0	6,848.3	7,233.7	6,843.6	18.9	31.3	89.83	-1,652.8	-35.6	2,269.6	2,234.0	35.64	63.674	
7,086.6	6,865.9	7,270.0	6,861.0	18.9	31.3	89.83	-1,652.8	-3.8	2,269.6	2,233.5	36.16	62.774	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MW/D												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	7,283.2	6,867.0	18.9	31.3	89.83	-1,652.8	8.1	2,269.6	2,233.3	36.35	62.434	
7,150.0	6,892.3	7,332.8	6,887.2	18.8	31.3	89.83	-1,652.8	53.3	2,269.6	2,232.4	37.23	60.969	
7,185.0	6,904.7	7,367.5	6,899.5	18.8	31.3	89.83	-1,652.8	85.7	2,269.6	2,231.7	37.95	59.810	
7,200.0	6,909.5	7,382.3	6,904.3	18.9	31.3	89.83	-1,652.8	99.8	2,269.6	2,231.4	38.27	59.308	
7,250.0	6,923.4	7,431.9	6,918.1	19.3	31.3	89.84	-1,652.8	147.4	2,269.6	2,230.1	39.47	57.499	
7,283.4	6,930.8	7,465.0	6,925.5	19.8	31.4	89.84	-1,652.8	179.7	2,269.6	2,229.2	40.37	56.219	
7,300.0	6,933.9	7,481.4	6,928.6	20.0	31.4	89.84	-1,652.8	195.8	2,269.6	2,228.8	40.83	55.588	
7,350.0	6,940.9	7,531.0	6,935.7	20.8	31.5	89.84	-1,652.8	244.8	2,269.6	2,227.3	42.32	53.625	
7,381.9	6,943.6	7,562.6	6,938.5	21.4	31.5	89.84	-1,652.8	276.3	2,269.6	2,226.3	43.34	52.364	
7,400.0	6,944.5	7,580.6	6,939.4	21.7	31.6	89.85	-1,652.8	294.2	2,269.6	2,225.7	43.94	51.658	
7,432.4	6,945.0	7,612.7	6,940.0	22.3	31.7	89.85	-1,652.8	326.4	2,269.6	2,224.6	45.03	50.405	
7,480.3	6,944.6	7,660.6	6,939.8	23.2	31.9	89.85	-1,652.8	374.3	2,269.6	2,222.9	46.76	48.535	
7,500.0	6,944.4	7,680.3	6,939.7	23.6	32.0	89.85	-1,652.8	394.0	2,269.6	2,222.1	47.48	47.806	
7,578.7	6,943.7	7,759.0	6,939.3	25.2	32.4	89.86	-1,652.8	472.7	2,269.6	2,219.1	50.55	44.902	
7,600.0	6,943.6	7,780.3	6,939.2	25.6	32.6	89.86	-1,652.8	494.0	2,269.6	2,218.2	51.39	44.169	
7,677.1	6,942.9	7,857.4	6,938.8	27.3	33.3	89.87	-1,652.8	571.1	2,269.6	2,215.0	54.61	41.558	
7,700.0	6,942.7	7,880.3	6,938.7	27.8	33.5	89.87	-1,652.8	594.0	2,269.6	2,214.0	55.58	40.837	
7,775.6	6,942.1	7,955.9	6,938.3	29.5	34.4	89.88	-1,652.8	669.5	2,269.6	2,210.7	58.91	38.526	
7,800.0	6,941.9	7,980.3	6,938.2	30.1	34.8	89.88	-1,652.8	694.0	2,269.6	2,209.6	60.00	37.829	
7,874.0	6,941.3	8,054.3	6,937.8	31.8	35.9	89.89	-1,652.8	768.0	2,269.6	2,206.2	63.41	35.795	
7,900.0	6,941.1	8,080.3	6,937.7	32.4	36.4	89.89	-1,652.8	794.0	2,269.6	2,205.0	64.61	35.128	
7,972.4	6,940.4	8,152.7	6,937.4	34.2	37.7	89.90	-1,652.8	866.4	2,269.6	2,201.6	68.06	33.349	
8,000.0	6,940.2	8,180.3	6,937.2	34.9	38.2	89.90	-1,652.8	894.0	2,269.6	2,200.2	69.37	32.716	
8,070.8	6,939.6	8,251.1	6,936.9	36.6	39.6	89.91	-1,652.8	964.8	2,269.6	2,196.8	72.83	31.163	
8,100.0	6,939.4	8,280.3	6,936.7	37.3	40.2	89.91	-1,652.8	993.9	2,269.6	2,195.4	74.26	30.564	
8,169.3	6,938.8	8,349.6	6,936.4	39.1	41.7	89.91	-1,652.8	1,063.2	2,269.6	2,191.9	77.71	29.208	
8,200.0	6,938.5	8,380.3	6,936.2	39.8	42.4	89.92	-1,652.8	1,093.9	2,269.6	2,190.4	79.24	28.643	
8,267.7	6,938.0	8,448.0	6,935.9	41.6	44.0	89.92	-1,652.8	1,161.6	2,269.6	2,186.9	82.66	27.456	
8,300.0	6,937.7	8,480.3	6,935.8	42.4	44.7	89.93	-1,652.8	1,193.9	2,269.6	2,185.3	84.30	26.923	
8,366.1	6,937.2	8,546.4	6,935.4	44.1	46.3	89.93	-1,652.8	1,260.1	2,269.6	2,181.9	87.69	25.882	
8,400.0	6,936.9	8,580.3	6,935.3	45.0	47.1	89.93	-1,652.8	1,293.9	2,269.6	2,180.2	89.43	25.379	
8,464.5	6,936.3	8,644.8	6,934.9	46.6	48.6	89.94	-1,652.8	1,358.5	2,269.6	2,176.8	92.77	24.464	
8,500.0	6,936.0	8,680.3	6,934.8	47.6	49.5	89.94	-1,652.8	1,393.9	2,269.6	2,175.0	94.61	23.988	
8,563.0	6,935.5	8,743.2	6,934.5	49.2	51.0	89.95	-1,652.8	1,456.9	2,269.6	2,171.7	97.91	23.181	
8,600.0	6,935.2	8,780.3	6,934.3	50.2	51.9	89.95	-1,652.8	1,493.9	2,269.6	2,169.8	99.85	22.731	
8,661.4	6,934.7	8,841.7	6,934.0	51.8	53.5	89.96	-1,652.8	1,555.3	2,269.6	2,166.5	103.08	22.018	
8,700.0	6,934.4	8,880.3	6,933.8	52.8	54.4	89.96	-1,652.8	1,593.9	2,269.6	2,164.5	105.12	21.591	
8,759.8	6,933.9	8,940.1	6,933.5	54.4	56.0	89.97	-1,652.8	1,653.8	2,269.6	2,161.3	108.29	20.959	
8,785.6	6,933.6	8,965.9	6,933.4	55.1	56.6	89.97	-1,652.8	1,679.6	2,269.6	2,160.0	109.66	20.697	
8,800.0	6,933.5	8,980.3	6,933.3	55.5	57.0	89.97	-1,652.8	1,693.9	2,269.6	2,159.2	110.42	20.554	
8,858.2	6,933.0	9,038.5	6,933.0	57.1	58.5	89.97	-1,652.8	1,752.2	2,269.6	2,156.1	113.53	19.991	
8,900.0	6,932.7	9,080.3	6,932.8	58.2	59.6	89.98	-1,652.8	1,793.9	2,269.6	2,153.9	115.76	19.606	
8,956.7	6,932.2	9,136.9	6,932.5	59.7	61.0	89.98	-1,652.8	1,850.6	2,269.6	2,150.8	118.80	19.105	
9,000.0	6,931.8	9,180.3	6,932.3	60.9	62.1	89.99	-1,652.8	1,893.9	2,269.6	2,148.5	121.12	18.738	
9,055.1	6,931.4	9,235.4	6,932.1	62.4	63.6	89.99	-1,652.8	1,949.0	2,269.6	2,145.5	124.09	18.291	
9,100.0	6,931.0	9,280.3	6,931.8	63.6	64.8	90.00	-1,652.8	1,993.9	2,269.6	2,143.1	126.50	17.941	
9,153.5	6,930.6	9,333.8	6,931.6	65.0	66.2	90.00	-1,652.8	2,047.5	2,269.6	2,140.2	129.40	17.540	
9,200.0	6,930.2	9,380.3	6,931.4	66.3	67.4	90.00	-1,652.8	2,093.9	2,269.6	2,137.7	131.91	17.206	
9,251.9	6,929.7	9,432.2	6,931.1	67.7	68.7	90.01	-1,652.8	2,145.9	2,269.6	2,134.9	134.72	16.847	
9,300.0	6,929.3	9,480.3	6,930.9	69.0	70.0	90.01	-1,652.8	2,193.9	2,269.6	2,132.3	137.33	16.527	
9,350.4	6,928.9	9,530.6	6,930.6	70.4	71.4	90.02	-1,652.8	2,244.3	2,269.6	2,129.5	140.07	16.204	
9,400.0	6,928.5	9,580.3	6,930.4	71.7	72.7	90.02	-1,652.8	2,293.9	2,269.6	2,126.8	142.76	15.898	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - PROPO												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	9,629.1	6,930.1	73.0	74.0	90.03	-1,652.8	2,342.7	2,269.6	2,124.2	145.42	15.607	
9,500.0	6,927.7	9,680.3	6,929.9	74.4	75.3	90.03	-1,652.8	2,393.9	2,269.6	2,121.4	148.21	15.313	
9,547.2	6,927.3	9,727.5	6,929.7	75.7	76.6	90.04	-1,652.8	2,441.1	2,269.6	2,118.8	150.79	15.051	
9,600.0	6,926.8	9,780.3	6,929.4	77.2	78.0	90.04	-1,652.8	2,493.9	2,269.6	2,115.9	153.68	14.769	
9,645.6	6,926.4	9,825.9	6,929.2	78.4	79.2	90.04	-1,652.8	2,539.6	2,269.6	2,113.4	156.17	14.533	
9,700.0	6,926.0	9,880.3	6,928.9	79.9	80.7	90.05	-1,652.8	2,593.9	2,269.6	2,110.5	159.15	14.261	
9,744.1	6,925.6	9,924.3	6,928.7	81.1	81.9	90.05	-1,652.8	2,638.0	2,269.6	2,108.0	161.57	14.048	
9,800.0	6,925.2	9,980.3	6,928.4	82.6	83.4	90.06	-1,652.8	2,693.9	2,269.6	2,105.0	164.63	13.786	
9,842.5	6,924.8	10,022.8	6,928.2	83.8	84.5	90.06	-1,652.8	2,736.4	2,269.6	2,102.6	166.97	13.593	
9,900.0	6,924.3	10,080.3	6,927.9	85.4	86.1	90.07	-1,652.8	2,793.9	2,269.6	2,099.5	170.13	13.341	
9,940.9	6,924.0	10,121.2	6,927.7	86.5	87.2	90.07	-1,652.8	2,834.8	2,269.6	2,097.2	172.38	13.167	
10,000.0	6,923.5	10,180.3	6,927.5	88.1	88.8	90.08	-1,652.8	2,893.9	2,269.6	2,094.0	175.63	12.923	
10,039.3	6,923.2	10,219.6	6,927.3	89.2	89.9	90.08	-1,652.8	2,933.3	2,269.6	2,091.8	177.79	12.766	
10,100.0	6,922.6	10,280.3	6,927.0	90.9	91.5	90.08	-1,652.8	2,993.9	2,269.6	2,088.5	181.13	12.530	
10,137.8	6,922.3	10,318.0	6,926.8	91.9	92.6	90.09	-1,652.8	3,031.7	2,269.6	2,086.4	183.21	12.388	
10,200.0	6,921.8	10,380.3	6,926.5	93.7	94.2	90.09	-1,652.8	3,093.9	2,269.6	2,083.0	186.65	12.160	
10,236.2	6,921.5	10,416.5	6,926.3	94.7	95.2	90.10	-1,652.8	3,130.1	2,269.6	2,081.0	188.64	12.031	
10,300.0	6,921.0	10,480.3	6,926.0	96.4	97.0	90.10	-1,652.8	3,193.9	2,269.6	2,077.5	192.17	11.811	
10,334.6	6,920.7	10,514.9	6,925.8	97.4	97.9	90.10	-1,652.8	3,228.5	2,269.6	2,075.5	194.08	11.694	
10,400.0	6,920.1	10,580.3	6,925.5	99.2	99.7	90.11	-1,652.8	3,293.9	2,269.6	2,071.9	197.69	11.481	
10,433.0	6,919.9	10,613.3	6,925.3	100.1	100.6	90.11	-1,652.8	3,327.0	2,269.6	2,070.1	199.52	11.375	
10,500.0	6,919.3	10,680.3	6,925.0	101.9	102.4	90.12	-1,652.8	3,393.9	2,269.6	2,066.4	203.22	11.168	
10,531.5	6,919.0	10,711.7	6,924.9	102.8	103.3	90.12	-1,652.8	3,425.4	2,269.6	2,064.7	204.97	11.073	
10,600.0	6,918.5	10,780.3	6,924.5	104.7	105.2	90.13	-1,652.8	3,493.9	2,269.6	2,060.9	208.76	10.872	
10,629.9	6,918.2	10,810.2	6,924.4	105.5	106.0	90.13	-1,652.8	3,523.8	2,269.6	2,059.2	210.42	10.786	
10,700.0	6,917.6	10,880.3	6,924.0	107.5	107.9	90.14	-1,652.8	3,593.9	2,269.6	2,055.3	214.30	10.591	
10,728.3	6,917.4	10,908.6	6,923.9	108.3	108.7	90.14	-1,652.8	3,622.2	2,269.6	2,053.8	215.87	10.514	
10,800.0	6,916.8	10,980.3	6,923.6	110.3	110.7	90.15	-1,652.8	3,693.9	2,269.6	2,049.8	219.84	10.324	
10,826.7	6,916.6	11,007.0	6,923.4	111.0	111.4	90.15	-1,652.8	3,720.6	2,269.6	2,048.3	221.33	10.255	
10,900.0	6,916.0	11,080.3	6,923.1	113.0	113.4	90.15	-1,652.8	3,793.9	2,269.6	2,044.2	225.39	10.070	
10,925.2	6,915.8	11,105.4	6,922.9	113.7	114.1	90.16	-1,652.8	3,819.1	2,269.6	2,042.8	226.79	10.008	
11,000.0	6,915.1	11,180.3	6,922.6	115.8	116.2	90.16	-1,652.8	3,893.9	2,269.6	2,038.7	230.94	9.828	
11,023.6	6,914.9	11,203.9	6,922.5	116.5	116.8	90.17	-1,652.8	3,917.5	2,269.6	2,037.4	232.25	9.772	
11,100.0	6,914.3	11,280.3	6,922.1	118.6	118.9	90.17	-1,652.8	3,993.9	2,269.6	2,033.1	236.50	9.597	
11,122.0	6,914.1	11,302.3	6,922.0	119.2	119.5	90.17	-1,652.8	4,015.9	2,269.6	2,031.9	237.72	9.547	
11,200.0	6,913.5	11,380.3	6,921.6	121.4	121.7	90.18	-1,652.8	4,093.9	2,269.6	2,027.6	242.05	9.377	
11,220.4	6,913.3	11,400.7	6,921.5	121.9	122.2	90.18	-1,652.8	4,114.3	2,269.6	2,026.4	243.19	9.333	
11,300.0	6,912.6	11,480.3	6,921.1	124.1	124.4	90.19	-1,652.8	4,193.9	2,269.6	2,022.0	247.62	9.166	
11,318.9	6,912.5	11,499.1	6,921.0	124.7	125.0	90.19	-1,652.8	4,212.8	2,269.6	2,021.0	248.66	9.127	
11,400.0	6,911.8	11,580.3	6,920.6	126.9	127.2	90.20	-1,652.8	4,293.9	2,269.6	2,016.5	253.18	8.965	
11,417.3	6,911.6	11,597.6	6,920.6	127.4	127.7	90.20	-1,652.8	4,311.2	2,269.6	2,015.5	254.14	8.931	
11,500.0	6,911.0	11,680.3	6,920.1	129.7	130.0	90.21	-1,652.8	4,393.9	2,269.6	2,010.9	258.74	8.772	
11,515.7	6,910.8	11,696.0	6,920.1	130.2	130.4	90.21	-1,652.8	4,409.6	2,269.6	2,010.0	259.62	8.742	
11,600.0	6,910.1	11,780.3	6,919.7	132.5	132.7	90.22	-1,652.8	4,493.9	2,269.6	2,005.3	264.31	8.587	
11,614.1	6,910.0	11,794.4	6,919.6	132.9	133.1	90.22	-1,652.8	4,508.0	2,269.6	2,004.5	265.10	8.561	
11,700.0	6,909.3	11,880.3	6,919.2	135.3	135.5	90.22	-1,652.8	4,593.9	2,269.6	1,999.8	269.88	8.410	
11,712.6	6,909.2	11,892.8	6,919.1	135.6	135.8	90.23	-1,652.8	4,606.5	2,269.6	1,999.1	270.58	8.388	
11,800.0	6,908.5	11,980.3	6,918.7	138.1	138.3	90.23	-1,652.8	4,693.9	2,269.6	1,994.2	275.45	8.240	
11,811.0	6,908.4	11,991.3	6,918.6	138.4	138.6	90.23	-1,652.8	4,704.9	2,269.6	1,993.6	276.07	8.221	
11,900.0	6,907.6	12,080.3	6,918.2	140.9	141.0	90.24	-1,652.8	4,793.9	2,269.6	1,988.6	281.03	8.076	
11,909.4	6,907.5	12,089.7	6,918.2	141.1	141.3	90.24	-1,652.8	4,803.3	2,269.6	1,988.1	281.55	8.061	
12,000.0	6,906.8	12,180.3	6,917.7	143.6	143.8	90.25	-1,652.8	4,893.9	2,269.6	1,983.0	286.60	7.919	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	12,188.1	6,917.7	143.9	144.0	90.25	-1,652.8	4,901.7	2,269.6	1,982.6	287.04	7.907	
12,100.0	6,905.9	12,280.2	6,917.2	146.4	146.6	90.26	-1,652.8	4,993.9	2,269.6	1,977.5	292.18	7.768	
12,106.3	6,905.9	12,286.5	6,917.2	146.6	146.8	90.26	-1,652.8	5,000.2	2,269.6	1,977.1	292.53	7.759	
12,200.0	6,905.1	12,380.2	6,916.7	149.2	149.4	90.27	-1,652.8	5,093.9	2,269.7	1,971.9	297.76	7.622	
12,204.7	6,905.1	12,384.9	6,916.7	149.4	149.5	90.27	-1,652.8	5,098.6	2,269.7	1,971.6	298.02	7.616	
12,300.0	6,904.3	12,480.2	6,916.3	152.0	152.1	90.28	-1,652.8	5,193.9	2,269.7	1,966.3	303.34	7.482	
12,303.1	6,904.3	12,483.4	6,916.2	152.1	152.2	90.28	-1,652.8	5,197.0	2,269.7	1,966.1	303.51	7.478	
12,400.0	6,903.4	12,580.2	6,915.8	154.8	154.9	90.29	-1,652.8	5,293.9	2,269.7	1,960.7	308.92	7.347	
12,401.5	6,903.4	12,581.8	6,915.8	154.8	155.0	90.29	-1,652.8	5,295.4	2,269.7	1,960.6	309.01	7.345	
12,500.0	6,902.6	12,680.2	6,915.3	157.6	157.7	90.29	-1,652.8	5,393.9	2,269.7	1,955.2	314.50	7.217	
12,598.4	6,901.8	12,778.6	6,914.8	160.3	160.4	90.30	-1,652.8	5,492.3	2,269.7	1,949.7	320.00	7.093	
12,600.0	6,901.8	12,780.2	6,914.8	160.4	160.5	90.30	-1,652.8	5,493.9	2,269.7	1,949.6	320.09	7.091	
12,696.8	6,901.0	12,877.1	6,914.3	163.1	163.2	90.31	-1,652.8	5,590.7	2,269.7	1,944.2	325.50	6.973	
12,700.0	6,900.9	12,880.2	6,914.3	163.2	163.3	90.31	-1,652.8	5,593.9	2,269.7	1,944.0	325.67	6.969	
12,795.2	6,900.1	12,975.5	6,913.8	165.8	165.9	90.32	-1,652.8	5,689.1	2,269.7	1,938.7	330.99	6.857	
12,800.0	6,900.1	12,980.2	6,913.8	166.0	166.0	90.32	-1,652.8	5,693.9	2,269.7	1,938.4	331.26	6.852	
12,893.7	6,899.3	13,073.9	6,913.4	168.6	168.6	90.33	-1,652.8	5,787.5	2,269.7	1,933.2	336.49	6.745	
12,900.0	6,899.3	13,080.2	6,913.3	168.8	168.8	90.33	-1,652.8	5,793.9	2,269.7	1,932.8	336.85	6.738	
12,992.1	6,898.5	13,172.3	6,912.9	171.3	171.4	90.34	-1,652.8	5,886.0	2,269.7	1,927.7	341.99	6.637	
13,000.0	6,898.4	13,180.2	6,912.9	171.6	171.6	90.34	-1,652.8	5,893.9	2,269.7	1,927.2	342.44	6.628	
13,090.5	6,897.7	13,270.8	6,912.4	174.1	174.1	90.35	-1,652.8	5,984.4	2,269.7	1,922.2	347.50	6.532	
13,100.0	6,897.6	13,280.2	6,912.4	174.4	174.4	90.35	-1,652.8	5,993.9	2,269.7	1,921.6	348.03	6.522	
13,188.9	6,896.9	13,369.2	6,911.9	176.8	176.9	90.36	-1,652.8	6,082.8	2,269.7	1,916.7	353.00	6.430	
13,200.0	6,896.8	13,380.2	6,911.9	177.2	177.2	90.36	-1,652.8	6,093.9	2,269.7	1,916.1	353.62	6.418	
13,287.4	6,896.0	13,467.6	6,911.5	179.6	179.6	90.36	-1,652.8	6,181.2	2,269.7	1,911.2	358.50	6.331	
13,300.0	6,895.9	13,480.2	6,911.4	180.0	180.0	90.36	-1,652.8	6,193.9	2,269.7	1,910.5	359.21	6.319	
13,385.8	6,895.2	13,566.0	6,911.0	182.4	182.3	90.37	-1,652.8	6,279.7	2,269.7	1,905.7	364.01	6.235	
13,400.0	6,895.1	13,580.2	6,910.9	182.7	182.7	90.37	-1,652.8	6,293.9	2,269.7	1,904.9	364.80	6.222	
13,484.2	6,894.4	13,664.5	6,910.5	185.1	185.1	90.38	-1,652.8	6,378.1	2,269.7	1,900.2	369.51	6.142	
13,500.0	6,894.3	13,680.2	6,910.4	185.5	185.5	90.38	-1,652.8	6,393.9	2,269.7	1,899.3	370.39	6.128	
13,582.6	6,893.6	13,762.9	6,910.0	187.9	187.8	90.39	-1,652.8	6,476.5	2,269.7	1,894.7	375.02	6.052	
13,600.0	6,893.4	13,780.2	6,909.9	188.3	188.3	90.39	-1,652.8	6,493.8	2,269.7	1,893.7	375.99	6.037	
13,681.1	6,892.8	13,861.3	6,909.5	190.6	190.6	90.40	-1,652.8	6,574.9	2,269.7	1,889.2	380.52	5.965	
13,700.0	6,892.6	13,880.2	6,909.5	191.1	191.1	90.40	-1,652.8	6,593.8	2,269.7	1,888.1	381.58	5.948	
13,779.5	6,891.9	13,959.7	6,909.1	193.4	193.3	90.41	-1,652.8	6,673.3	2,269.7	1,883.7	386.03	5.880	
13,800.0	6,891.8	13,980.2	6,909.0	193.9	193.9	90.41	-1,652.8	6,693.8	2,269.7	1,882.5	387.18	5.862	
13,877.9	6,891.1	14,058.2	6,908.6	196.1	196.1	90.42	-1,652.8	6,771.8	2,269.7	1,878.2	391.54	5.797	
13,900.0	6,890.9	14,080.2	6,908.5	196.7	196.7	90.42	-1,652.8	6,793.8	2,269.7	1,876.9	392.77	5.779	
13,976.3	6,890.3	14,156.6	6,908.1	198.9	198.8	90.42	-1,652.8	6,870.2	2,269.7	1,872.7	397.05	5.716	
14,000.0	6,890.1	14,180.2	6,908.0	199.5	199.5	90.43	-1,652.8	6,893.8	2,269.7	1,871.3	398.37	5.697	
14,074.8	6,889.5	14,255.0	6,907.6	201.6	201.6	90.43	-1,652.8	6,968.6	2,269.7	1,867.1	402.56	5.638	
14,100.0	6,889.3	14,280.2	6,907.5	202.3	202.3	90.44	-1,652.8	6,993.8	2,269.7	1,865.7	403.97	5.619	
14,173.2	6,888.7	14,353.4	6,907.2	204.4	204.3	90.44	-1,652.8	7,067.0	2,269.7	1,861.6	408.07	5.562	
14,200.0	6,888.4	14,380.2	6,907.0	205.1	205.1	90.44	-1,652.8	7,093.8	2,269.7	1,860.1	409.57	5.542	
14,271.6	6,887.8	14,451.9	6,906.7	207.1	207.1	90.45	-1,652.8	7,165.5	2,269.7	1,856.1	413.58	5.488	
14,300.0	6,887.6	14,480.2	6,906.5	207.9	207.8	90.45	-1,652.8	7,193.8	2,269.7	1,854.5	415.16	5.467	
14,370.0	6,887.0	14,550.3	6,906.2	209.9	209.8	90.46	-1,652.8	7,263.9	2,269.7	1,850.6	419.09	5.416	
14,400.0	6,886.8	14,580.2	6,906.1	210.7	210.6	90.46	-1,652.8	7,293.8	2,269.7	1,849.0	420.76	5.394	
14,468.5	6,886.2	14,648.7	6,905.7	212.6	212.6	90.47	-1,652.8	7,362.3	2,269.7	1,845.1	424.60	5.346	
14,500.0	6,885.9	14,680.2	6,905.6	213.5	213.4	90.47	-1,652.8	7,393.8	2,269.7	1,843.4	426.36	5.323	
14,566.9	6,885.4	14,747.1	6,905.2	215.4	215.3	90.48	-1,652.8	7,460.7	2,269.7	1,839.6	430.11	5.277	
14,600.0	6,885.1	14,780.2	6,905.1	216.3	216.2	90.48	-1,652.8	7,493.8	2,269.7	1,837.8	431.96	5.254	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - PROPO												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,613.0	6,885.0	14,793.3	6,905.0	216.7	216.6	90.48	-1,652.8	7,506.8	2,269.7	1,837.0	432.69	5.246 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-120.2	0.0	120.2				
98.4	98.4	99.4	99.4	0.1	0.1	-180.00	-120.2	0.0	120.2	120.1	0.17	703.890	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-120.2	0.0	120.2	120.1	0.18	685.762	
196.8	196.8	197.8	197.8	0.3	0.3	-180.00	-120.2	0.0	120.2	119.6	0.61	196.870	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-120.2	0.0	120.2	119.6	0.62	192.408	
295.3	295.3	296.3	296.3	0.5	0.5	-180.00	-120.2	0.0	120.2	119.2	1.05	114.160	
300.0	300.0	301.0	301.0	0.5	0.5	-180.00	-120.2	0.0	120.2	119.2	1.07	111.903	
393.7	393.7	394.7	394.7	0.7	0.7	-180.00	-120.2	0.0	120.2	118.7	1.50	80.387	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-120.2	0.0	120.2	118.7	1.52	78.893	
492.1	492.1	493.1	493.1	1.0	1.0	-180.00	-120.2	0.0	120.2	118.3	1.94	62.035	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-120.2	0.0	120.2	118.3	1.97	60.922	
590.5	590.5	591.5	591.5	1.2	1.2	-180.00	-120.2	0.0	120.2	117.8	2.38	50.505	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-120.2	0.0	120.2	117.8	2.42	49.619	
689.0	689.0	690.0	690.0	1.4	1.4	-180.00	-120.2	0.0	120.2	117.4	2.82	42.589	
700.0	700.0	701.0	701.0	1.4	1.4	-180.00	-120.2	0.0	120.2	117.4	2.87	41.854	
787.4	787.4	788.4	788.4	1.6	1.6	-180.00	-120.2	0.0	120.2	117.0	3.27	36.818	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-120.2	0.0	120.2	116.9	3.32	36.190	
885.8	885.8	886.8	886.8	1.9	1.9	-180.00	-120.2	0.0	120.2	116.5	3.71	32.425	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-120.2	0.0	120.2	116.5	3.77	31.877	
984.2	984.2	985.2	985.2	2.1	2.1	-180.00	-120.2	0.0	120.2	116.1	4.15	28.968	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-120.2	0.0	120.2	116.0	4.22	28.482	
1,082.7	1,082.7	1,083.7	1,083.7	2.3	2.3	-180.00	-120.2	0.0	120.2	115.6	4.59	26.177	
1,100.0	1,100.0	1,101.0	1,101.0	2.3	2.3	-180.00	-120.2	0.0	120.2	115.6	4.67	25.741	
1,150.0	1,150.0	1,151.0	1,151.0	2.4	2.4	-180.00	-120.2	0.0	120.2	115.3	4.90	24.559 CC, ES	
1,181.1	1,181.1	1,182.1	1,182.1	2.5	2.5	-147.35	-120.2	0.0	120.4	115.3	5.03	23.908	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-147.42	-120.2	0.0	120.6	115.5	5.12	23.558	
1,279.5	1,279.5	1,279.3	1,279.3	2.7	2.7	-147.99	-120.4	-0.1	122.8	117.4	5.46	22.492	
1,300.0	1,299.9	1,298.9	1,298.9	2.8	2.8	-148.17	-120.6	-0.1	124.0	118.4	5.55	22.353	
1,377.9	1,377.7	1,373.5	1,373.5	3.0	2.9	-148.90	-122.7	-0.9	130.5	124.7	5.85	22.317	
1,400.0	1,399.7	1,394.5	1,394.4	3.0	2.9	-149.11	-123.7	-1.2	133.1	127.1	5.93	22.423	
1,476.4	1,475.7	1,466.8	1,466.6	3.2	3.1	-149.83	-128.0	-2.7	144.1	137.9	6.24	23.103	
1,500.0	1,499.1	1,489.0	1,488.7	3.2	3.1	-150.04	-129.6	-3.3	148.3	141.9	6.33	23.416	
1,574.8	1,573.2	1,558.7	1,558.1	3.4	3.2	-150.66	-135.9	-5.5	163.5	156.9	6.63	24.650	
1,600.0	1,598.2	1,582.0	1,581.2	3.5	3.3	-150.84	-138.3	-6.4	169.4	162.7	6.74	25.156	
1,673.2	1,670.3	1,648.8	1,647.5	3.7	3.4	-151.32	-146.3	-9.3	188.7	181.6	7.04	26.808	
1,700.0	1,696.6	1,672.9	1,671.3	3.8	3.5	-151.47	-149.6	-10.4	196.5	189.3	7.15	27.490	
1,749.9	1,745.5	1,717.3	1,715.3	3.9	3.6	-151.71	-156.1	-12.7	212.1	204.8	7.36	28.835	
1,771.6	1,766.8	1,736.6	1,734.2	4.0	3.6	-151.87	-159.1	-13.8	219.3	211.9	7.45	29.424	
1,800.0	1,794.5	1,761.5	1,758.8	4.1	3.7	-152.03	-163.2	-15.2	228.9	221.3	7.58	30.195	
1,870.1	1,863.1	1,822.5	1,818.7	4.3	3.9	-152.29	-174.0	-19.0	253.4	245.5	7.90	32.078	
1,900.0	1,892.3	1,848.3	1,844.0	4.4	4.0	-152.34	-178.9	-20.8	264.2	256.2	8.03	32.883	
1,968.5	1,959.4	1,906.7	1,901.0	4.7	4.1	-152.38	-190.9	-25.0	289.9	281.5	8.35	34.700	
2,000.0	1,990.2	1,933.3	1,926.8	4.8	4.2	-152.35	-196.7	-27.1	302.1	293.6	8.50	35.527	
2,066.9	2,055.6	1,989.1	1,980.9	5.1	4.4	-152.25	-209.6	-31.7	328.8	320.0	8.82	37.268	
2,100.0	2,088.0	2,016.4	2,007.3	5.2	4.5	-152.17	-216.3	-34.0	342.4	333.4	8.98	38.112	
2,165.3	2,151.9	2,072.0	2,060.8	5.4	4.8	-151.97	-230.5	-39.1	369.9	360.6	9.31	39.732	
2,200.0	2,185.8	2,103.4	2,091.0	5.6	4.9	-151.87	-238.7	-42.0	384.6	375.2	9.49	40.543	
2,263.8	2,248.2	2,161.1	2,146.5	5.8	5.1	-151.69	-253.7	-47.3	411.7	401.9	9.81	41.953	
2,300.0	2,283.6	2,193.9	2,178.0	6.0	5.3	-151.60	-262.2	-50.3	427.1	417.1	10.00	42.697	
2,362.2	2,344.5	2,250.2	2,232.1	6.2	5.5	-151.46	-276.8	-55.5	453.5	443.2	10.33	43.895	
2,400.0	2,381.4	2,284.4	2,265.0	6.4	5.7	-151.39	-285.7	-58.6	469.5	459.0	10.53	44.591	
2,460.6	2,440.7	2,339.3	2,317.8	6.6	6.0	-151.27	-299.9	-63.7	495.3	484.4	10.85	45.630	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,375.0	2,352.1	6.8	6.1	-151.20	-309.2	-66.9	512.0	500.9	11.07	46.269	
2,559.0	2,537.0	2,428.4	2,403.4	7.0	6.4	-151.11	-323.0	-71.8	537.1	525.7	11.39	47.168	
2,600.0	2,577.1	2,465.5	2,439.1	7.2	6.6	-151.05	-332.6	-75.2	554.5	542.8	11.61	47.757	
2,657.5	2,633.3	2,517.5	2,489.1	7.4	6.8	-150.97	-346.1	-80.0	578.9	566.9	11.93	48.537	
2,700.0	2,674.9	2,556.0	2,526.1	7.6	7.0	-150.92	-356.1	-83.6	596.9	584.8	12.16	49.082	
2,755.9	2,729.6	2,606.6	2,574.8	7.9	7.3	-150.85	-369.3	-88.2	620.7	608.2	12.47	49.762	
2,800.0	2,772.7	2,646.6	2,613.1	8.0	7.5	-150.81	-379.6	-91.9	639.4	626.7	12.72	50.267	
2,854.3	2,825.8	2,695.7	2,660.4	8.3	7.8	-150.75	-392.4	-96.4	662.4	649.4	13.02	50.860	
2,900.0	2,870.5	2,737.1	2,700.2	8.5	8.0	-150.71	-403.1	-100.2	681.8	668.6	13.28	51.331	
2,952.7	2,922.1	2,784.8	2,746.1	8.7	8.2	-150.66	-415.5	-104.6	704.2	690.7	13.58	51.849	
3,000.0	2,968.3	2,827.6	2,787.2	8.9	8.5	-150.62	-426.6	-108.5	724.3	710.5	13.85	52.290	
3,051.2	3,018.4	2,873.9	2,831.7	9.1	8.7	-150.58	-438.6	-112.8	746.0	731.9	14.14	52.744	
3,100.0	3,066.1	2,918.1	2,874.2	9.3	8.9	-150.54	-450.1	-116.9	766.8	752.4	14.42	53.157	
3,149.6	3,114.7	2,963.0	2,917.4	9.5	9.2	-150.50	-461.7	-121.0	787.8	773.1	14.71	53.556	
3,200.0	3,164.0	3,008.7	2,961.3	9.8	9.4	-150.47	-473.6	-125.2	809.2	794.2	15.00	53.945	
3,248.0	3,210.9	3,052.1	3,003.1	10.0	9.7	-150.44	-484.9	-129.2	829.6	814.4	15.28	54.296	
3,300.0	3,261.8	3,099.2	3,048.3	10.2	9.9	-150.41	-497.1	-133.5	851.7	836.1	15.58	54.661	
3,346.4	3,307.2	3,141.2	3,088.7	10.4	10.1	-150.38	-508.0	-137.4	871.4	855.6	15.85	54.971	
3,400.0	3,359.6	3,189.7	3,135.3	10.6	10.4	-150.35	-520.6	-141.8	894.2	878.0	16.17	55.315	
3,444.9	3,403.5	3,230.4	3,174.4	10.8	10.6	-150.32	-531.1	-145.6	913.2	896.8	16.43	55.590	
3,500.0	3,457.4	3,280.3	3,222.4	11.1	10.9	-150.30	-544.1	-150.1	936.7	919.9	16.75	55.914	
3,543.3	3,499.8	3,319.5	3,260.1	11.3	11.1	-150.28	-554.2	-153.7	955.1	938.0	17.01	56.158	
3,600.0	3,555.2	3,370.8	3,309.4	11.5	11.4	-150.25	-567.5	-158.5	979.1	961.8	17.34	56.465	
3,641.7	3,596.0	3,408.6	3,345.7	11.7	11.6	-150.23	-577.3	-161.9	996.9	979.3	17.59	56.682	
3,700.0	3,653.0	3,461.3	3,396.4	11.9	11.9	-150.21	-591.0	-166.8	1,021.6	1,003.7	17.93	56.972	
3,740.1	3,692.3	3,497.7	3,431.4	12.1	12.1	-150.19	-600.5	-170.1	1,038.7	1,020.5	18.17	57.165	
3,800.0	3,750.8	3,551.8	3,483.5	12.4	12.4	-150.17	-614.5	-175.1	1,064.1	1,045.6	18.52	57.441	
3,838.6	3,788.6	3,586.8	3,517.0	12.6	12.6	-150.15	-623.6	-178.3	1,080.5	1,061.7	18.75	57.612	
3,900.0	3,848.7	3,642.4	3,570.5	12.8	12.9	-150.13	-638.0	-183.4	1,106.6	1,087.4	19.12	57.875	
3,937.0	3,884.9	3,675.9	3,602.7	13.0	13.1	-150.12	-646.7	-186.5	1,122.3	1,102.9	19.34	58.027	
4,000.0	3,946.5	3,732.9	3,657.5	13.3	13.4	-150.09	-661.5	-191.7	1,149.0	1,129.3	19.72	58.277	
4,035.4	3,981.1	3,765.0	3,688.4	13.4	13.6	-150.08	-669.8	-194.7	1,164.1	1,144.1	19.93	58.413	
4,100.0	4,044.3	3,823.4	3,744.6	13.7	13.9	-150.06	-685.0	-200.1	1,191.5	1,171.2	20.31	58.652	
4,133.8	4,077.4	3,854.1	3,774.0	13.9	14.1	-150.05	-692.9	-202.9	1,205.9	1,185.4	20.52	58.772	
4,200.0	4,142.1	3,914.0	3,831.6	14.2	14.4	-150.03	-708.5	-208.4	1,234.0	1,213.1	20.91	59.001	
4,232.3	4,173.7	3,943.2	3,859.7	14.3	14.6	-150.02	-716.1	-211.1	1,247.7	1,226.6	21.11	59.108	
4,300.0	4,239.9	4,004.5	3,918.6	14.6	14.9	-150.01	-732.0	-216.7	1,276.5	1,254.9	21.52	59.326	
4,330.7	4,270.0	4,032.3	3,945.3	14.7	15.1	-150.00	-739.2	-219.3	1,289.5	1,267.8	21.70	59.422	
4,400.0	4,337.7	4,095.0	4,005.7	15.0	15.4	-149.98	-755.5	-225.0	1,318.9	1,296.8	22.12	59.631	
4,429.1	4,366.2	4,121.4	4,031.0	15.2	15.6	-149.97	-762.3	-227.5	1,331.3	1,309.0	22.29	59.716	
4,500.0	4,435.6	4,185.6	4,092.7	15.5	15.9	-149.96	-779.0	-233.4	1,361.4	1,338.7	22.72	59.916	
4,527.5	4,462.5	4,210.5	4,116.7	15.6	16.1	-149.95	-785.4	-235.6	1,373.1	1,350.2	22.89	59.992	
4,600.0	4,533.4	4,276.1	4,179.7	15.9	16.4	-149.93	-802.4	-241.7	1,403.9	1,380.6	23.33	60.184	
4,626.0	4,558.8	4,299.6	4,202.3	16.0	16.6	-149.93	-808.5	-243.8	1,414.9	1,391.4	23.48	60.251	
4,673.6	4,605.3	4,342.7	4,243.7	16.3	16.8	-149.92	-819.7	-247.8	1,435.1	1,411.3	23.77	60.371	
4,700.0	4,631.2	4,366.7	4,266.8	16.4	17.0	-150.03	-825.9	-250.0	1,446.3	1,422.3	23.96	60.372	
4,724.4	4,655.1	4,388.9	4,288.1	16.4	17.1	-150.13	-831.7	-252.0	1,456.4	1,432.3	24.11	60.397	
4,800.0	4,729.5	4,458.1	4,354.7	16.7	17.5	-150.39	-849.7	-258.4	1,486.6	1,462.0	24.60	60.435	
4,822.8	4,752.1	4,479.2	4,375.0	16.7	17.6	-150.46	-855.1	-260.3	1,495.5	1,470.7	24.74	60.445	
4,900.0	4,828.4	4,550.7	4,443.7	17.0	18.0	-150.65	-873.7	-266.9	1,524.2	1,499.0	25.22	60.444	
4,921.2	4,849.5	4,570.5	4,462.8	17.0	18.1	-150.69	-878.8	-268.7	1,531.8	1,506.5	25.34	60.444	
5,000.0	4,927.8	4,644.3	4,533.8	17.2	18.5	-150.81	-898.0	-275.5	1,559.0	1,533.2	25.81	60.411	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,662.9	4,551.6	17.2	18.6	-150.83	-902.8	-277.2	1,565.5	1,539.6	25.92	60.403	
5,100.0	5,027.5	4,738.9	4,624.6	17.4	19.1	-150.88	-922.5	-284.2	1,590.9	1,564.5	26.36	60.344	
5,118.1	5,045.6	4,756.1	4,641.2	17.4	19.2	-150.88	-927.0	-285.8	1,596.3	1,569.9	26.46	60.332	
5,200.0	5,127.4	4,834.2	4,716.3	17.6	19.6	-150.86	-947.3	-293.0	1,619.9	1,593.0	26.89	60.251	
5,216.5	5,143.9	4,850.0	4,731.5	17.6	19.7	-150.85	-951.4	-294.4	1,624.4	1,597.5	26.97	60.236	
5,273.4	5,200.8	4,904.6	4,783.9	17.7	20.0	176.52	-965.5	-299.4	1,639.4	1,603.9	35.45	46.244	
5,300.0	5,227.4	4,930.1	4,808.5	17.7	20.1	176.61	-972.2	-301.8	1,646.2	1,610.6	35.62	46.209	
5,314.9	5,242.3	4,944.5	4,822.3	17.7	20.2	176.67	-975.9	-303.1	1,650.0	1,614.3	35.72	46.187	
5,400.0	5,327.4	5,026.3	4,900.9	17.8	20.7	176.98	-997.1	-310.6	1,671.7	1,635.4	36.29	46.064	
5,413.4	5,340.8	5,039.1	4,913.3	17.9	20.8	177.03	-1,000.4	-311.8	1,675.1	1,638.8	36.38	46.045	
5,500.0	5,427.4	5,122.4	4,993.4	18.0	21.2	177.33	-1,022.0	-319.5	1,697.3	1,660.4	36.96	45.921	
5,511.8	5,439.2	5,133.8	5,004.3	18.0	21.3	177.37	-1,025.0	-320.5	1,700.3	1,663.3	37.04	45.905	
5,600.0	5,527.4	5,218.6	5,085.8	18.1	21.8	177.68	-1,047.0	-328.3	1,723.0	1,685.3	37.64	45.781	
5,610.2	5,537.6	5,228.4	5,095.2	18.1	21.8	177.71	-1,049.5	-329.2	1,725.6	1,687.9	37.70	45.767	
5,700.0	5,627.4	5,314.7	5,178.2	18.3	22.3	178.01	-1,071.9	-337.1	1,748.7	1,710.4	38.31	45.643	
5,708.6	5,636.0	5,323.0	5,186.2	18.3	22.4	178.04	-1,074.1	-337.9	1,750.9	1,712.6	38.37	45.632	
5,800.0	5,727.4	5,410.8	5,270.6	18.4	22.9	178.33	-1,096.9	-346.0	1,774.5	1,735.5	38.99	45.508	
5,807.1	5,734.5	5,417.6	5,277.2	18.4	22.9	178.36	-1,098.6	-346.6	1,776.3	1,737.3	39.04	45.499	
5,900.0	5,827.4	5,507.0	5,363.1	18.6	23.4	178.65	-1,121.8	-354.8	1,800.3	1,760.6	39.68	45.375	
5,905.5	5,832.9	5,512.3	5,368.1	18.6	23.4	178.67	-1,123.2	-355.3	1,801.7	1,762.0	39.71	45.368	
6,000.0	5,927.4	5,681.4	5,531.5	18.7	24.2	179.17	-1,164.4	-369.9	1,825.0	1,784.4	40.60	44.955	
6,003.9	5,931.3	5,690.9	5,540.8	18.7	24.2	179.19	-1,166.4	-370.6	1,825.9	1,785.2	40.64	44.931	
6,100.0	6,027.4	5,928.5	5,774.1	18.9	25.0	179.68	-1,208.4	-385.5	1,842.8	1,801.3	41.52	44.387	
6,102.3	6,029.7	5,934.4	5,780.0	18.9	25.0	179.69	-1,209.2	-385.8	1,843.2	1,801.6	41.54	44.375	
6,200.0	6,127.4	6,182.1	6,026.3	19.0	25.5	179.95	-1,232.9	-394.2	1,852.5	1,810.3	42.22	43.876	
6,200.8	6,128.2	6,184.1	6,028.3	19.0	25.5	179.95	-1,233.0	-394.2	1,852.6	1,810.3	42.23	43.872	
6,299.2	6,226.6	6,383.5	6,227.6	19.2	25.8	180.00	-1,237.5	-395.8	1,854.3	1,811.7	42.65	43.480	
6,301.4	6,228.8	6,385.7	6,229.8	19.2	25.8	180.00	-1,237.5	-395.8	1,854.3	1,811.7	42.65	43.475	
6,350.0	6,277.4	6,434.3	6,278.3	19.3	25.8	89.99	-1,237.5	-393.7	1,854.3	1,821.3	33.04	56.126	
6,397.6	6,324.7	6,481.9	6,325.6	19.3	25.8	89.97	-1,237.5	-388.5	1,854.3	1,821.2	33.12	55.986	
6,400.0	6,327.1	6,484.3	6,328.0	19.3	25.8	89.97	-1,237.5	-388.2	1,854.3	1,821.2	33.13	55.979	
6,450.0	6,376.3	6,534.2	6,377.1	19.3	25.8	89.96	-1,237.5	-379.2	1,854.3	1,821.2	33.17	55.903	
6,496.0	6,421.1	6,580.1	6,421.6	19.3	25.8	89.95	-1,237.5	-367.9	1,854.3	1,821.1	33.18	55.890	
6,500.0	6,424.9	6,584.1	6,425.4	19.3	25.8	89.95	-1,237.5	-366.8	1,854.3	1,821.1	33.18	55.889	
6,550.0	6,472.4	6,633.9	6,472.7	19.3	25.8	89.94	-1,237.5	-351.2	1,854.3	1,821.2	33.16	55.925	
6,594.5	6,513.8	6,678.3	6,513.8	19.3	25.8	89.93	-1,237.5	-334.5	1,854.3	1,821.2	33.12	55.986	
6,600.0	6,518.8	6,683.8	6,518.8	19.3	25.8	89.92	-1,237.5	-332.2	1,854.3	1,821.2	33.12	55.994	
6,650.0	6,563.8	6,733.6	6,563.5	19.3	25.8	89.91	-1,237.5	-310.1	1,854.3	1,821.3	33.07	56.077	
6,692.9	6,601.1	6,776.3	6,600.4	19.2	25.7	89.90	-1,237.5	-288.8	1,854.3	1,821.3	33.03	56.139	
6,700.0	6,607.1	6,783.4	6,606.4	19.2	25.7	89.90	-1,237.5	-285.0	1,854.3	1,821.3	33.02	56.149	
6,750.0	6,648.6	6,833.2	6,647.5	19.2	25.7	89.89	-1,237.5	-257.0	1,854.3	1,821.3	33.01	56.180	
6,791.3	6,681.4	6,874.3	6,680.0	19.1	25.7	89.88	-1,237.5	-231.7	1,854.3	1,821.3	33.03	56.145	
6,800.0	6,688.1	6,882.9	6,686.6	19.1	25.6	89.88	-1,237.5	-226.2	1,854.3	1,821.3	33.03	56.135	
6,850.0	6,725.3	6,932.6	6,723.4	19.1	25.6	89.87	-1,237.5	-192.8	1,854.3	1,821.2	33.13	55.978	
6,889.7	6,753.2	6,972.1	6,750.9	19.0	25.6	89.86	-1,237.5	-164.4	1,854.3	1,821.1	33.27	55.741	
6,900.0	6,760.1	6,982.3	6,757.8	19.0	25.5	89.86	-1,237.5	-156.9	1,854.3	1,821.0	33.31	55.673	
6,950.0	6,792.3	7,032.0	6,789.6	19.0	25.5	89.85	-1,237.5	-118.7	1,854.3	1,820.7	33.60	55.186	
6,988.2	6,815.1	7,069.9	6,812.0	18.9	25.5	89.85	-1,237.5	-88.2	1,854.3	1,820.4	33.92	54.665	
7,000.0	6,821.8	7,081.7	6,818.6	18.9	25.5	89.85	-1,237.5	-78.5	1,854.3	1,820.3	34.03	54.493	
7,050.0	6,848.3	7,131.3	6,844.8	18.9	25.4	89.84	-1,237.5	-36.3	1,854.3	1,819.7	34.61	53.584	
7,086.6	6,865.9	7,167.6	6,862.1	18.9	25.4	89.83	-1,237.5	-4.4	1,854.3	1,819.2	35.14	52.770	
7,100.0	6,871.9	7,180.9	6,868.0	18.9	25.4	89.83	-1,237.5	7.5	1,854.3	1,819.0	35.35	52.461	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	7,230.6	6,888.2	18.8	25.4	89.83	-1,237.5	52.9	1,854.3	1,818.1	36.26	51.143	
7,185.0	6,904.7	7,265.3	6,900.4	18.8	25.4	89.82	-1,237.5	85.4	1,854.3	1,817.3	37.00	50.111	
7,200.0	6,909.5	7,280.2	6,905.1	18.9	25.4	89.82	-1,237.5	99.5	1,854.3	1,817.0	37.34	49.662	
7,250.0	6,923.4	7,329.8	6,918.7	19.3	25.4	89.82	-1,237.5	147.2	1,854.3	1,815.8	38.58	48.058	
7,283.4	6,930.8	7,362.9	6,926.0	19.8	25.4	89.82	-1,237.5	179.5	1,854.3	1,814.8	39.51	46.933	
7,300.0	6,933.9	7,379.4	6,929.1	20.0	25.4	89.82	-1,237.5	195.7	1,854.3	1,814.4	39.98	46.377	
7,350.0	6,940.9	7,428.9	6,936.0	20.8	25.5	89.82	-1,237.5	244.8	1,854.3	1,812.8	41.52	44.662	
7,381.9	6,943.6	7,460.6	6,938.6	21.4	25.6	89.81	-1,237.5	276.3	1,854.3	1,811.8	42.56	43.566	
7,400.0	6,944.5	7,478.5	6,939.5	21.7	25.7	89.81	-1,237.5	294.2	1,854.3	1,811.2	43.17	42.953	
7,432.4	6,945.0	7,510.7	6,940.0	22.3	25.9	89.81	-1,237.5	326.4	1,854.3	1,810.0	44.29	41.867	
7,480.3	6,944.6	7,558.6	6,939.7	23.2	26.2	89.82	-1,237.5	374.3	1,854.3	1,808.3	46.06	40.258	
7,500.0	6,944.4	7,578.3	6,939.6	23.6	26.4	89.82	-1,237.5	394.0	1,854.3	1,807.5	46.79	39.632	
7,578.7	6,943.7	7,657.0	6,939.3	25.2	27.3	89.83	-1,237.5	472.7	1,854.3	1,804.4	49.91	37.151	
7,600.0	6,943.6	7,678.3	6,939.2	25.6	27.6	89.83	-1,237.5	494.0	1,854.3	1,803.6	50.77	36.526	
7,677.1	6,942.9	7,755.4	6,938.8	27.3	28.9	89.84	-1,237.5	571.1	1,854.3	1,800.3	54.04	34.312	
7,700.0	6,942.7	7,778.3	6,938.7	27.8	29.3	89.84	-1,237.5	594.0	1,854.3	1,799.3	55.02	33.701	
7,775.6	6,942.1	7,853.9	6,938.3	29.5	30.8	89.85	-1,237.5	669.5	1,854.3	1,795.9	58.40	31.753	
7,800.0	6,941.9	7,878.3	6,938.2	30.1	31.3	89.85	-1,237.5	694.0	1,854.3	1,794.8	59.50	31.166	
7,874.0	6,941.3	7,952.3	6,937.8	31.8	32.9	89.86	-1,237.5	768.0	1,854.3	1,791.4	62.94	29.460	
7,900.0	6,941.1	7,978.3	6,937.7	32.4	33.4	89.87	-1,237.5	794.0	1,854.3	1,790.2	64.16	28.901	
7,972.4	6,940.4	8,050.7	6,937.3	34.2	35.1	89.87	-1,237.5	866.4	1,854.3	1,786.7	67.64	27.415	
8,000.0	6,940.2	8,078.3	6,937.2	34.9	35.7	89.88	-1,237.5	894.0	1,854.3	1,785.4	68.97	26.886	
8,070.8	6,939.6	8,149.1	6,936.9	36.6	37.4	89.88	-1,237.5	964.8	1,854.3	1,781.9	72.45	25.593	
8,100.0	6,939.4	8,178.3	6,936.7	37.3	38.1	89.89	-1,237.5	994.0	1,854.3	1,780.4	73.89	25.095	
8,169.3	6,938.8	8,247.6	6,936.4	39.1	39.7	89.89	-1,237.5	1,063.2	1,854.3	1,777.0	77.37	23.968	
8,200.0	6,938.5	8,278.3	6,936.2	39.8	40.5	89.90	-1,237.5	1,093.9	1,854.3	1,775.4	78.91	23.499	
8,267.7	6,938.0	8,346.0	6,935.9	41.6	42.1	89.90	-1,237.5	1,161.6	1,854.3	1,772.0	82.36	22.516	
8,300.0	6,937.7	8,378.3	6,935.7	42.4	43.0	89.91	-1,237.5	1,193.9	1,854.3	1,770.3	84.00	22.075	
8,366.1	6,937.2	8,444.4	6,935.4	44.1	44.6	89.92	-1,237.5	1,260.1	1,854.3	1,766.9	87.41	21.214	
8,400.0	6,936.9	8,478.3	6,935.3	45.0	45.5	89.92	-1,237.5	1,293.9	1,854.3	1,765.2	89.16	20.798	
8,464.5	6,936.3	8,542.8	6,934.9	46.6	47.1	89.93	-1,237.5	1,358.5	1,854.3	1,761.8	92.52	20.042	
8,500.0	6,936.0	8,578.3	6,934.8	47.6	48.0	89.93	-1,237.5	1,393.9	1,854.3	1,760.0	94.37	19.650	
8,563.0	6,935.5	8,641.3	6,934.5	49.2	49.6	89.94	-1,237.5	1,456.9	1,854.3	1,756.7	97.68	18.985	
8,600.0	6,935.2	8,678.3	6,934.3	50.2	50.6	89.94	-1,237.5	1,493.9	1,854.3	1,754.7	99.62	18.614	
8,661.4	6,934.7	8,739.7	6,934.0	51.8	52.2	89.95	-1,237.5	1,555.3	1,854.3	1,751.5	102.87	18.026	
8,700.0	6,934.4	8,778.3	6,933.8	52.8	53.2	89.95	-1,237.5	1,593.9	1,854.3	1,749.4	104.91	17.675	
8,759.8	6,933.9	8,838.1	6,933.5	54.4	54.8	89.96	-1,237.5	1,653.8	1,854.3	1,746.2	108.10	17.154	
8,800.0	6,933.5	8,878.3	6,933.3	55.5	55.8	89.96	-1,237.5	1,693.9	1,854.3	1,744.1	110.24	16.821	
8,858.2	6,933.0	8,936.5	6,933.0	57.1	57.3	89.97	-1,237.5	1,752.2	1,854.3	1,741.0	113.36	16.358	
8,900.0	6,932.7	8,978.3	6,932.8	58.2	58.5	89.97	-1,237.5	1,793.9	1,854.3	1,738.7	115.59	16.042	
8,956.7	6,932.2	9,035.0	6,932.5	59.7	60.0	89.98	-1,237.5	1,850.6	1,854.3	1,735.7	118.64	15.630	
9,000.0	6,931.8	9,078.3	6,932.3	60.9	61.1	89.98	-1,237.5	1,893.9	1,854.3	1,733.4	120.97	15.329	
9,055.1	6,931.4	9,133.4	6,932.1	62.4	62.6	89.99	-1,237.5	1,949.5	1,854.3	1,730.4	123.94	14.961	
9,055.6	6,931.4	9,133.8	6,932.1	62.4	62.6	89.99	-1,237.5	1,949.5	1,854.3	1,730.4	123.97	14.958	
9,100.0	6,931.0	9,178.3	6,931.8	63.6	63.8	89.99	-1,237.5	1,993.9	1,854.3	1,728.0	126.37	14.674	
9,153.5	6,930.6	9,231.8	6,931.6	65.0	65.2	90.00	-1,237.5	2,047.5	1,854.3	1,725.1	129.26	14.345	
9,200.0	6,930.2	9,278.3	6,931.3	66.3	66.5	90.01	-1,237.5	2,093.9	1,854.3	1,722.5	131.78	14.071	
9,251.9	6,929.7	9,330.2	6,931.1	67.7	67.8	90.01	-1,237.5	2,145.9	1,854.3	1,719.7	134.60	13.776	
9,300.0	6,929.3	9,378.3	6,930.9	69.0	69.1	90.02	-1,237.5	2,193.9	1,854.3	1,717.1	137.22	13.514	
9,350.4	6,928.9	9,428.7	6,930.6	70.4	70.5	90.02	-1,237.5	2,244.3	1,854.3	1,714.4	139.96	13.249	
9,400.0	6,928.5	9,478.3	6,930.4	71.7	71.8	90.03	-1,237.5	2,293.9	1,854.3	1,711.7	142.66	12.998	
9,448.8	6,928.1	9,527.1	6,930.1	73.0	73.2	90.03	-1,237.5	2,342.7	1,854.3	1,709.0	145.33	12.760	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWDD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,500.0	6,927.7	9,578.3	6,929.9	74.4	74.5	90.04	-1,237.5	2,393.9	1,854.3	1,706.2	148.12	12.519	
9,547.2	6,927.3	9,625.5	6,929.7	75.7	75.8	90.04	-1,237.5	2,441.2	1,854.3	1,703.6	150.71	12.304	
9,600.0	6,926.8	9,678.3	6,929.4	77.2	77.3	90.05	-1,237.5	2,493.9	1,854.3	1,700.7	153.59	12.073	
9,645.6	6,926.4	9,723.9	6,929.2	78.4	78.5	90.05	-1,237.5	2,539.6	1,854.3	1,698.2	156.10	11.879	
9,700.0	6,926.0	9,778.3	6,928.9	79.9	80.0	90.06	-1,237.5	2,593.9	1,854.3	1,695.3	159.08	11.657	
9,744.1	6,925.6	9,822.4	6,928.7	81.1	81.2	90.06	-1,237.5	2,638.0	1,854.3	1,692.8	161.50	11.482	
9,800.0	6,925.2	9,878.3	6,928.4	82.6	82.7	90.07	-1,237.5	2,693.9	1,854.3	1,689.8	164.57	11.268	
9,842.5	6,924.8	9,920.8	6,928.2	83.8	83.9	90.07	-1,237.5	2,736.4	1,854.3	1,687.4	166.91	11.110	
9,900.0	6,924.3	9,978.3	6,927.9	85.4	85.4	90.08	-1,237.5	2,793.9	1,854.3	1,684.3	170.07	10.903	
9,940.9	6,924.0	10,019.2	6,927.7	86.5	86.6	90.09	-1,237.5	2,834.8	1,854.3	1,682.0	172.32	10.761	
10,000.0	6,923.5	10,078.3	6,927.4	88.1	88.2	90.09	-1,237.5	2,893.9	1,854.3	1,678.8	175.58	10.561	
10,039.3	6,923.2	10,117.6	6,927.3	89.2	89.2	90.10	-1,237.5	2,933.3	1,854.3	1,676.6	177.74	10.433	
10,100.0	6,922.6	10,178.3	6,927.0	90.9	90.9	90.10	-1,237.5	2,993.9	1,854.3	1,673.2	181.09	10.240	
10,137.8	6,922.3	10,216.0	6,926.8	91.9	91.9	90.11	-1,237.5	3,031.7	1,854.3	1,671.2	183.17	10.123	
10,200.0	6,921.8	10,278.3	6,926.5	93.7	93.7	90.11	-1,237.5	3,093.9	1,854.3	1,667.7	186.61	9.937	
10,236.2	6,921.5	10,314.5	6,926.3	94.7	94.6	90.12	-1,237.5	3,130.1	1,854.3	1,665.7	188.61	9.832	
10,300.0	6,921.0	10,378.3	6,926.0	96.4	96.4	90.12	-1,237.5	3,193.9	1,854.3	1,662.2	192.14	9.651	
10,334.6	6,920.7	10,412.9	6,925.8	97.4	97.4	90.13	-1,237.5	3,228.5	1,854.3	1,660.3	194.05	9.556	
10,400.0	6,920.1	10,478.3	6,925.5	99.2	99.2	90.13	-1,237.5	3,293.9	1,854.3	1,656.7	197.67	9.381	
10,433.0	6,919.9	10,511.3	6,925.3	100.1	100.1	90.14	-1,237.5	3,327.0	1,854.3	1,654.8	199.50	9.295	
10,500.0	6,919.3	10,578.3	6,925.0	101.9	101.9	90.15	-1,237.5	3,393.9	1,854.3	1,651.1	203.20	9.125	
10,531.5	6,919.0	10,609.7	6,924.9	102.8	102.8	90.15	-1,237.5	3,425.4	1,854.3	1,649.4	204.95	9.048	
10,600.0	6,918.5	10,678.3	6,924.5	104.7	104.7	90.16	-1,237.5	3,493.9	1,854.3	1,645.6	208.75	8.883	
10,629.9	6,918.2	10,708.2	6,924.4	105.5	105.5	90.16	-1,237.5	3,523.8	1,854.3	1,643.9	210.40	8.813	
10,700.0	6,917.6	10,778.3	6,924.0	107.5	107.4	90.17	-1,237.5	3,593.9	1,854.3	1,640.0	214.29	8.653	
10,728.3	6,917.4	10,806.6	6,923.9	108.3	108.2	90.17	-1,237.5	3,622.2	1,854.3	1,638.5	215.86	8.590	
10,800.0	6,916.8	10,878.3	6,923.5	110.3	110.2	90.18	-1,237.5	3,693.9	1,854.3	1,634.5	219.84	8.435	
10,826.7	6,916.6	10,905.0	6,923.4	111.0	110.9	90.18	-1,237.5	3,720.7	1,854.3	1,633.0	221.32	8.378	
10,900.0	6,916.0	10,978.3	6,923.1	113.0	113.0	90.19	-1,237.5	3,793.9	1,854.3	1,628.9	225.39	8.227	
10,925.2	6,915.8	11,003.4	6,922.9	113.7	113.6	90.19	-1,237.5	3,819.1	1,854.3	1,627.5	226.79	8.176	
11,000.0	6,915.1	11,078.3	6,922.6	115.8	115.7	90.20	-1,237.5	3,893.9	1,854.3	1,623.4	230.95	8.029	
11,023.6	6,914.9	11,101.9	6,922.5	116.5	116.4	90.20	-1,237.5	3,917.5	1,854.3	1,622.1	232.26	7.984	
11,100.0	6,914.3	11,178.3	6,922.1	118.6	118.5	90.21	-1,237.5	3,993.9	1,854.3	1,617.8	236.51	7.841	
11,122.0	6,914.1	11,200.3	6,922.0	119.2	119.1	90.21	-1,237.5	4,015.9	1,854.3	1,616.6	237.73	7.800	
11,200.0	6,913.5	11,278.3	6,921.6	121.4	121.3	90.22	-1,237.5	4,093.9	1,854.3	1,612.3	242.07	7.660	
11,220.4	6,913.3	11,298.7	6,921.5	121.9	121.8	90.22	-1,237.5	4,114.3	1,854.3	1,611.1	243.20	7.625	
11,300.0	6,912.6	11,378.3	6,921.1	124.1	124.0	90.23	-1,237.5	4,193.9	1,854.3	1,606.7	247.63	7.488	
11,318.9	6,912.5	11,397.1	6,921.0	124.7	124.6	90.23	-1,237.5	4,212.8	1,854.3	1,605.7	248.68	7.457	
11,400.0	6,911.8	11,478.3	6,920.6	126.9	126.8	90.24	-1,237.5	4,293.9	1,854.3	1,601.1	253.20	7.324	
11,417.3	6,911.6	11,495.6	6,920.5	127.4	127.3	90.24	-1,237.5	4,311.2	1,854.3	1,600.2	254.16	7.296	
11,500.0	6,911.0	11,578.3	6,920.1	129.7	129.6	90.25	-1,237.5	4,393.9	1,854.3	1,595.6	258.77	7.166	
11,515.7	6,910.8	11,594.0	6,920.1	130.2	130.0	90.25	-1,237.5	4,409.6	1,854.3	1,594.7	259.64	7.142	
11,600.0	6,910.1	11,678.3	6,919.7	132.5	132.4	90.26	-1,237.5	4,493.9	1,854.3	1,590.0	264.34	7.015	
11,614.1	6,910.0	11,692.4	6,919.6	132.9	132.8	90.27	-1,237.5	4,508.0	1,854.3	1,589.2	265.13	6.994	
11,700.0	6,909.3	11,778.3	6,919.2	135.3	135.1	90.27	-1,237.5	4,593.9	1,854.4	1,584.4	269.91	6.870	
11,712.6	6,909.2	11,790.8	6,919.1	135.6	135.5	90.28	-1,237.5	4,606.5	1,854.4	1,583.7	270.61	6.852	
11,800.0	6,908.5	11,878.3	6,918.7	138.1	137.9	90.29	-1,237.5	4,693.9	1,854.4	1,578.9	275.48	6.731	
11,811.0	6,908.4	11,889.3	6,918.6	138.4	138.2	90.29	-1,237.5	4,704.9	1,854.4	1,578.3	276.10	6.716	
11,900.0	6,907.6	11,978.3	6,918.2	140.9	140.7	90.30	-1,237.5	4,793.9	1,854.4	1,573.3	281.06	6.598	
11,909.4	6,907.5	11,987.7	6,918.1	141.1	141.0	90.30	-1,237.5	4,803.3	1,854.4	1,572.8	281.59	6.585	
12,000.0	6,906.8	12,078.3	6,917.7	143.6	143.5	90.31	-1,237.5	4,893.9	1,854.4	1,567.7	286.64	6.469	
12,007.8	6,906.7	12,086.1	6,917.7	143.9	143.7	90.31	-1,237.5	4,901.7	1,854.4	1,567.3	287.08	6.459	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.0 usft
Survey Program: 0-MWMD												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,100.0	6,905.9	12,178.3	6,917.2	146.4	146.3	90.32	-1,237.5	4,993.9	1,854.4	1,562.1	292.22	6.346	
12,106.3	6,905.9	12,184.5	6,917.2	146.6	146.4	90.32	-1,237.5	5,000.2	1,854.4	1,561.8	292.57	6.338	
12,200.0	6,905.1	12,278.3	6,916.7	149.2	149.0	90.33	-1,237.5	5,093.9	1,854.4	1,556.6	297.80	6.227	
12,204.7	6,905.1	12,283.0	6,916.7	149.4	149.2	90.33	-1,237.5	5,098.6	1,854.4	1,556.3	298.06	6.221	
12,300.0	6,904.3	12,378.3	6,916.2	152.0	151.8	90.34	-1,237.5	5,193.9	1,854.4	1,551.0	303.38	6.112	
12,303.1	6,904.3	12,381.4	6,916.2	152.1	151.9	90.34	-1,237.5	5,197.0	1,854.4	1,550.8	303.56	6.109	
12,400.0	6,903.4	12,478.3	6,915.8	154.8	154.6	90.35	-1,237.5	5,293.9	1,854.4	1,545.4	308.97	6.002	
12,401.5	6,903.4	12,479.8	6,915.8	154.8	154.7	90.35	-1,237.5	5,295.4	1,854.4	1,545.3	309.05	6.000	
12,500.0	6,902.6	12,578.3	6,915.3	157.6	157.4	90.36	-1,237.5	5,393.9	1,854.4	1,539.8	314.55	5.895	
12,598.4	6,901.8	12,676.7	6,914.8	160.3	160.1	90.37	-1,237.5	5,492.3	1,854.4	1,534.3	320.05	5.794	
12,600.0	6,901.8	12,678.3	6,914.8	160.4	160.2	90.37	-1,237.5	5,493.9	1,854.4	1,534.2	320.14	5.792	
12,696.8	6,901.0	12,775.1	6,914.3	163.1	162.9	90.38	-1,237.5	5,590.7	1,854.4	1,528.8	325.55	5.696	
12,700.0	6,900.9	12,778.3	6,914.3	163.2	163.0	90.38	-1,237.5	5,593.9	1,854.4	1,528.6	325.73	5.693	
12,795.2	6,900.1	12,873.5	6,913.8	165.8	165.6	90.39	-1,237.5	5,689.1	1,854.4	1,523.3	331.05	5.602	
12,800.0	6,900.1	12,878.3	6,913.8	166.0	165.8	90.39	-1,237.5	5,693.9	1,854.4	1,523.1	331.31	5.597	
12,893.7	6,899.3	12,971.9	6,913.4	168.6	168.4	90.40	-1,237.5	5,787.5	1,854.4	1,517.8	336.55	5.510	
12,900.0	6,899.3	12,978.3	6,913.3	168.8	168.6	90.40	-1,237.5	5,793.9	1,854.4	1,517.5	336.90	5.504	
12,992.1	6,898.5	13,070.4	6,912.9	171.3	171.1	90.41	-1,237.5	5,886.0	1,854.4	1,512.3	342.05	5.421	
13,000.0	6,898.4	13,078.3	6,912.8	171.6	171.4	90.41	-1,237.5	5,893.9	1,854.4	1,511.9	342.49	5.414	
13,090.5	6,897.7	13,168.8	6,912.4	174.1	173.9	90.42	-1,237.5	5,984.4	1,854.4	1,506.8	347.56	5.335	
13,100.0	6,897.6	13,178.3	6,912.4	174.4	174.1	90.42	-1,237.5	5,993.9	1,854.4	1,506.3	348.09	5.327	
13,188.9	6,896.9	13,267.2	6,911.9	176.8	176.6	90.43	-1,237.5	6,082.8	1,854.4	1,501.3	353.06	5.252	
13,200.0	6,896.8	13,278.3	6,911.9	177.2	176.9	90.44	-1,237.5	6,093.9	1,854.4	1,500.7	353.68	5.243	
13,287.4	6,896.0	13,365.6	6,911.5	179.6	179.4	90.45	-1,237.5	6,181.2	1,854.4	1,495.8	358.57	5.172	
13,300.0	6,895.9	13,378.3	6,911.4	180.0	179.7	90.45	-1,237.5	6,193.9	1,854.4	1,495.1	359.27	5.162	
13,385.8	6,895.2	13,464.1	6,911.0	182.4	182.1	90.46	-1,237.5	6,279.7	1,854.4	1,490.3	364.07	5.093	
13,400.0	6,895.1	13,478.3	6,910.9	182.7	182.5	90.46	-1,237.5	6,293.9	1,854.4	1,489.5	364.87	5.082	
13,484.2	6,894.4	13,562.5	6,910.5	185.1	184.9	90.47	-1,237.5	6,378.1	1,854.4	1,484.8	369.58	5.018	
13,500.0	6,894.3	13,578.3	6,910.4	185.5	185.3	90.47	-1,237.5	6,393.9	1,854.4	1,483.9	370.46	5.006	
13,582.6	6,893.6	13,660.9	6,910.0	187.9	187.6	90.48	-1,237.5	6,476.5	1,854.4	1,479.3	375.08	4.944	
13,600.0	6,893.4	13,678.3	6,909.9	188.3	188.1	90.48	-1,237.5	6,493.9	1,854.4	1,478.3	376.06	4.931	
13,681.1	6,892.8	13,759.3	6,909.5	190.6	190.4	90.49	-1,237.5	6,574.9	1,854.4	1,473.8	380.59	4.872	
13,700.0	6,892.6	13,778.3	6,909.4	191.1	190.9	90.49	-1,237.5	6,593.9	1,854.4	1,472.8	381.65	4.859	
13,779.5	6,891.9	13,857.8	6,909.1	193.4	193.1	90.50	-1,237.5	6,673.4	1,854.4	1,468.3	386.10	4.803	
13,800.0	6,891.8	13,878.3	6,909.0	193.9	193.7	90.50	-1,237.5	6,693.9	1,854.4	1,467.2	387.25	4.789	
13,877.9	6,891.1	13,956.2	6,908.6	196.1	195.9	90.51	-1,237.5	6,771.8	1,854.4	1,462.8	391.61	4.735	
13,900.0	6,890.9	13,978.3	6,908.5	196.7	196.5	90.51	-1,237.5	6,793.9	1,854.4	1,461.6	392.85	4.720	
13,976.3	6,890.3	14,054.6	6,908.1	198.9	198.6	90.52	-1,237.5	6,870.2	1,854.4	1,457.3	397.12	4.670	
14,000.0	6,890.1	14,078.3	6,908.0	199.5	199.3	90.52	-1,237.5	6,893.9	1,854.4	1,456.0	398.44	4.654	
14,074.8	6,889.5	14,153.0	6,907.6	201.6	201.4	90.53	-1,237.5	6,968.6	1,854.4	1,451.8	402.63	4.606	
14,100.0	6,889.3	14,178.3	6,907.5	202.3	202.1	90.53	-1,237.5	6,993.9	1,854.4	1,450.4	404.04	4.590	
14,173.2	6,888.7	14,251.5	6,907.1	204.4	204.1	90.54	-1,237.5	7,067.0	1,854.4	1,446.3	408.14	4.544	
14,200.0	6,888.4	14,278.3	6,907.0	205.1	204.9	90.54	-1,237.5	7,093.8	1,854.4	1,444.8	409.64	4.527	
14,271.6	6,887.8	14,349.9	6,906.7	207.1	206.9	90.55	-1,237.5	7,165.5	1,854.4	1,440.8	413.65	4.483	
14,300.0	6,887.6	14,378.3	6,906.5	207.9	207.7	90.55	-1,237.5	7,193.8	1,854.4	1,439.2	415.24	4.466	
14,370.0	6,887.0	14,448.3	6,906.2	209.9	209.6	90.56	-1,237.5	7,263.9	1,854.4	1,435.3	419.16	4.424	
14,400.0	6,886.8	14,478.3	6,906.0	210.7	210.5	90.56	-1,237.5	7,293.8	1,854.4	1,433.6	420.84	4.406	
14,468.5	6,886.2	14,546.7	6,905.7	212.6	212.4	90.57	-1,237.5	7,362.3	1,854.4	1,429.8	424.68	4.367	
14,500.0	6,885.9	14,578.3	6,905.6	213.5	213.3	90.58	-1,237.5	7,393.8	1,854.4	1,428.0	426.44	4.349	
14,566.9	6,885.4	14,645.2	6,905.2	215.4	215.1	90.58	-1,237.5	7,460.7	1,854.4	1,424.2	430.19	4.311	
14,600.0	6,885.1	14,678.3	6,905.1	216.3	216.1	90.59	-1,237.5	7,493.8	1,854.4	1,422.4	432.04	4.292	
14,613.0	6,885.0	14,691.3	6,905.0	216.7	216.4	90.59	-1,237.5	7,506.9	1,854.4	1,421.7	432.77	4.285 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	86.87	444.0	8,112.6	8,124.8				
98.4	98.4	69.4	69.4	0.1	0.5	86.87	444.0	8,112.6	8,124.7	8,124.2	0.54	N/A	
100.0	100.0	71.0	71.0	0.1	0.5	86.87	444.0	8,112.6	8,124.7	8,124.2	0.55	N/A	
196.8	196.8	167.8	167.8	0.3	2.3	86.87	444.0	8,112.6	8,124.7	8,122.1	2.60	3,118.999	
200.0	200.0	171.0	171.0	0.3	2.4	86.87	444.0	8,112.6	8,124.7	8,122.0	2.69	3,022.007	
295.3	295.3	266.3	266.3	0.5	4.5	86.87	444.0	8,112.6	8,124.7	8,119.7	4.99	1,629.336	
300.0	300.0	271.0	271.0	0.5	4.6	86.87	444.0	8,112.6	8,124.7	8,119.6	5.10	1,594.495	
393.7	393.7	364.7	364.7	0.7	6.5	86.87	444.0	8,112.6	8,124.7	8,117.5	7.23	1,123.682	
400.0	400.0	371.0	371.0	0.8	6.6	86.87	444.0	8,112.6	8,124.7	8,117.4	7.37	1,101.924	
492.1	492.1	463.1	463.1	1.0	8.5	86.87	444.0	8,112.6	8,124.7	8,115.3	9.45	859.532	
500.0	500.0	471.0	471.0	1.0	8.6	86.87	444.0	8,112.6	8,124.7	8,115.1	9.63	843.697	
590.5	590.5	561.5	561.5	1.2	10.5	86.87	444.0	8,112.6	8,124.7	8,113.1	11.67	696.442	
600.0	600.0	571.0	571.0	1.2	10.7	86.87	444.0	8,112.6	8,124.7	8,112.9	11.88	683.994	
689.0	689.0	660.0	660.0	1.4	12.5	86.87	444.0	8,112.6	8,124.7	8,110.9	13.88	585.552	
700.0	700.0	671.0	671.0	1.4	12.7	86.87	444.0	8,112.6	8,124.7	8,110.6	14.12	575.297	
787.4	787.4	758.4	758.4	1.6	14.5	86.87	444.0	8,112.6	8,124.7	8,108.7	16.08	505.201	
800.0	800.0	771.0	771.0	1.7	14.7	86.87	444.0	8,112.6	8,124.7	8,108.4	16.36	496.482	
885.8	885.8	856.8	856.8	1.9	16.4	86.87	444.0	8,112.6	8,124.7	8,106.4	18.29	444.279	
900.0	900.0	871.0	871.0	1.9	16.7	86.87	444.0	8,112.6	8,124.7	8,106.1	18.60	436.696	
984.2	984.2	955.2	955.2	2.1	18.4	86.87	444.0	8,112.6	8,124.7	8,104.2	20.49	396.489	
1,000.0	1,000.0	971.0	971.0	2.1	18.7	86.87	444.0	8,112.6	8,124.7	8,103.9	20.84	389.781	
1,082.7	1,082.7	1,053.7	1,053.7	2.3	20.4	86.87	444.0	8,112.6	8,124.7	8,102.0	22.70	357.993	
1,100.0	1,100.0	1,071.0	1,071.0	2.3	20.7	86.87	444.0	8,112.6	8,124.7	8,101.6	23.08	351.979	
1,150.0	1,150.0	1,121.0	1,121.0	2.4	21.8	86.87	444.0	8,112.6	8,124.7	8,100.5	24.20	335.703	
1,181.1	1,181.1	1,152.1	1,152.1	2.5	22.4	119.56	444.0	8,112.6	8,124.8	8,099.9	24.90	326.337	
1,200.0	1,200.0	1,171.0	1,171.0	2.6	22.8	119.55	444.0	8,112.6	8,124.9	8,099.6	25.32	320.904	
1,279.5	1,279.5	1,250.5	1,250.5	2.7	24.4	119.55	444.0	8,112.6	8,126.2	8,099.1	27.09	299.990	
1,300.0	1,299.9	1,270.9	1,270.9	2.8	24.8	119.55	444.0	8,112.6	8,126.7	8,099.1	27.54	295.061	
1,377.9	1,377.7	1,348.7	1,348.7	3.0	26.3	119.53	444.0	8,112.6	8,129.2	8,099.9	29.27	277.747	
1,400.0	1,399.7	1,370.7	1,370.7	3.0	26.8	119.53	444.0	8,112.6	8,130.1	8,100.4	29.75	273.238	
1,476.4	1,475.7	1,446.7	1,446.7	3.2	28.3	119.51	444.0	8,112.6	8,133.9	8,102.5	31.44	258.723	
1,500.0	1,499.1	1,470.1	1,470.1	3.2	28.8	119.50	444.0	8,112.6	8,135.3	8,103.3	31.96	254.569	
1,574.8	1,573.2	1,544.2	1,544.2	3.4	30.3	119.48	444.0	8,112.6	8,140.3	8,106.7	33.60	242.260	
1,600.0	1,598.2	1,569.2	1,569.2	3.5	30.8	119.47	444.0	8,112.6	8,142.2	8,108.0	34.15	238.407	
1,673.2	1,670.3	1,641.3	1,641.3	3.7	32.2	119.43	444.0	8,112.6	8,148.3	8,112.6	35.76	227.860	
1,700.0	1,696.6	1,667.6	1,667.6	3.8	32.8	119.42	444.0	8,112.6	8,150.8	8,114.5	36.34	224.265	
1,749.9	1,745.5	1,716.5	1,716.5	3.9	33.7	119.39	444.0	8,112.6	8,155.8	8,118.3	37.44	217.848	
1,771.6	1,766.8	1,737.8	1,737.8	4.0	34.2	119.42	444.0	8,112.6	8,158.0	8,120.1	37.93	215.081	
1,800.0	1,794.5	1,765.5	1,765.5	4.1	34.7	119.46	444.0	8,112.6	8,161.0	8,122.4	38.57	211.587	
1,870.1	1,863.1	1,834.1	1,834.1	4.3	36.1	119.54	444.0	8,112.6	8,168.3	8,128.1	40.16	203.383	
1,900.0	1,892.3	1,863.3	1,863.3	4.4	36.7	119.58	444.0	8,112.6	8,171.4	8,130.6	40.84	200.075	
1,968.5	1,959.4	1,930.4	1,930.4	4.7	38.0	119.67	444.0	8,112.6	8,178.6	8,136.1	42.41	192.855	
2,000.0	1,990.2	1,961.2	1,961.2	4.8	38.7	119.71	444.0	8,112.6	8,181.9	8,138.7	43.13	189.713	
2,066.9	2,055.6	2,026.6	2,026.6	5.1	40.0	119.79	444.0	8,112.6	8,188.9	8,144.2	44.66	183.343	
2,100.0	2,088.0	2,059.0	2,059.0	5.2	40.6	119.83	444.0	8,112.6	8,192.3	8,146.9	45.42	180.349	
2,165.3	2,151.9	2,122.9	2,122.9	5.4	41.9	119.91	444.0	8,112.6	8,199.2	8,152.3	46.93	174.705	
2,200.0	2,185.8	2,156.8	2,156.8	5.6	42.6	119.95	444.0	8,112.6	8,202.9	8,155.1	47.73	171.856	
2,263.8	2,248.2	2,219.2	2,219.2	5.8	43.9	120.03	444.0	8,112.6	8,209.6	8,160.4	49.21	166.840	
2,300.0	2,283.6	2,254.6	2,254.6	6.0	44.6	120.08	444.0	8,112.6	8,213.4	8,163.4	50.04	164.123	
2,362.2	2,344.5	2,315.5	2,315.5	6.2	45.8	120.15	444.0	8,112.6	8,220.0	8,168.6	51.49	159.652	
2,400.0	2,381.4	2,352.4	2,352.4	6.4	46.5	120.20	444.0	8,112.6	8,224.1	8,171.7	52.36	157.056	
2,460.6	2,440.7	2,411.7	2,411.7	6.6	47.7	120.28	444.0	8,112.6	8,230.5	8,176.7	53.77	153.061	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design		NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BARKER -PM F #26-10 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor	
2,500.0	2,479.2	2,450.2	2,450.2	6.8	48.5	120.32	444.0	8,112.6	8,234.7	8,180.0	54.69	150.577		
2,559.0	2,537.0	2,508.0	2,508.0	7.0	49.7	120.40	444.0	8,112.6	8,241.0	8,184.9	56.06	146.998		
2,600.0	2,577.1	2,548.1	2,548.1	7.2	50.5	120.45	444.0	8,112.6	8,245.4	8,188.4	57.02	144.617		
2,657.5	2,633.3	2,604.3	2,604.3	7.4	51.6	120.52	444.0	8,112.6	8,251.6	8,193.2	58.35	141.403		
2,700.0	2,674.9	2,645.9	2,645.9	7.6	52.4	120.57	444.0	8,112.6	8,256.1	8,196.8	59.35	139.118		
2,755.9	2,729.6	2,700.6	2,700.6	7.9	53.5	120.64	444.0	8,112.6	8,262.1	8,201.5	60.65	136.226		
2,800.0	2,772.7	2,743.7	2,743.7	8.0	54.4	120.69	444.0	8,112.6	8,266.9	8,205.2	61.68	134.030		
2,854.3	2,825.8	2,796.8	2,796.8	8.3	55.5	120.76	444.0	8,112.6	8,272.7	8,209.8	62.95	131.422		
2,900.0	2,870.5	2,841.5	2,841.5	8.5	56.4	120.81	444.0	8,112.6	8,277.7	8,213.7	64.01	129.310		
2,952.7	2,922.1	2,893.1	2,893.1	8.7	57.4	120.88	444.0	8,112.6	8,283.4	8,218.2	65.25	126.954		
3,000.0	2,968.3	2,939.3	2,939.3	8.9	58.3	120.93	444.0	8,112.6	8,288.5	8,222.2	66.35	124.919		
3,051.2	3,018.4	2,989.4	2,989.4	9.1	59.3	121.00	444.0	8,112.6	8,294.1	8,226.5	67.55	122.789		
3,100.0	3,066.1	3,037.1	3,037.1	9.3	60.3	121.06	444.0	8,112.6	8,299.4	8,230.7	68.69	120.825		
3,149.6	3,114.7	3,085.7	3,085.7	9.5	61.3	121.12	444.0	8,112.6	8,304.8	8,235.0	69.85	118.896		
3,200.0	3,164.0	3,135.0	3,135.0	9.8	62.3	121.18	444.0	8,112.6	8,310.3	8,239.3	71.03	117.000		
3,248.0	3,210.9	3,181.9	3,181.9	10.0	63.2	121.23	444.0	8,112.6	8,315.6	8,243.4	72.15	115.251		
3,300.0	3,261.8	3,232.8	3,232.8	10.2	64.2	121.30	444.0	8,112.6	8,321.3	8,247.9	73.37	113.418		
3,346.4	3,307.2	3,278.2	3,278.2	10.4	65.2	121.35	444.0	8,112.6	8,326.4	8,251.9	74.46	111.830		
3,400.0	3,359.6	3,330.6	3,330.6	10.6	66.2	121.42	444.0	8,112.6	8,332.3	8,256.6	75.71	110.057		
3,444.9	3,403.5	3,374.5	3,374.5	10.8	67.1	121.47	444.0	8,112.6	8,337.2	8,260.4	76.76	108.615		
3,500.0	3,457.4	3,428.4	3,428.4	11.1	68.2	121.54	444.0	8,112.6	8,343.3	8,265.2	78.05	106.897		
3,543.3	3,499.8	3,470.8	3,470.8	11.3	69.0	121.59	444.0	8,112.6	8,348.1	8,269.0	79.06	105.587		
3,600.0	3,555.2	3,526.2	3,526.2	11.5	70.1	121.66	444.0	8,112.6	8,354.4	8,274.0	80.39	103.922		
3,641.7	3,596.0	3,567.0	3,567.0	11.7	71.0	121.71	444.0	8,112.6	8,359.0	8,277.6	81.37	102.731		
3,700.0	3,653.0	3,624.0	3,624.0	11.9	72.1	121.78	444.0	8,112.6	8,365.5	8,282.7	82.73	101.115		
3,740.1	3,692.3	3,663.3	3,663.3	12.1	72.9	121.82	444.0	8,112.6	8,369.9	8,286.3	83.67	100.032		
3,800.0	3,750.8	3,721.8	3,721.8	12.4	74.1	121.89	444.0	8,112.6	8,376.6	8,291.5	85.07	98.463		
3,838.6	3,788.6	3,759.6	3,759.6	12.6	74.8	121.94	444.0	8,112.6	8,380.9	8,294.9	85.98	97.478		
3,900.0	3,848.7	3,819.7	3,819.7	12.8	76.0	122.01	444.0	8,112.6	8,387.8	8,300.4	87.42	95.953		
3,937.0	3,884.9	3,855.9	3,855.9	13.0	76.8	122.06	444.0	8,112.6	8,391.9	8,303.6	88.28	95.058		
4,000.0	3,946.5	3,917.5	3,917.5	13.3	78.0	122.13	444.0	8,112.6	8,399.0	8,309.2	89.76	93.575		
4,035.4	3,981.1	3,952.1	3,952.1	13.4	78.7	122.17	444.0	8,112.6	8,403.0	8,312.4	90.59	92.762		
4,100.0	4,044.3	4,015.3	4,015.3	13.7	80.0	122.25	444.0	8,112.6	8,410.2	8,318.1	92.10	91.318		
4,133.8	4,077.4	4,048.4	4,048.4	13.9	80.6	122.29	444.0	8,112.6	8,414.1	8,321.2	92.89	90.580		
4,200.0	4,142.1	4,113.1	4,113.1	14.2	81.9	122.37	444.0	8,112.6	8,421.5	8,327.1	94.44	89.173		
4,232.3	4,173.7	4,144.7	4,144.7	14.3	82.6	122.41	444.0	8,112.6	8,425.2	8,330.0	95.20	88.504		
4,300.0	4,239.9	4,210.9	4,210.9	14.6	83.9	122.48	444.0	8,112.6	8,432.8	8,336.1	96.78	87.133		
4,330.7	4,270.0	4,241.0	4,241.0	14.7	84.5	122.52	444.0	8,112.6	8,436.3	8,338.8	97.50	86.527		
4,400.0	4,337.7	4,308.7	4,308.7	15.0	85.9	122.60	444.0	8,112.6	8,444.2	8,345.1	99.12	85.190		
4,429.1	4,366.2	4,337.2	4,337.2	15.2	86.5	122.64	444.0	8,112.6	8,447.5	8,347.7	99.80	84.642		
4,500.0	4,435.6	4,406.6	4,406.6	15.5	87.8	122.72	444.0	8,112.6	8,455.6	8,354.1	101.46	83.338		
4,527.5	4,462.5	4,433.5	4,433.5	15.6	88.4	122.75	444.0	8,112.6	8,458.7	8,356.6	102.11	82.842		
4,600.0	4,533.4	4,504.4	4,504.4	15.9	89.8	122.84	444.0	8,112.6	8,467.0	8,363.2	103.80	81.569		
4,626.0	4,558.8	4,529.8	4,529.8	16.0	90.3	122.87	444.0	8,112.6	8,470.0	8,365.6	104.41	81.123		
4,673.6	4,605.3	4,576.3	4,576.3	16.3	91.3	122.92	444.0	8,112.6	8,475.5	8,369.9	105.52	80.319		
4,700.0	4,631.2	4,602.2	4,602.2	16.4	91.8	123.00	444.0	8,112.6	8,478.4	8,372.2	106.18	79.852		
4,724.4	4,655.1	4,626.1	4,626.1	16.4	92.3	123.07	444.0	8,112.6	8,481.0	8,374.3	106.77	79.436		
4,800.0	4,729.5	4,700.5	4,700.5	16.7	93.8	123.27	444.0	8,112.6	8,488.5	8,379.9	108.59	78.170		
4,822.8	4,752.1	4,723.1	4,723.1	16.7	94.2	123.33	444.0	8,112.6	8,490.5	8,381.4	109.13	77.800		
4,900.0	4,828.4	4,799.4	4,799.4	17.0	95.7	123.49	444.0	8,112.6	8,496.6	8,385.7	110.96	76.572		
4,921.2	4,849.5	4,820.5	4,820.5	17.0	96.2	123.53	444.0	8,112.6	8,498.1	8,386.7	111.46	76.245		
5,000.0	4,927.8	4,898.8	4,898.8	17.2	97.7	123.66	444.0	8,112.6	8,502.9	8,389.6	113.29	75.056		

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

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Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,918.4	4,918.4	17.2	98.1	123.69	444.0	8,112.6	8,503.9	8,390.2	113.74	74.769	
5,100.0	5,027.5	4,998.5	4,998.5	17.4	99.8	123.77	444.0	8,112.6	8,507.2	8,391.7	115.56	73.619	
5,118.1	5,045.6	5,016.6	5,016.6	17.4	100.1	123.79	444.0	8,112.6	8,507.8	8,391.8	115.96	73.369	
5,200.0	5,127.4	5,098.4	5,098.4	17.6	101.8	123.84	444.0	8,112.6	8,509.6	8,391.9	117.77	72.259	
5,216.5	5,143.9	5,114.9	5,114.9	17.6	102.1	123.84	444.0	8,112.6	8,509.8	8,391.7	118.12	72.042	
5,273.4	5,200.8	5,171.8	5,171.8	17.7	103.2	91.16	444.0	8,112.6	8,510.1	8,392.6	117.53	72.410	
5,300.0	5,227.4	5,198.4	5,198.4	17.7	103.8	91.16	444.0	8,112.6	8,510.1	8,392.0	118.10	72.056	
5,314.9	5,242.3	5,213.3	5,213.3	17.7	104.1	91.16	444.0	8,112.6	8,510.1	8,391.7	118.43	71.857	
5,400.0	5,327.4	5,298.4	5,298.4	17.8	105.8	91.16	444.0	8,112.6	8,510.1	8,389.9	120.29	70.746	
5,413.4	5,340.8	5,311.8	5,311.8	17.9	106.1	91.16	444.0	8,112.6	8,510.1	8,389.6	120.58	70.575	
5,500.0	5,427.4	5,398.4	5,398.4	18.0	107.8	91.16	444.0	8,112.6	8,510.1	8,387.7	122.48	69.483	
5,511.8	5,439.2	5,410.2	5,410.2	18.0	108.0	91.16	444.0	8,112.6	8,510.1	8,387.4	122.74	69.336	
5,600.0	5,527.4	5,498.4	5,498.4	18.1	109.8	91.16	444.0	8,112.6	8,510.1	8,385.5	124.67	68.262	
5,610.2	5,537.6	5,508.6	5,508.6	18.1	110.0	91.16	444.0	8,112.6	8,510.1	8,385.3	124.89	68.140	
5,700.0	5,627.4	5,598.4	5,598.4	18.3	111.8	91.16	444.0	8,112.6	8,510.1	8,383.3	126.86	67.084	
5,708.6	5,636.0	5,607.0	5,607.0	18.3	112.0	91.16	444.0	8,112.6	8,510.1	8,383.1	127.05	66.984	
5,800.0	5,727.4	5,698.4	5,698.4	18.4	113.8	91.16	444.0	8,112.6	8,510.1	8,381.1	129.05	65.944	
5,807.1	5,734.5	5,705.5	5,705.5	18.4	114.0	91.16	444.0	8,112.6	8,510.1	8,380.9	129.21	65.865	
5,900.0	5,827.4	5,798.4	5,798.4	18.6	115.8	91.16	444.0	8,112.6	8,510.1	8,378.9	131.24	64.842	
5,905.5	5,832.9	5,803.9	5,803.9	18.6	115.9	91.16	444.0	8,112.6	8,510.1	8,378.8	131.36	64.783	
6,000.0	5,927.4	5,898.4	5,898.4	18.7	117.8	91.16	444.0	8,112.6	8,510.1	8,376.7	133.44	63.776	
6,003.9	5,931.3	5,902.3	5,902.3	18.7	117.9	91.16	444.0	8,112.6	8,510.1	8,376.6	133.52	63.735	
6,100.0	6,027.4	5,998.4	5,998.4	18.9	119.9	91.16	444.0	8,112.6	8,510.1	8,374.5	135.63	62.744	
6,102.3	6,029.7	6,000.7	6,000.7	18.9	119.9	91.16	444.0	8,112.6	8,510.1	8,374.5	135.68	62.720	
6,200.0	6,127.4	6,098.4	6,098.4	19.0	121.9	91.16	444.0	8,112.6	8,510.1	8,372.3	137.83	61.744	
6,200.8	6,128.2	6,099.2	6,099.2	19.0	121.9	91.16	444.0	8,112.6	8,510.1	8,372.3	137.85	61.737	
6,299.2	6,226.6	6,197.6	6,197.6	19.2	123.9	91.16	444.0	8,112.6	8,510.1	8,370.1	140.01	60.783	
6,301.4	6,228.8	6,199.8	6,199.8	19.2	123.9	91.16	444.0	8,112.6	8,510.1	8,370.1	140.06	60.762	
6,350.0	6,277.4	6,248.4	6,248.4	19.3	124.9	1.17	444.0	8,112.6	8,508.5	8,366.2	142.33	59.782	
6,397.6	6,324.7	6,295.7	6,295.7	19.3	125.8	1.18	444.0	8,112.6	8,503.7	8,361.3	142.35	59.737	
6,400.0	6,327.1	6,298.1	6,298.1	19.3	125.9	1.18	444.0	8,112.6	8,503.4	8,361.0	142.34	59.741	
6,450.0	6,376.3	6,347.3	6,347.3	19.3	126.9	1.19	444.0	8,112.6	8,494.8	8,353.2	141.64	59.976	
6,496.0	6,421.1	6,392.1	6,392.1	19.3	127.8	1.21	444.0	8,112.6	8,483.9	8,343.5	140.35	60.447	
6,500.0	6,424.9	6,395.9	6,395.9	19.3	127.9	1.21	444.0	8,112.6	8,482.8	8,342.6	140.21	60.499	
6,550.0	6,472.4	6,443.4	6,443.4	19.3	128.8	1.24	444.0	8,112.6	8,467.4	8,329.4	138.07	61.329	
6,594.5	6,513.8	6,484.8	6,484.8	19.3	129.6	1.28	444.0	8,112.6	8,451.0	8,315.5	135.55	62.347	
6,600.0	6,518.8	6,489.8	6,489.8	19.3	129.7	1.28	444.0	8,112.6	8,448.8	8,313.6	135.19	62.494	
6,650.0	6,563.8	6,534.8	6,534.8	19.3	130.6	1.33	444.0	8,112.6	8,427.0	8,295.4	131.60	64.033	
6,692.9	6,601.1	6,572.1	6,572.1	19.2	131.4	1.38	444.0	8,112.6	8,405.8	8,277.8	127.96	65.691	
6,700.0	6,607.1	6,578.1	6,578.1	19.2	131.5	1.39	444.0	8,112.6	8,402.1	8,274.8	127.31	65.998	
6,750.0	6,648.6	6,619.6	6,619.6	19.2	132.4	1.46	444.0	8,112.6	8,374.2	8,251.9	122.32	68.460	
6,791.3	6,681.4	6,652.4	6,652.4	19.1	133.0	1.53	444.0	8,112.6	8,349.0	8,231.3	117.70	70.934	
6,800.0	6,688.1	6,659.1	6,659.1	19.1	133.1	1.55	444.0	8,112.6	8,343.5	8,226.9	116.68	71.511	
6,850.0	6,725.3	6,696.3	6,696.3	19.1	133.9	1.65	444.0	8,112.6	8,310.2	8,199.8	110.40	75.277	
6,889.7	6,753.2	6,724.2	6,724.2	19.0	134.5	1.76	444.0	8,112.6	8,281.8	8,176.9	104.98	78.892	
6,900.0	6,760.1	6,731.1	6,731.1	19.0	134.6	1.78	444.0	8,112.6	8,274.3	8,170.8	103.52	79.928	
6,950.0	6,792.3	6,763.3	6,763.3	19.0	135.2	1.95	444.0	8,112.6	8,236.1	8,139.9	96.10	85.700	
6,988.2	6,815.1	6,786.1	6,786.1	18.9	135.7	2.10	444.0	8,112.6	8,205.4	8,115.3	90.11	91.063	
7,000.0	6,821.8	6,792.8	6,792.8	18.9	135.8	2.15	444.0	8,112.6	8,195.7	8,107.5	88.20	92.926	
7,050.0	6,848.3	6,819.3	6,819.3	18.9	136.4	2.42	444.0	8,112.6	8,153.3	8,073.5	79.87	102.082	
7,086.6	6,865.9	6,836.9	6,836.9	18.9	136.7	2.67	444.0	8,112.6	8,121.2	8,047.7	73.56	110.397	
7,100.0	6,871.9	6,842.9	6,842.9	18.9	136.8	2.77	444.0	8,112.6	8,109.3	8,038.0	71.22	113.866	

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

Anticollision Report



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Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design		NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BARKER -PM F #26-10 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,150.0	6,892.3	6,863.3	6,863.3	18.8	137.3	3.26	444.0	8,112.6	8,063.6	8,001.3	62.37	129.295		
7,185.0	6,904.7	6,875.7	6,875.7	18.8	137.5	3.72	444.0	8,112.6	8,030.9	7,974.7	56.16	143.002		
7,200.0	6,909.5	6,880.5	6,880.5	18.9	137.6	3.97	444.0	8,112.6	8,016.7	7,963.2	53.54	149.746		
7,250.0	6,923.4	6,894.4	6,894.4	19.3	137.9	5.08	444.0	8,112.6	7,968.7	7,923.5	45.23	176.199		
7,283.4	6,930.8	6,901.8	6,901.8	19.8	138.0	6.27	444.0	8,112.6	7,936.1	7,895.5	40.63	195.349		
7,300.0	6,933.9	6,904.9	6,904.9	20.0	138.1	7.09	444.0	8,112.6	7,919.8	7,880.8	39.01	203.046		
7,350.0	6,940.9	6,911.9	6,911.9	20.8	138.2	11.66	444.0	8,112.6	7,870.4	7,829.3	41.03	191.836		
7,381.9	6,943.6	6,914.6	6,914.6	21.4	138.3	19.54	444.0	8,112.6	7,838.6	7,781.4	57.25	136.927		
7,400.0	6,944.5	6,915.5	6,915.5	21.7	138.3	30.95	444.0	8,112.6	7,820.5	7,736.9	83.64	93.502		
7,432.4	6,945.0	6,916.0	6,916.0	22.3	138.3	110.68	444.0	8,112.6	7,788.1	7,637.0	151.11	51.541		
7,480.3	6,944.6	6,915.6	6,915.6	23.2	138.3	110.56	444.0	8,112.6	7,740.2	7,588.2	152.05	50.907		
7,500.0	6,944.4	6,915.4	6,915.4	23.6	138.3	110.51	444.0	8,112.6	7,720.5	7,568.1	152.43	50.649		
7,578.7	6,943.7	6,914.7	6,914.7	25.2	138.3	110.32	444.0	8,112.6	7,641.8	7,487.8	154.09	49.595		
7,600.0	6,943.6	6,914.6	6,914.6	25.6	138.3	110.27	444.0	8,112.6	7,620.6	7,466.0	154.54	49.313		
7,677.1	6,942.9	6,913.9	6,913.9	27.3	138.3	110.08	444.0	8,112.6	7,543.4	7,387.2	156.26	48.275		
7,700.0	6,942.7	6,913.7	6,913.7	27.8	138.3	110.02	444.0	8,112.6	7,520.6	7,363.8	156.77	47.972		
7,775.6	6,942.1	6,913.1	6,913.1	29.5	138.3	109.83	444.0	8,112.6	7,445.0	7,286.5	158.54	46.961		
7,800.0	6,941.9	6,912.9	6,912.9	30.1	138.2	109.77	444.0	8,112.6	7,420.6	7,261.5	159.11	46.639		
7,874.0	6,941.3	6,912.3	6,912.3	31.8	138.2	109.59	444.0	8,112.6	7,346.7	7,185.8	160.90	45.659		
7,900.0	6,941.1	6,912.1	6,912.1	32.4	138.2	109.52	444.0	8,112.6	7,320.7	7,159.1	161.53	45.320		
7,972.4	6,940.4	6,911.4	6,911.4	34.2	138.2	109.35	444.0	8,112.6	7,248.3	7,084.9	163.34	44.376		
8,000.0	6,940.2	6,911.2	6,911.2	34.9	138.2	109.28	444.0	8,112.6	7,220.7	7,056.7	164.03	44.021		
8,070.8	6,939.6	6,910.6	6,910.6	36.6	138.2	109.10	444.0	8,112.6	7,149.9	6,984.0	165.83	43.115		
8,100.0	6,939.4	6,910.4	6,910.4	37.3	138.2	109.03	444.0	8,112.6	7,120.7	6,954.1	166.58	42.747		
8,169.3	6,938.8	6,909.8	6,909.8	39.1	138.2	108.85	444.0	8,112.6	7,051.5	6,883.1	168.38	41.878		
8,200.0	6,938.5	6,909.5	6,909.5	39.8	138.2	108.78	444.0	8,112.6	7,020.8	6,851.6	169.18	41.499		
8,267.7	6,938.0	6,909.0	6,909.0	41.6	138.2	108.61	444.0	8,112.6	6,953.1	6,782.1	170.97	40.669		
8,300.0	6,937.7	6,908.7	6,908.7	42.4	138.2	108.53	444.0	8,112.6	6,920.8	6,749.0	171.82	40.279		
8,366.1	6,937.2	6,908.2	6,908.2	44.1	138.2	108.36	444.0	8,112.6	6,854.7	6,681.1	173.59	39.488		
8,400.0	6,936.9	6,907.9	6,907.9	45.0	138.1	108.27	444.0	8,112.6	6,820.8	6,646.3	174.50	39.089		
8,464.5	6,936.3	6,907.3	6,907.3	46.6	138.1	108.11	444.0	8,112.6	6,756.3	6,580.1	176.24	38.336		
8,500.0	6,936.0	6,907.0	6,907.0	47.6	138.1	108.02	444.0	8,112.6	6,720.9	6,543.7	177.20	37.928		
8,563.0	6,935.5	6,906.5	6,906.5	49.2	138.1	107.86	444.0	8,112.6	6,657.9	6,479.0	178.92	37.212		
8,600.0	6,935.2	6,906.2	6,906.2	50.2	138.1	107.77	444.0	8,112.6	6,620.9	6,441.0	179.93	36.797		
8,661.4	6,934.7	6,905.7	6,905.7	51.8	138.1	107.62	444.0	8,112.6	6,559.5	6,377.9	181.62	36.117		
8,700.0	6,934.4	6,905.4	6,905.4	52.8	138.1	107.52	444.0	8,112.6	6,520.9	6,338.3	182.68	35.696		
8,759.8	6,933.9	6,904.9	6,904.9	54.4	138.1	107.37	444.0	8,112.6	6,461.1	6,276.8	184.34	35.051		
8,800.0	6,933.5	6,904.5	6,904.5	55.5	138.1	107.26	444.0	8,112.6	6,421.0	6,235.5	185.45	34.623		
8,858.2	6,933.0	6,904.0	6,904.0	57.1	138.1	107.11	444.0	8,112.6	6,362.8	6,175.7	187.08	34.012		
8,900.0	6,932.7	6,903.7	6,903.7	58.2	138.1	107.01	444.0	8,112.6	6,321.0	6,132.8	188.24	33.579		
8,956.7	6,932.2	6,903.2	6,903.2	59.7	138.1	106.86	444.0	8,112.6	6,264.4	6,074.5	189.83	33.000		
9,000.0	6,931.8	6,902.8	6,902.8	60.9	138.0	106.75	444.0	8,112.6	6,221.1	6,030.0	191.04	32.563		
9,055.1	6,931.4	6,902.4	6,902.4	62.4	138.0	106.61	444.0	8,112.6	6,166.0	5,973.4	192.60	32.015		
9,100.0	6,931.0	6,902.0	6,902.0	63.6	138.0	106.50	444.0	8,112.6	6,121.1	5,927.2	193.86	31.574		
9,153.5	6,930.6	6,901.6	6,901.6	65.0	138.0	106.36	444.0	8,112.6	6,067.6	5,872.2	195.38	31.056		
9,200.0	6,930.2	6,901.2	6,901.2	66.3	138.0	106.24	444.0	8,112.6	6,021.1	5,824.5	196.69	30.612		
9,251.9	6,929.7	6,900.7	6,900.7	67.7	138.0	106.11	444.0	8,112.6	5,969.2	5,771.1	198.17	30.122		
9,300.0	6,929.3	6,900.3	6,900.3	69.0	138.0	105.98	444.0	8,112.6	5,921.2	5,721.7	199.53	29.675		
9,350.4	6,928.9	6,899.9	6,899.9	70.4	138.0	105.85	444.0	8,112.6	5,870.8	5,669.9	200.97	29.213		
9,400.0	6,928.5	6,899.5	6,899.5	71.7	138.0	105.72	444.0	8,112.6	5,821.2	5,618.9	202.38	28.763		
9,448.8	6,928.1	6,899.1	6,899.1	73.0	138.0	105.60	444.0	8,112.6	5,772.5	5,568.7	203.78	28.327		
9,500.0	6,927.7	6,898.7	6,898.7	74.4	138.0	105.47	444.0	8,112.6	5,721.3	5,516.0	205.24	27.875		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,898.3	6,898.3	75.7	138.0	105.34	444.0	8,112.6	5,674.1	5,467.5	206.60	27.464	
9,600.0	6,926.8	6,897.8	6,897.8	77.2	137.9	105.21	444.0	8,112.6	5,621.3	5,413.2	208.11	27.011	
9,645.6	6,926.4	6,897.4	6,897.4	78.4	137.9	105.09	444.0	8,112.6	5,575.7	5,366.3	209.43	26.624	
9,700.0	6,926.0	6,897.0	6,897.0	79.9	137.9	104.95	444.0	8,112.6	5,521.4	5,310.4	210.99	26.169	
9,744.1	6,925.6	6,896.6	6,896.6	81.1	137.9	104.83	444.0	8,112.6	5,477.3	5,265.1	212.26	25.805	
9,800.0	6,925.2	6,896.2	6,896.2	82.6	137.9	104.69	444.0	8,112.6	5,421.4	5,207.6	213.87	25.349	
9,842.5	6,924.8	6,895.8	6,895.8	83.8	137.9	104.58	444.0	8,112.6	5,379.0	5,163.9	215.10	25.007	
9,900.0	6,924.3	6,895.3	6,895.3	85.4	137.9	104.43	444.0	8,112.6	5,321.5	5,104.7	216.76	24.550	
9,940.9	6,924.0	6,895.0	6,895.0	86.5	137.9	104.32	444.0	8,112.6	5,280.6	5,062.6	217.95	24.229	
10,000.0	6,923.5	6,894.5	6,894.5	88.1	137.9	104.16	444.0	8,112.6	5,221.6	5,001.9	219.66	23.771	
10,039.3	6,923.2	6,894.2	6,894.2	89.2	137.9	104.06	444.0	8,112.6	5,182.2	4,961.4	220.80	23.470	
10,100.0	6,922.6	6,893.6	6,893.6	90.9	137.9	103.90	444.0	8,112.6	5,121.6	4,899.1	222.56	23.013	
10,137.8	6,922.3	6,893.3	6,893.3	91.9	137.9	103.80	444.0	8,112.6	5,083.9	4,860.2	223.65	22.731	
10,200.0	6,921.8	6,892.8	6,892.8	93.7	137.8	103.64	444.0	8,112.6	5,021.7	4,796.2	225.46	22.273	
10,236.2	6,921.5	6,892.5	6,892.5	94.7	137.8	103.55	444.0	8,112.6	4,985.5	4,759.0	226.52	22.010	
10,300.0	6,921.0	6,892.0	6,892.0	96.4	137.8	103.38	444.0	8,112.6	4,921.7	4,693.4	228.37	21.551	
10,334.6	6,920.7	6,891.7	6,891.7	97.4	137.8	103.29	444.0	8,112.6	4,887.1	4,657.8	229.38	21.306	
10,400.0	6,920.1	6,891.1	6,891.1	99.2	137.8	103.11	444.0	8,112.6	4,821.8	4,590.5	231.29	20.848	
10,433.0	6,919.9	6,890.9	6,890.9	100.1	137.8	103.03	444.0	8,112.6	4,788.8	4,556.5	232.25	20.619	
10,500.0	6,919.3	6,890.3	6,890.3	101.9	137.8	102.85	444.0	8,112.6	4,721.9	4,487.7	234.20	20.162	
10,531.5	6,919.0	6,890.0	6,890.0	102.8	137.8	102.77	444.0	8,112.6	4,690.4	4,455.3	235.12	19.949	
10,600.0	6,918.5	6,889.5	6,889.5	104.7	137.8	102.58	444.0	8,112.6	4,621.9	4,384.8	237.12	19.492	
10,629.9	6,918.2	6,889.2	6,889.2	105.5	137.8	102.51	444.0	8,112.6	4,592.1	4,354.1	238.00	19.295	
10,700.0	6,917.6	6,888.6	6,888.6	107.5	137.8	102.32	444.0	8,112.6	4,522.0	4,282.0	240.05	18.838	
10,728.3	6,917.4	6,888.4	6,888.4	108.3	137.8	102.24	444.0	8,112.6	4,493.7	4,252.8	240.87	18.656	
10,800.0	6,916.8	6,887.8	6,887.8	110.3	137.7	102.05	444.0	8,112.6	4,422.1	4,179.1	242.97	18.200	
10,826.7	6,916.6	6,887.6	6,887.6	111.0	137.7	101.98	444.0	8,112.6	4,395.4	4,151.6	243.75	18.032	
10,900.0	6,916.0	6,887.0	6,887.0	113.0	137.7	101.79	444.0	8,112.6	4,322.2	4,076.3	245.90	17.577	
10,925.2	6,915.8	6,886.8	6,886.8	113.7	137.7	101.72	444.0	8,112.6	4,297.0	4,050.4	246.63	17.423	
11,000.0	6,915.1	6,886.1	6,886.1	115.8	137.7	101.52	444.0	8,112.6	4,222.3	3,973.4	248.83	16.969	
11,023.6	6,914.9	6,885.9	6,885.9	116.5	137.7	101.46	444.0	8,112.6	4,198.7	3,949.2	249.52	16.827	
11,100.0	6,914.3	6,885.3	6,885.3	118.6	137.7	101.25	444.0	8,112.6	4,122.4	3,870.6	251.76	16.374	
11,122.0	6,914.1	6,885.1	6,885.1	119.2	137.7	101.20	444.0	8,112.6	4,100.4	3,847.9	252.40	16.245	
11,200.0	6,913.5	6,884.5	6,884.5	121.4	137.7	100.99	444.0	8,112.6	4,022.4	3,767.8	254.69	15.794	
11,220.4	6,913.3	6,884.3	6,884.3	121.9	137.7	100.93	444.0	8,112.6	4,002.0	3,746.7	255.29	15.676	
11,300.0	6,912.6	6,883.6	6,883.6	124.1	137.7	100.72	444.0	8,112.6	3,922.5	3,664.9	257.62	15.226	
11,318.9	6,912.5	6,883.5	6,883.5	124.7	137.7	100.67	444.0	8,112.6	3,903.7	3,645.5	258.18	15.120	
11,400.0	6,911.8	6,882.8	6,882.8	126.9	137.6	100.45	444.0	8,112.6	3,822.7	3,562.1	260.55	14.671	
11,417.3	6,911.6	6,882.6	6,882.6	127.4	137.6	100.40	444.0	8,112.6	3,805.4	3,544.3	261.06	14.576	
11,500.0	6,911.0	6,882.0	6,882.0	129.7	137.6	100.18	444.0	8,112.6	3,722.8	3,459.3	263.49	14.129	
11,515.7	6,910.8	6,881.8	6,881.8	130.2	137.6	100.14	444.0	8,112.6	3,707.1	3,443.1	263.95	14.045	
11,600.0	6,910.1	6,881.1	6,881.1	132.5	137.6	99.91	444.0	8,112.6	3,622.9	3,356.5	266.42	13.598	
11,614.1	6,910.0	6,881.0	6,881.0	132.9	137.6	99.87	444.0	8,112.6	3,608.7	3,341.9	266.84	13.524	
11,700.0	6,909.3	6,880.3	6,880.3	135.3	137.6	99.64	444.0	8,112.6	3,523.0	3,253.6	269.36	13.079	
11,712.6	6,909.2	6,880.2	6,880.2	135.6	137.6	99.61	444.0	8,112.6	3,510.4	3,240.7	269.72	13.015	
11,800.0	6,908.5	6,879.5	6,879.5	138.1	137.6	99.37	444.0	8,112.6	3,423.1	3,150.8	272.29	12.572	
11,811.0	6,908.4	6,879.4	6,879.4	138.4	137.6	99.34	444.0	8,112.6	3,412.1	3,139.5	272.61	12.516	
11,900.0	6,907.6	6,878.6	6,878.6	140.9	137.6	99.10	444.0	8,112.6	3,323.3	3,048.0	275.22	12.075	
11,909.4	6,907.5	6,878.5	6,878.5	141.1	137.6	99.08	444.0	8,112.6	3,313.8	3,038.3	275.50	12.029	
12,000.0	6,906.8	6,877.8	6,877.8	143.6	137.5	98.83	444.0	8,112.6	3,223.4	2,945.2	278.15	11.589	
12,007.8	6,906.7	6,877.7	6,877.7	143.9	137.5	98.81	444.0	8,112.6	3,215.6	2,937.2	278.38	11.551	
12,100.0	6,905.9	6,876.9	6,876.9	146.4	137.5	98.56	444.0	8,112.6	3,123.6	2,842.5	281.08	11.113	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,876.9	6,876.9	146.6	137.5	98.54	444.0	8,112.6	3,117.3	2,836.0	281.27	11.083	
12,200.0	6,905.1	6,876.1	6,876.1	149.2	137.5	98.29	444.0	8,112.6	3,023.7	2,739.7	284.01	10.646	
12,204.7	6,905.1	6,876.1	6,876.1	149.4	137.5	98.28	444.0	8,112.6	3,019.0	2,734.9	284.15	10.625	
12,300.0	6,904.3	6,875.3	6,875.3	152.0	137.5	98.02	444.0	8,112.6	2,923.9	2,636.9	286.94	10.190	
12,303.1	6,904.3	6,875.3	6,875.3	152.1	137.5	98.01	444.0	8,112.6	2,920.8	2,633.7	287.03	10.176	
12,400.0	6,903.4	6,874.4	6,874.4	154.8	137.5	97.75	444.0	8,112.6	2,824.1	2,534.2	289.86	9.743	
12,401.5	6,903.4	6,874.4	6,874.4	154.8	137.5	97.74	444.0	8,112.6	2,822.5	2,532.6	289.91	9.736	
12,500.0	6,902.6	6,873.6	6,873.6	157.6	137.5	97.47	444.0	8,112.6	2,724.3	2,431.5	292.79	9.305	
12,598.4	6,901.8	6,872.8	6,872.8	160.3	137.4	97.21	444.0	8,112.6	2,626.1	2,330.4	295.66	8.882	
12,600.0	6,901.8	6,872.8	6,872.8	160.4	137.4	97.20	444.0	8,112.6	2,624.5	2,328.8	295.71	8.875	
12,696.8	6,901.0	6,872.0	6,872.0	163.1	137.4	96.94	444.0	8,112.6	2,527.9	2,229.3	298.53	8.468	
12,700.0	6,900.9	6,871.9	6,871.9	163.2	137.4	96.93	444.0	8,112.6	2,524.7	2,226.1	298.63	8.454	
12,795.2	6,900.1	6,871.1	6,871.1	165.8	137.4	96.67	444.0	8,112.6	2,429.7	2,128.3	301.40	8.061	
12,800.0	6,900.1	6,871.1	6,871.1	166.0	137.4	96.66	444.0	8,112.6	2,425.0	2,123.4	301.54	8.042	
12,893.7	6,899.3	6,870.3	6,870.3	168.6	137.4	96.40	444.0	8,112.6	2,331.5	2,027.3	304.27	7.663	
12,900.0	6,899.3	6,870.3	6,870.3	168.8	137.4	96.38	444.0	8,112.6	2,325.2	2,020.8	304.45	7.637	
12,992.1	6,898.5	6,869.5	6,869.5	171.3	137.4	96.13	444.0	8,112.6	2,233.4	1,926.3	307.13	7.272	
13,000.0	6,898.4	6,869.4	6,869.4	171.6	137.4	96.11	444.0	8,112.6	2,225.5	1,918.2	307.36	7.241	
13,090.5	6,897.7	6,868.7	6,868.7	174.1	137.4	95.86	444.0	8,112.6	2,135.3	1,825.3	309.99	6.888	
13,100.0	6,897.6	6,868.6	6,868.6	174.4	137.4	95.83	444.0	8,112.6	2,125.8	1,815.6	310.27	6.852	
13,188.9	6,896.9	6,867.9	6,867.9	176.8	137.3	95.59	444.0	8,112.6	2,037.2	1,724.4	312.85	6.512	
13,200.0	6,896.8	6,867.8	6,867.8	177.2	137.3	95.56	444.0	8,112.6	2,026.2	1,713.0	313.17	6.470	
13,287.4	6,896.0	6,867.0	6,867.0	179.6	137.3	95.32	444.0	8,112.6	1,939.2	1,623.5	315.70	6.142	
13,300.0	6,895.9	6,866.9	6,866.9	180.0	137.3	95.29	444.0	8,112.6	1,926.6	1,610.5	316.07	6.095	
13,385.8	6,895.2	6,866.2	6,866.2	182.4	137.3	95.05	444.0	8,112.6	1,841.1	1,522.6	318.55	5.780	
13,400.0	6,895.1	6,866.1	6,866.1	182.7	137.3	95.01	444.0	8,112.6	1,827.0	1,508.0	318.96	5.728	
13,484.2	6,894.4	6,865.4	6,865.4	185.1	137.3	94.78	444.0	8,112.6	1,743.2	1,421.8	321.39	5.424	
13,500.0	6,894.3	6,865.3	6,865.3	185.5	137.3	94.74	444.0	8,112.6	1,727.5	1,405.6	321.85	5.367	
13,582.6	6,893.6	6,864.6	6,864.6	187.9	137.3	94.51	444.0	8,112.6	1,645.3	1,321.0	324.23	5.074	
13,600.0	6,893.4	6,864.4	6,864.4	188.3	137.3	94.46	444.0	8,112.6	1,628.0	1,303.3	324.73	5.013	
13,681.1	6,892.8	6,863.8	6,863.8	190.6	137.3	94.24	444.0	8,112.6	1,547.4	1,220.4	327.07	4.731	
13,700.0	6,892.6	6,863.6	6,863.6	191.1	137.3	94.19	444.0	8,112.6	1,528.6	1,201.0	327.61	4.666	
13,779.5	6,891.9	6,862.9	6,862.9	193.4	137.2	93.97	444.0	8,112.6	1,449.7	1,119.8	329.90	4.394	
13,800.0	6,891.8	6,862.8	6,862.8	193.9	137.2	93.91	444.0	8,112.6	1,429.3	1,098.8	330.49	4.325	
13,877.9	6,891.1	6,862.1	6,862.1	196.1	137.2	93.70	444.0	8,112.6	1,352.0	1,019.3	332.72	4.063	
13,900.0	6,890.9	6,861.9	6,861.9	196.7	137.2	93.64	444.0	8,112.6	1,330.1	996.8	333.36	3.990	
13,976.3	6,890.3	6,861.3	6,861.3	198.9	137.2	93.43	444.0	8,112.6	1,254.4	918.9	335.54	3.739	
14,000.0	6,890.1	6,861.1	6,861.1	199.5	137.2	93.36	444.0	8,112.6	1,231.0	894.8	336.22	3.661	
14,074.8	6,889.5	6,860.5	6,860.5	201.6	137.2	93.16	444.0	8,112.6	1,157.0	818.7	338.36	3.420	
14,100.0	6,889.3	6,860.3	6,860.3	202.3	137.2	93.09	444.0	8,112.6	1,132.1	793.0	339.08	3.339	
14,173.2	6,888.7	6,859.7	6,859.7	204.4	137.2	92.88	444.0	8,112.6	1,059.8	718.7	341.17	3.106	
14,200.0	6,888.4	6,859.4	6,859.4	205.1	137.2	92.81	444.0	8,112.6	1,033.4	691.5	341.93	3.022	
14,271.6	6,887.8	6,858.8	6,858.8	207.1	137.2	92.61	444.0	8,112.6	962.9	618.9	343.97	2.799	
14,300.0	6,887.6	6,858.6	6,858.6	207.9	137.2	92.53	444.0	8,112.6	935.0	590.2	344.78	2.712	
14,370.0	6,887.0	6,858.0	6,858.0	209.9	137.1	92.34	444.0	8,112.6	866.2	519.5	346.77	2.498	
14,400.0	6,886.8	6,857.8	6,857.8	210.7	137.1	92.26	444.0	8,112.6	836.9	489.3	347.62	2.408	
14,468.5	6,886.2	6,857.2	6,857.2	212.6	137.1	92.07	444.0	8,112.6	770.0	420.5	349.56	2.203	
14,500.0	6,885.9	6,856.9	6,856.9	213.5	137.1	91.98	444.0	8,112.6	739.3	388.9	350.45	2.110	
14,566.9	6,885.4	6,856.4	6,856.4	215.4	137.1	91.80	444.0	8,112.6	674.5	322.1	352.34	1.914	
14,600.0	6,885.1	6,856.1	6,856.1	216.3	137.1	91.71	444.0	8,112.6	642.5	289.3	353.28	1.819	
14,613.0	6,885.0	6,856.0	6,856.0	216.7	137.1	91.67	444.0	8,112.6	630.0	276.4	353.64	1.781 CC, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	104.02	-1,052.5	4,216.2	4,345.7				
98.4	98.4	66.0	66.0	0.1	0.0	104.02	-1,052.5	4,216.2	4,345.6	4,345.5	0.12	N/A	
100.0	100.0	67.5	67.5	0.1	0.0	104.02	-1,052.5	4,216.2	4,345.6	4,345.5	0.12	N/A	
196.8	196.8	162.7	162.7	0.3	0.2	104.02	-1,052.7	4,216.3	4,345.7	4,345.3	0.46	9,503.729	
200.0	200.0	165.8	165.8	0.3	0.2	104.02	-1,052.7	4,216.3	4,345.7	4,345.3	0.47	9,257.733	
295.3	295.3	257.2	257.2	0.5	0.3	104.02	-1,053.1	4,216.3	4,345.9	4,345.1	0.79	5,505.125	
300.0	300.0	261.6	261.6	0.5	0.3	104.02	-1,053.2	4,216.3	4,345.9	4,345.1	0.80	5,405.498	
393.7	393.7	361.1	361.1	0.7	0.3	104.03	-1,053.6	4,216.4	4,346.1	4,345.0	1.08	4,018.332	
400.0	400.0	368.4	368.4	0.8	0.3	104.03	-1,053.6	4,216.4	4,346.1	4,345.0	1.10	3,952.216	
492.1	492.1	502.9	502.9	1.0	0.4	104.03	-1,053.5	4,216.0	4,345.8	4,344.4	1.36	3,190.645	
500.0	500.0	510.8	510.8	1.0	0.4	104.03	-1,053.5	4,215.9	4,345.7	4,344.3	1.38	3,140.728	
590.5	590.5	600.0	600.0	1.2	0.5	104.03	-1,053.2	4,215.1	4,344.9	4,343.2	1.63	2,663.828	
600.0	600.0	609.9	609.9	1.2	0.5	104.03	-1,053.1	4,215.0	4,344.8	4,343.1	1.66	2,622.569	
689.0	689.0	688.7	688.7	1.4	0.5	104.03	-1,052.9	4,214.5	4,344.1	4,342.2	1.89	2,296.332	
700.0	700.0	700.0	700.0	1.4	0.5	104.03	-1,052.8	4,214.4	4,344.0	4,342.1	1.92	2,260.695	
787.4	787.4	803.0	802.9	1.6	0.5	104.02	-1,052.5	4,213.6	4,343.3	4,341.1	2.16	2,009.265	
800.0	800.0	814.9	814.9	1.7	0.5	104.02	-1,052.5	4,213.5	4,343.2	4,341.0	2.19	1,978.690	
885.8	885.8	896.4	896.4	1.9	0.6	104.02	-1,052.3	4,212.7	4,342.3	4,339.9	2.42	1,792.836	
900.0	900.0	911.4	911.4	1.9	0.6	104.02	-1,052.2	4,212.6	4,342.2	4,339.7	2.46	1,765.134	
984.2	984.2	1,004.0	1,003.9	2.1	0.6	104.02	-1,051.9	4,211.7	4,341.3	4,338.7	2.69	1,616.021	
1,000.0	1,000.0	1,022.6	1,022.6	2.1	0.6	104.02	-1,051.8	4,211.5	4,341.2	4,338.4	2.73	1,590.692	
1,082.7	1,082.7	1,116.5	1,116.5	2.3	0.7	104.02	-1,051.4	4,210.3	4,340.0	4,337.1	2.95	1,470.544	
1,100.0	1,100.0	1,133.0	1,133.0	2.3	0.7	104.02	-1,051.4	4,210.1	4,339.8	4,336.8	3.00	1,448.263	
1,150.0	1,150.0	1,180.8	1,180.8	2.4	0.7	104.02	-1,051.2	4,209.4	4,339.1	4,336.0	3.13	1,387.595	
1,181.1	1,181.1	1,212.7	1,212.7	2.5	0.7	136.71	-1,051.0	4,209.0	4,338.8	4,335.6	3.23	1,344.173	
1,200.0	1,200.0	1,234.5	1,234.5	2.6	0.7	136.72	-1,050.8	4,208.7	4,338.7	4,335.4	3.28	1,323.387	
1,208.9	1,208.8	1,244.8	1,244.7	2.6	0.7	136.72	-1,050.8	4,208.6	4,338.7	4,335.4	3.30	1,313.934	
1,279.5	1,279.5	1,319.8	1,319.8	2.7	0.8	136.73	-1,050.2	4,207.5	4,339.3	4,335.8	3.49	1,244.175	
1,300.0	1,299.9	1,337.6	1,337.6	2.8	0.8	136.73	-1,050.1	4,207.2	4,339.7	4,336.1	3.54	1,226.067	
1,377.9	1,377.7	1,405.4	1,405.3	3.0	0.8	136.73	-1,049.3	4,206.4	4,342.3	4,338.6	3.74	1,161.031	
1,400.0	1,399.7	1,425.1	1,425.0	3.0	0.8	136.73	-1,049.1	4,206.2	4,343.4	4,339.6	3.80	1,143.975	
1,476.4	1,475.7	1,493.1	1,493.0	3.2	0.8	136.71	-1,048.3	4,205.6	4,348.1	4,344.1	4.00	1,087.276	
1,500.0	1,499.1	1,513.7	1,513.6	3.2	0.8	136.71	-1,048.0	4,205.5	4,349.9	4,345.8	4.06	1,071.170	
1,574.8	1,573.2	1,577.9	1,577.9	3.4	0.8	136.68	-1,047.1	4,205.1	4,356.6	4,352.3	4.26	1,021.520	
1,600.0	1,598.2	1,600.0	1,599.9	3.5	0.9	136.67	-1,046.8	4,205.0	4,359.2	4,354.9	4.33	1,005.969	
1,673.2	1,670.3	1,663.1	1,663.0	3.7	0.9	136.64	-1,045.9	4,204.9	4,367.8	4,363.3	4.54	961.326	
1,700.0	1,696.6	1,686.3	1,686.2	3.8	0.9	136.63	-1,045.6	4,204.9	4,371.4	4,366.7	4.62	946.211	
1,749.9	1,745.5	1,732.7	1,732.6	3.9	0.9	136.60	-1,044.9	4,204.8	4,378.5	4,373.7	4.77	917.758	
1,771.6	1,766.8	1,753.5	1,753.4	4.0	0.9	136.64	-1,044.6	4,204.8	4,381.7	4,376.9	4.84	905.931	
1,800.0	1,794.5	1,780.7	1,780.6	4.1	0.9	136.69	-1,044.1	4,204.9	4,385.9	4,381.0	4.92	891.151	
1,870.1	1,863.1	1,857.0	1,856.9	4.3	0.9	136.81	-1,042.9	4,204.9	4,396.4	4,391.2	5.14	855.042	
1,900.0	1,892.3	1,891.2	1,891.1	4.4	0.9	136.87	-1,042.4	4,204.8	4,400.8	4,395.6	5.23	840.710	
1,968.5	1,959.4	1,953.0	1,952.8	4.7	1.0	136.97	-1,041.4	4,204.7	4,410.9	4,405.4	5.45	808.807	
2,000.0	1,990.2	1,980.4	1,980.3	4.8	1.0	137.02	-1,041.0	4,204.7	4,415.6	4,410.0	5.55	795.201	
2,066.9	2,055.6	2,048.4	2,048.3	5.1	1.0	137.13	-1,039.9	4,204.7	4,425.6	4,419.8	5.77	766.680	
2,100.0	2,088.0	2,084.5	2,084.3	5.2	1.0	137.19	-1,039.2	4,204.6	4,430.5	4,424.6	5.88	753.107	
2,165.3	2,151.9	2,148.7	2,148.5	5.4	1.0	137.30	-1,038.1	4,204.5	4,440.2	4,434.1	6.10	727.665	
2,200.0	2,185.8	2,181.7	2,181.5	5.6	1.0	137.35	-1,037.5	4,204.5	4,445.3	4,439.1	6.22	714.957	
2,263.8	2,248.2	2,238.7	2,238.5	5.8	1.0	137.44	-1,036.6	4,204.4	4,454.9	4,448.4	6.43	692.427	
2,300.0	2,283.6	2,270.2	2,270.0	6.0	1.1	137.50	-1,036.2	4,204.4	4,460.3	4,453.8	6.56	680.345	
2,362.2	2,344.5	2,322.7	2,322.6	6.2	1.1	137.58	-1,035.5	4,204.5	4,469.8	4,463.0	6.77	660.446	
2,400.0	2,381.4	2,353.6	2,353.4	6.4	1.1	137.63	-1,035.1	4,204.6	4,475.6	4,468.7	6.90	649.063	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,460.6	2,440.7	2,403.5	2,403.3	6.6	1.1	137.72	-1,034.6	4,204.8	4,485.1	4,478.0	7.10	631.349		
2,500.0	2,479.2	2,441.7	2,441.5	6.8	1.1	137.78	-1,034.3	4,204.9	4,491.3	4,484.1	7.24	620.435		
2,559.0	2,537.0	2,498.9	2,498.7	7.0	1.1	137.88	-1,033.7	4,205.2	4,500.6	4,493.2	7.44	604.634		
2,600.0	2,577.1	2,540.5	2,540.4	7.2	1.1	137.94	-1,033.3	4,205.4	4,507.1	4,499.5	7.58	594.222		
2,657.5	2,633.3	2,599.1	2,598.9	7.4	1.1	138.04	-1,032.6	4,205.7	4,516.1	4,508.3	7.78	580.118		
2,700.0	2,674.9	2,642.1	2,641.9	7.6	1.2	138.11	-1,032.0	4,205.9	4,522.8	4,514.9	7.93	570.152		
2,755.9	2,729.6	2,698.7	2,698.5	7.9	1.2	138.20	-1,031.3	4,206.1	4,531.6	4,523.4	8.13	557.507		
2,800.0	2,772.7	2,743.5	2,743.3	8.0	1.2	138.27	-1,030.8	4,206.3	4,538.5	4,530.2	8.28	547.957		
2,854.3	2,825.8	2,798.6	2,798.4	8.3	1.2	138.36	-1,030.1	4,206.5	4,547.0	4,538.5	8.47	536.597		
2,900.0	2,870.5	2,841.7	2,841.5	8.5	1.2	138.43	-1,029.6	4,206.6	4,554.1	4,545.5	8.63	527.476		
2,952.7	2,922.1	2,891.4	2,891.1	8.7	1.2	138.51	-1,029.1	4,206.8	4,562.4	4,553.6	8.82	517.305		
3,000.0	2,968.3	2,935.1	2,934.9	8.9	1.2	138.58	-1,028.6	4,207.0	4,569.9	4,560.9	8.99	508.587		
3,051.2	3,018.4	2,982.3	2,982.1	9.1	1.2	138.66	-1,028.2	4,207.2	4,578.0	4,568.9	9.17	499.468		
3,100.0	3,066.1	3,026.3	3,026.0	9.3	1.3	138.73	-1,027.7	4,207.4	4,585.8	4,576.5	9.34	491.137		
3,149.6	3,114.7	3,070.2	3,070.0	9.5	1.3	138.80	-1,027.3	4,207.6	4,593.8	4,584.3	9.51	482.966		
3,200.0	3,164.0	3,115.4	3,115.2	9.8	1.3	138.87	-1,026.9	4,208.0	4,602.0	4,592.3	9.69	474.987		
3,248.0	3,210.9	3,159.4	3,159.1	10.0	1.3	138.94	-1,026.4	4,208.3	4,609.8	4,599.9	9.86	467.640		
3,300.0	3,261.8	3,207.6	3,207.3	10.2	1.3	139.01	-1,026.0	4,208.7	4,618.3	4,608.2	10.04	459.981		
3,346.4	3,307.2	3,254.2	3,253.9	10.4	1.3	139.09	-1,025.5	4,209.1	4,625.9	4,615.7	10.20	453.349		
3,400.0	3,359.6	3,308.4	3,308.1	10.6	1.3	139.17	-1,024.9	4,209.6	4,634.6	4,624.3	10.39	445.971		
3,444.9	3,403.5	3,356.5	3,356.2	10.8	1.3	139.24	-1,024.4	4,210.0	4,642.0	4,631.4	10.55	439.966		
3,500.0	3,457.4	3,413.9	3,413.6	11.1	1.4	139.33	-1,023.7	4,210.4	4,650.9	4,640.2	10.75	432.840		
3,543.3	3,499.8	3,455.3	3,455.0	11.3	1.4	139.39	-1,023.2	4,210.7	4,658.0	4,647.1	10.90	427.415		
3,600.0	3,555.2	3,508.4	3,508.1	11.5	1.4	139.48	-1,022.5	4,211.1	4,667.2	4,656.1	11.10	420.551		
3,641.7	3,596.0	3,543.3	3,543.1	11.7	1.4	139.53	-1,022.1	4,211.4	4,674.0	4,662.8	11.24	415.657		
3,700.0	3,653.0	3,592.2	3,591.9	11.9	1.4	139.60	-1,021.5	4,211.9	4,683.7	4,672.2	11.45	409.046		
3,740.1	3,692.3	3,632.3	3,632.0	12.1	1.4	139.66	-1,021.0	4,212.4	4,690.4	4,678.8	11.59	404.607		
3,800.0	3,750.8	3,695.0	3,694.7	12.4	1.4	139.75	-1,020.1	4,213.0	4,700.3	4,688.5	11.80	398.184		
3,838.6	3,788.6	3,735.3	3,735.0	12.6	1.4	139.81	-1,019.5	4,213.5	4,706.7	4,694.8	11.94	394.168		
3,900.0	3,848.7	3,799.6	3,799.3	12.8	1.5	139.90	-1,018.6	4,214.1	4,716.9	4,704.7	12.16	387.968		
3,937.0	3,884.9	3,835.3	3,835.0	13.0	1.5	139.95	-1,018.0	4,214.4	4,723.0	4,710.7	12.29	384.335		
4,000.0	3,946.5	3,896.1	3,895.7	13.3	1.5	140.04	-1,017.2	4,215.0	4,733.4	4,720.9	12.51	378.334		
4,035.4	3,981.1	3,926.4	3,926.0	13.4	1.5	140.09	-1,016.8	4,215.3	4,739.2	4,726.6	12.64	375.058		
4,100.0	4,044.3	3,980.6	3,980.3	13.7	1.5	140.16	-1,016.0	4,215.9	4,750.0	4,737.2	12.86	369.263		
4,133.8	4,077.4	4,011.4	4,011.1	13.9	1.5	140.21	-1,015.6	4,216.3	4,755.8	4,742.8	12.98	366.302		
4,200.0	4,142.1	4,081.2	4,080.9	14.2	1.5	140.31	-1,014.6	4,217.2	4,766.9	4,753.7	13.22	360.654		
4,232.3	4,173.7	4,115.4	4,115.0	14.3	1.5	140.35	-1,014.0	4,217.6	4,772.3	4,759.0	13.33	357.968		
4,300.0	4,239.9	4,187.2	4,186.8	14.6	1.6	140.45	-1,012.8	4,218.4	4,783.7	4,770.1	13.57	352.489		
4,330.7	4,270.0	4,220.0	4,219.6	14.7	1.6	140.50	-1,012.2	4,218.8	4,788.8	4,775.1	13.68	350.075		
4,400.0	4,337.7	4,294.4	4,294.0	15.0	1.6	140.60	-1,010.8	4,219.5	4,800.2	4,786.3	13.92	344.724		
4,429.1	4,366.2	4,326.0	4,325.6	15.2	1.6	140.64	-1,010.3	4,219.8	4,805.0	4,791.0	14.03	342.524		
4,500.0	4,435.6	4,402.8	4,402.4	15.5	1.6	140.74	-1,008.8	4,220.5	4,816.7	4,802.4	14.28	337.322		
4,527.5	4,462.5	4,430.7	4,430.3	15.6	1.6	140.78	-1,008.2	4,220.7	4,821.2	4,806.8	14.38	335.345		
4,600.0	4,533.4	4,500.0	4,499.6	15.9	1.7	140.87	-1,007.0	4,221.1	4,833.0	4,818.3	14.63	330.292		
4,626.0	4,558.8	4,524.8	4,524.3	16.0	1.7	140.91	-1,006.7	4,221.2	4,837.2	4,822.5	14.72	328.519		
4,673.6	4,605.3	4,564.3	4,563.8	16.3	1.7	140.96	-1,006.1	4,221.5	4,845.0	4,830.1	14.89	325.351		
4,700.0	4,631.2	4,586.2	4,585.7	16.4	1.7	141.05	-1,005.9	4,221.7	4,849.3	4,834.4	14.96	324.101		
4,724.4	4,655.1	4,608.2	4,607.7	16.4	1.7	141.12	-1,005.6	4,221.8	4,853.1	4,838.1	15.02	323.178		
4,800.0	4,729.5	4,687.7	4,687.2	16.7	1.7	141.35	-1,004.7	4,222.4	4,863.9	4,848.7	15.19	320.271		
4,822.8	4,752.1	4,711.0	4,710.6	16.7	1.7	141.41	-1,004.4	4,222.6	4,866.9	4,851.6	15.23	319.496		
4,900.0	4,828.4	4,787.7	4,787.2	17.0	1.7	141.60	-1,003.6	4,223.1	4,875.7	4,860.4	15.39	316.839		
4,921.2	4,849.5	4,808.4	4,808.0	17.0	1.8	141.64	-1,003.3	4,223.2	4,877.9	4,862.5	15.43	316.196		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,883.5	4,883.1	17.2	1.8	141.77	-1,002.6	4,223.7	4,884.9	4,869.3	15.57	313.753	
5,019.7	4,947.4	4,902.5	4,902.0	17.2	1.8	141.80	-1,002.4	4,223.8	4,886.4	4,870.8	15.60	313.220	
5,100.0	5,027.5	4,985.0	4,984.6	17.4	1.8	141.90	-1,001.7	4,224.4	4,891.3	4,875.6	15.73	310.942	
5,118.1	5,045.6	5,003.5	5,003.1	17.4	1.8	141.92	-1,001.5	4,224.5	4,892.2	4,876.4	15.76	310.492	
5,200.0	5,127.4	5,085.0	5,084.5	17.6	1.8	141.96	-1,000.9	4,224.9	4,895.0	4,879.1	15.87	308.354	
5,216.5	5,143.9	5,101.5	5,101.0	17.6	1.8	141.97	-1,000.7	4,225.0	4,895.3	4,879.5	15.90	307.964	
5,273.4	5,200.8	5,159.8	5,159.3	17.7	1.9	109.29	-1,000.3	4,225.3	4,895.9	4,878.2	17.79	275.243	
5,300.0	5,227.4	5,187.0	5,186.5	17.7	1.9	109.28	-1,000.2	4,225.5	4,896.0	4,878.2	17.83	274.542	
5,314.9	5,242.3	5,202.6	5,202.1	17.7	1.9	109.28	-1,000.1	4,225.6	4,896.0	4,878.2	17.86	274.109	
5,400.0	5,327.4	5,299.7	5,299.2	17.8	1.9	109.28	-999.5	4,225.9	4,896.1	4,878.1	18.03	271.624	
5,413.4	5,340.8	5,312.7	5,312.2	17.9	1.9	109.27	-999.4	4,225.9	4,896.1	4,878.1	18.05	271.242	
5,426.2	5,353.6	5,325.1	5,324.6	17.9	1.9	109.27	-999.3	4,225.9	4,896.1	4,878.1	18.08	270.876	
5,500.0	5,427.4	5,396.6	5,396.1	18.0	1.9	109.27	-999.0	4,226.1	4,896.2	4,877.9	18.22	268.795	
5,511.8	5,439.2	5,409.9	5,409.4	18.0	1.9	109.27	-998.9	4,226.1	4,896.2	4,877.9	18.24	268.456	
5,600.0	5,527.4	5,515.2	5,514.7	18.1	2.0	109.26	-998.3	4,226.1	4,896.0	4,877.6	18.41	265.930	
5,610.2	5,537.6	5,527.2	5,526.7	18.1	2.0	109.26	-998.2	4,226.1	4,896.0	4,877.6	18.43	265.642	
5,700.0	5,627.4	5,621.2	5,620.7	18.3	2.0	109.25	-997.5	4,225.9	4,895.5	4,876.9	18.60	263.180	
5,708.6	5,636.0	5,627.7	5,627.2	18.3	2.0	109.25	-997.5	4,225.8	4,895.5	4,876.9	18.62	262.954	
5,800.0	5,727.4	5,700.0	5,699.5	18.4	2.0	109.25	-997.0	4,225.9	4,895.3	4,876.5	18.79	260.588	
5,801.1	5,728.5	5,700.0	5,699.5	18.4	2.0	109.25	-997.0	4,225.9	4,895.3	4,876.5	18.79	260.563	
5,807.1	5,734.5	5,703.8	5,703.3	18.4	2.0	109.25	-997.0	4,225.9	4,895.3	4,876.5	18.80	260.423	
5,900.0	5,827.4	5,837.8	5,837.3	18.6	2.0	109.25	-996.9	4,225.4	4,895.0	4,876.1	18.96	258.202	
5,905.5	5,832.9	5,846.8	5,846.3	18.6	2.0	109.25	-996.9	4,225.4	4,895.0	4,876.0	18.97	258.073	
6,000.0	5,927.4	5,964.2	5,963.7	18.7	2.0	109.26	-997.0	4,223.8	4,893.8	4,874.7	19.13	255.845	
6,003.9	5,931.3	5,968.2	5,967.7	18.7	2.0	109.26	-997.0	4,223.8	4,893.8	4,874.6	19.13	255.752	
6,100.0	6,027.4	6,064.5	6,064.0	18.9	2.0	109.26	-997.1	4,222.4	4,892.5	4,873.2	19.30	253.500	
6,102.3	6,029.7	6,066.9	6,066.3	18.9	2.0	109.26	-997.1	4,222.3	4,892.4	4,873.1	19.30	253.445	
6,200.0	6,127.4	6,148.6	6,148.1	19.0	2.0	109.27	-997.2	4,221.2	4,891.2	4,871.8	19.47	251.208	
6,200.8	6,128.2	6,149.2	6,148.7	19.0	2.0	109.27	-997.2	4,221.2	4,891.2	4,871.8	19.47	251.190	
6,299.2	6,226.6	6,227.2	6,226.6	19.2	2.1	109.27	-997.3	4,220.5	4,890.5	4,870.8	19.64	249.010	
6,301.4	6,228.8	6,229.1	6,228.5	19.2	2.1	109.27	-997.3	4,220.5	4,890.4	4,870.8	19.64	248.962	
6,350.0	6,277.4	6,270.9	6,270.3	19.3	2.1	19.33	-997.5	4,220.2	4,888.6	4,870.7	17.96	272.195	
6,397.6	6,324.7	6,300.0	6,299.5	19.3	2.1	19.47	-997.6	4,220.1	4,883.9	4,865.9	18.01	271.156	
6,400.0	6,327.1	6,312.3	6,311.7	19.3	2.1	19.48	-997.7	4,220.0	4,883.6	4,865.6	18.02	271.071	
6,450.0	6,376.3	6,350.4	6,349.9	19.3	2.0	19.74	-998.0	4,219.8	4,875.4	4,857.4	18.08	269.721	
6,496.0	6,421.1	6,385.1	6,384.5	19.3	2.0	20.06	-998.3	4,219.7	4,865.1	4,847.0	18.12	268.509	
6,500.0	6,424.9	6,388.0	6,387.5	19.3	2.0	20.09	-998.4	4,219.7	4,864.1	4,846.0	18.12	268.415	
6,550.0	6,472.4	6,428.4	6,427.9	19.3	2.0	20.57	-998.9	4,219.6	4,849.8	4,831.6	18.14	267.374	
6,594.5	6,513.8	6,465.0	6,464.5	19.3	2.0	21.10	-999.5	4,219.6	4,834.5	4,816.3	18.12	266.780	
6,600.0	6,518.8	6,469.5	6,468.9	19.3	2.0	21.18	-999.5	4,219.6	4,832.4	4,814.3	18.12	266.736	
6,650.0	6,563.8	6,510.6	6,510.0	19.3	2.0	21.92	-1,000.2	4,219.5	4,812.0	4,794.0	18.05	266.554	
6,692.9	6,601.1	6,548.0	6,547.5	19.2	2.0	22.70	-1,000.9	4,219.5	4,792.3	4,774.3	17.97	266.721	
6,700.0	6,607.1	6,554.1	6,553.5	19.2	2.0	22.85	-1,001.0	4,219.5	4,788.8	4,770.9	17.95	266.788	
6,750.0	6,648.6	6,595.7	6,595.2	19.2	2.0	23.95	-1,001.8	4,219.4	4,762.8	4,745.0	17.81	267.406	
6,791.3	6,681.4	6,637.7	6,637.1	19.1	2.0	25.07	-1,002.8	4,219.3	4,739.3	4,721.6	17.69	267.967	
6,800.0	6,688.1	6,646.5	6,645.9	19.1	2.0	25.33	-1,003.0	4,219.2	4,734.1	4,716.5	17.66	268.109	
6,850.0	6,725.3	6,695.3	6,694.7	19.1	2.0	26.99	-1,004.2	4,218.9	4,702.8	4,685.3	17.50	268.749	
6,889.7	6,753.2	6,751.4	6,750.7	19.0	2.0	28.67	-1,005.9	4,218.1	4,676.2	4,658.8	17.41	268.640	
6,900.0	6,760.1	6,765.8	6,765.2	19.0	2.0	29.15	-1,006.4	4,217.8	4,669.0	4,651.7	17.39	268.552	
6,950.0	6,792.3	6,813.4	6,812.7	19.0	2.0	31.63	-1,008.3	4,216.6	4,632.9	4,615.6	17.32	267.449	
6,988.2	6,815.1	6,832.9	6,832.2	18.9	2.0	33.72	-1,009.1	4,216.1	4,604.0	4,586.6	17.33	265.647	
7,000.0	6,821.8	6,838.6	6,837.9	18.9	2.0	34.43	-1,009.4	4,215.9	4,594.8	4,577.5	17.34	264.913	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
7,050.0	6,848.3	6,861.2	6,860.4	18.9	2.0	37.79	-1,010.4	4,215.3	4,555.0	4,537.4	17.53	259.905		
7,086.6	6,865.9	6,876.0	6,875.2	18.9	2.0	40.67	-1,011.1	4,214.9	4,524.8	4,507.0	17.79	254.288		
7,100.0	6,871.9	6,881.0	6,880.2	18.9	2.0	41.83	-1,011.4	4,214.7	4,513.6	4,495.7	17.91	251.961		
7,150.0	6,892.3	6,900.0	6,899.2	18.8	2.0	46.72	-1,012.3	4,214.2	4,470.9	4,452.4	18.54	241.116		
7,185.0	6,904.7	6,900.0	6,899.2	18.8	2.0	50.48	-1,012.3	4,214.2	4,440.4	4,421.3	19.10	232.433		
7,200.0	6,909.5	6,909.2	6,908.4	18.9	2.0	52.44	-1,012.8	4,214.0	4,427.1	4,407.8	19.38	228.391		
7,250.0	6,923.4	6,917.8	6,916.9	19.3	2.0	59.24	-1,013.2	4,213.7	4,382.4	4,362.0	20.40	214.870		
7,283.4	6,930.8	6,922.2	6,921.4	19.8	2.0	64.40	-1,013.4	4,213.6	4,352.1	4,331.0	21.12	206.096		
7,300.0	6,933.9	6,924.1	6,923.2	20.0	2.0	67.13	-1,013.5	4,213.6	4,337.1	4,315.6	21.47	202.021		
7,350.0	6,940.9	6,928.0	6,927.2	20.8	2.0	75.97	-1,013.7	4,213.5	4,291.2	4,268.7	22.50	190.746		
7,381.9	6,943.6	6,929.3	6,928.5	21.4	2.0	81.94	-1,013.8	4,213.4	4,261.8	4,238.7	23.14	184.186		
7,400.0	6,944.5	6,929.7	6,928.8	21.7	2.0	85.40	-1,013.8	4,213.4	4,245.1	4,221.6	23.51	180.547		
7,432.4	6,945.0	6,929.4	6,928.6	22.3	2.0	91.59	-1,013.8	4,213.4	4,215.2	4,191.0	24.27	173.661		
7,480.3	6,944.6	6,928.4	6,927.5	23.2	2.0	91.55	-1,013.7	4,213.5	4,171.1	4,145.9	25.16	165.760		
7,500.0	6,944.4	6,927.9	6,927.0	23.6	2.0	91.53	-1,013.7	4,213.5	4,153.0	4,127.5	25.53	162.670		
7,578.7	6,943.7	6,926.1	6,925.2	25.2	2.0	91.47	-1,013.6	4,213.5	4,080.7	4,053.6	27.11	150.512		
7,600.0	6,943.6	6,925.6	6,924.7	25.6	2.0	91.45	-1,013.6	4,213.5	4,061.2	4,033.7	27.54	147.467		
7,677.1	6,942.9	6,923.8	6,922.9	27.3	2.0	91.39	-1,013.5	4,213.6	3,990.7	3,961.5	29.20	136.679		
7,700.0	6,942.7	6,923.3	6,922.4	27.8	2.0	91.37	-1,013.5	4,213.6	3,969.8	3,940.1	29.69	133.716		
7,775.6	6,942.1	6,921.5	6,920.6	29.5	2.0	91.31	-1,013.4	4,213.6	3,901.0	3,869.7	31.39	124.269		
7,800.0	6,941.9	6,920.9	6,920.0	30.1	2.0	91.29	-1,013.4	4,213.7	3,878.9	3,846.9	31.94	121.432		
7,874.0	6,941.3	6,919.1	6,918.2	31.8	2.0	91.22	-1,013.3	4,213.7	3,811.9	3,778.2	33.68	113.195		
7,900.0	6,941.1	6,918.5	6,917.6	32.4	2.0	91.20	-1,013.2	4,213.7	3,788.4	3,754.1	34.28	110.500		
7,972.4	6,940.4	6,916.7	6,915.8	34.2	2.0	91.14	-1,013.1	4,213.8	3,723.1	3,687.1	36.03	103.334		
8,000.0	6,940.2	6,916.0	6,915.1	34.9	2.0	91.11	-1,013.1	4,213.8	3,698.3	3,661.7	36.69	100.787		
8,070.8	6,939.6	6,914.2	6,913.4	36.6	2.0	91.05	-1,013.0	4,213.8	3,634.9	3,596.4	38.44	94.554		
8,100.0	6,939.4	6,913.5	6,912.6	37.3	2.0	91.03	-1,013.0	4,213.9	3,608.9	3,569.7	39.16	92.154		
8,169.3	6,938.8	6,911.7	6,910.9	39.1	2.0	90.96	-1,012.9	4,213.9	3,547.2	3,506.3	40.90	86.725		
8,200.0	6,938.5	6,910.9	6,910.1	39.8	2.0	90.94	-1,012.9	4,213.9	3,519.9	3,478.3	41.67	84.465		
8,267.7	6,938.0	6,909.2	6,908.3	41.6	2.0	90.88	-1,012.8	4,214.0	3,460.1	3,416.7	43.40	79.726		
8,300.0	6,937.7	6,908.3	6,907.5	42.4	2.0	90.85	-1,012.7	4,214.0	3,431.6	3,387.4	44.22	77.598		
8,366.1	6,937.2	6,906.6	6,905.7	44.1	2.0	90.78	-1,012.6	4,214.0	3,373.6	3,327.6	45.93	73.451		
8,400.0	6,936.9	6,900.0	6,899.2	45.0	2.0	90.55	-1,012.3	4,214.2	3,343.9	3,297.1	46.80	71.455		
8,464.5	6,936.3	6,900.0	6,899.2	46.6	2.0	90.55	-1,012.3	4,214.2	3,287.7	3,239.2	48.48	67.813		
8,500.0	6,936.0	6,900.0	6,899.2	47.6	2.0	90.55	-1,012.3	4,214.2	3,257.0	3,207.6	49.41	65.922		
8,563.0	6,935.5	6,900.0	6,899.2	49.2	2.0	90.55	-1,012.3	4,214.2	3,202.6	3,151.5	51.06	62.718		
8,600.0	6,935.2	6,900.0	6,899.2	50.2	2.0	90.55	-1,012.3	4,214.2	3,170.8	3,118.7	52.04	60.933		
8,661.4	6,934.7	6,900.0	6,899.2	51.8	2.0	90.55	-1,012.3	4,214.2	3,118.3	3,064.6	53.66	58.107		
8,700.0	6,934.4	6,900.0	6,899.2	52.8	2.0	90.55	-1,012.3	4,214.2	3,085.4	3,030.7	54.69	56.420		
8,759.8	6,933.9	6,900.0	6,899.2	54.4	2.0	90.55	-1,012.3	4,214.2	3,034.8	2,978.5	56.28	53.922		
8,800.0	6,933.5	6,893.9	6,893.1	55.5	2.0	90.34	-1,012.0	4,214.4	3,001.0	2,943.6	57.35	52.331		
8,858.2	6,933.0	6,892.0	6,891.2	57.1	2.0	90.27	-1,011.9	4,214.4	2,952.2	2,893.3	58.90	50.118		
8,900.0	6,932.7	6,890.7	6,889.9	58.2	2.0	90.23	-1,011.8	4,214.5	2,917.5	2,857.4	60.02	48.607		
8,956.7	6,932.2	6,888.9	6,888.1	59.7	2.0	90.16	-1,011.7	4,214.5	2,870.6	2,809.1	61.54	46.643		
9,000.0	6,931.8	6,887.5	6,886.7	60.9	2.0	90.12	-1,011.7	4,214.6	2,835.0	2,772.3	62.71	45.209		
9,055.1	6,931.4	6,885.8	6,885.0	62.4	2.0	90.05	-1,011.6	4,214.6	2,790.1	2,725.9	64.20	43.463		
9,100.0	6,931.0	6,884.3	6,883.5	63.6	2.0	90.00	-1,011.5	4,214.7	2,753.8	2,688.4	65.41	42.102		
9,153.5	6,930.6	6,882.6	6,881.8	65.0	2.0	89.94	-1,011.4	4,214.7	2,710.8	2,644.0	66.86	40.547		
9,200.0	6,930.2	6,881.2	6,880.4	66.3	2.0	89.89	-1,011.4	4,214.7	2,673.8	2,605.7	68.11	39.255		
9,251.9	6,929.7	6,879.5	6,878.7	67.7	2.0	89.83	-1,011.3	4,214.8	2,632.8	2,563.3	69.52	37.868		
9,300.0	6,929.3	6,878.0	6,877.2	69.0	2.0	89.78	-1,011.2	4,214.8	2,595.2	2,524.4	70.83	36.640		
9,350.4	6,928.9	6,876.4	6,875.6	70.4	2.0	89.72	-1,011.1	4,214.9	2,556.2	2,484.0	72.20	35.404		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,400.0	6,928.5	6,874.8	6,874.1	71.7	2.0	89.67	-1,011.1	4,214.9	2,518.1	2,444.5	73.55	34.236	
9,448.8	6,928.1	6,873.3	6,872.5	73.0	2.0	89.62	-1,011.0	4,215.0	2,481.1	2,406.2	74.88	33.133	
9,500.0	6,927.7	6,871.7	6,870.9	74.4	2.0	89.56	-1,010.9	4,215.0	2,442.6	2,366.4	76.28	32.023	
9,547.2	6,927.3	6,870.2	6,869.4	75.7	2.0	89.51	-1,010.8	4,215.0	2,407.6	2,330.1	77.57	31.039	
9,600.0	6,926.8	6,868.5	6,867.7	77.2	2.0	89.45	-1,010.7	4,215.1	2,369.0	2,290.0	79.01	29.983	
9,645.6	6,926.4	6,867.1	6,866.3	78.4	2.0	89.40	-1,010.7	4,215.1	2,336.1	2,255.8	80.26	29.106	
9,700.0	6,926.0	6,865.4	6,864.6	79.9	2.0	89.34	-1,010.6	4,215.2	2,297.4	2,215.6	81.75	28.103	
9,744.1	6,925.6	6,864.0	6,863.2	81.1	2.0	89.29	-1,010.5	4,215.2	2,266.5	2,183.5	82.96	27.321	
9,800.0	6,925.2	6,862.2	6,861.5	82.6	2.0	89.23	-1,010.4	4,215.3	2,227.9	2,143.4	84.49	26.369	
9,842.5	6,924.8	6,860.9	6,860.1	83.8	2.0	89.18	-1,010.4	4,215.3	2,199.1	2,113.5	85.66	25.673	
9,900.0	6,924.3	6,859.1	6,858.3	85.4	2.0	89.12	-1,010.3	4,215.4	2,160.9	2,073.6	87.24	24.770	
9,940.9	6,924.0	6,857.8	6,857.0	86.5	2.0	89.07	-1,010.2	4,215.4	2,134.2	2,045.8	88.36	24.152	
10,000.0	6,923.5	6,856.0	6,855.2	88.1	2.0	89.01	-1,010.2	4,215.4	2,096.4	2,006.4	89.99	23.297	
10,039.3	6,923.2	6,854.7	6,854.0	89.2	2.0	88.96	-1,010.1	4,215.5	2,071.8	1,980.8	91.07	22.750	
10,100.0	6,922.6	6,852.8	6,852.1	90.9	2.0	88.89	-1,010.0	4,215.5	2,034.9	1,942.1	92.74	21.941	
10,137.8	6,922.3	6,851.6	6,850.9	91.9	2.0	88.85	-1,010.0	4,215.6	2,012.4	1,918.6	93.78	21.458	
10,200.0	6,921.8	6,849.7	6,848.9	93.7	2.0	88.78	-1,009.9	4,215.6	1,976.4	1,880.9	95.50	20.696	
10,236.2	6,921.5	6,848.6	6,847.8	94.7	2.0	88.74	-1,009.8	4,215.6	1,956.1	1,859.6	96.49	20.272	
10,300.0	6,921.0	6,846.6	6,845.8	96.4	2.0	88.67	-1,009.7	4,215.7	1,921.4	1,823.2	98.25	19.556	
10,334.6	6,920.7	6,845.5	6,844.7	97.4	2.0	88.64	-1,009.7	4,215.7	1,903.2	1,804.0	99.21	19.184	
10,400.0	6,920.1	6,843.4	6,842.7	99.2	2.0	88.56	-1,009.6	4,215.8	1,870.1	1,769.1	101.01	18.514	
10,433.0	6,919.9	6,842.4	6,841.7	100.1	2.0	88.53	-1,009.5	4,215.8	1,854.1	1,752.1	101.93	18.190	
10,500.0	6,919.3	6,840.3	6,839.6	101.9	2.0	88.45	-1,009.4	4,215.9	1,822.9	1,719.1	103.77	17.566	
10,531.5	6,919.0	6,839.3	6,838.6	102.8	2.0	88.42	-1,009.4	4,215.9	1,808.9	1,704.3	104.64	17.286	
10,600.0	6,918.5	6,837.2	6,836.5	104.7	2.0	88.35	-1,009.3	4,216.0	1,780.0	1,673.5	106.54	16.708	
10,629.9	6,918.2	6,836.3	6,835.5	105.5	2.0	88.31	-1,009.3	4,216.0	1,768.1	1,660.7	107.36	16.468	
10,700.0	6,917.6	6,834.1	6,833.4	107.5	2.0	88.24	-1,009.2	4,216.0	1,741.8	1,632.5	109.30	15.936	
10,728.3	6,917.4	6,833.2	6,832.5	108.3	2.0	88.20	-1,009.1	4,216.1	1,731.9	1,621.8	110.09	15.732	
10,800.0	6,916.8	6,831.0	6,830.2	110.3	2.0	88.13	-1,009.0	4,216.1	1,708.6	1,596.6	112.07	15.246	
10,826.7	6,916.6	6,830.1	6,829.4	111.0	2.0	88.10	-1,009.0	4,216.1	1,700.6	1,587.8	112.81	15.075	
10,900.0	6,916.0	6,827.9	6,827.2	113.0	2.0	88.02	-1,008.9	4,216.2	1,680.7	1,565.9	114.84	14.636	
10,925.2	6,915.8	6,827.1	6,826.4	113.7	2.0	87.99	-1,008.9	4,216.2	1,674.6	1,559.0	115.53	14.494	
11,000.0	6,915.1	6,824.8	6,824.1	115.8	2.0	87.91	-1,008.8	4,216.3	1,658.4	1,540.8	117.60	14.101	
11,023.6	6,914.9	6,824.0	6,823.3	116.5	2.0	87.88	-1,008.7	4,216.3	1,654.0	1,535.7	118.26	13.986	
11,100.0	6,914.3	6,821.7	6,821.0	118.6	2.0	87.80	-1,008.6	4,216.4	1,641.8	1,521.5	120.37	13.640	
11,122.0	6,914.1	6,821.0	6,820.3	119.2	2.0	87.77	-1,008.6	4,216.4	1,639.0	1,518.0	120.98	13.547	
11,200.0	6,913.5	6,818.6	6,817.9	121.4	2.0	87.69	-1,008.5	4,216.5	1,631.3	1,508.1	123.14	13.247	
11,220.4	6,913.3	6,818.0	6,817.2	121.9	2.0	87.67	-1,008.5	4,216.5	1,629.9	1,506.1	123.71	13.175	
11,300.0	6,912.6	6,815.5	6,814.8	124.1	2.0	87.58	-1,008.4	4,216.5	1,626.8	1,500.9	125.91	12.920	
11,318.9	6,912.5	6,814.9	6,814.2	124.7	2.0	87.56	-1,008.3	4,216.6	1,626.6	1,500.2	126.44	12.865	
11,323.3	6,912.4	6,814.8	6,814.1	124.8	2.0	87.56	-1,008.3	4,216.6	1,626.6	1,500.1	126.56	12.853 CC	
11,400.0	6,911.8	6,812.4	6,811.7	126.9	2.0	87.47	-1,008.2	4,216.6	1,628.4	1,499.7	128.68	12.654 ES	
11,417.3	6,911.6	6,811.9	6,811.2	127.4	2.0	87.45	-1,008.2	4,216.6	1,629.3	1,500.2	129.16	12.614	
11,500.0	6,911.0	6,809.3	6,808.6	129.7	2.0	87.36	-1,008.1	4,216.7	1,636.2	1,504.7	131.46	12.447	
11,515.7	6,910.8	6,808.8	6,808.1	130.2	2.0	87.35	-1,008.1	4,216.7	1,637.9	1,506.0	131.89	12.419	
11,600.0	6,910.1	6,800.0	6,799.3	132.5	2.0	87.04	-1,007.7	4,217.0	1,650.0	1,515.8	134.20	12.295	
11,614.1	6,910.0	6,800.0	6,799.3	132.9	2.0	87.04	-1,007.7	4,217.0	1,652.4	1,517.8	134.60	12.277	
11,700.0	6,909.3	6,800.0	6,799.3	135.3	2.0	87.04	-1,007.7	4,217.0	1,669.6	1,532.6	136.99	12.188	
11,712.6	6,909.2	6,800.0	6,799.3	135.6	2.0	87.04	-1,007.7	4,217.0	1,672.5	1,535.2	137.34	12.178	
11,800.0	6,908.5	6,800.0	6,799.3	138.1	2.0	87.04	-1,007.7	4,217.0	1,695.0	1,555.2	139.77	12.127	
11,811.0	6,908.4	6,800.0	6,799.3	138.4	2.0	87.04	-1,007.7	4,217.0	1,698.1	1,558.0	140.08	12.123	
11,900.0	6,907.6	6,800.0	6,799.3	140.9	2.0	87.04	-1,007.7	4,217.0	1,725.7	1,583.2	142.55	12.106	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,909.4	6,907.5	6,800.0	6,799.3	141.1	2.0	87.04	-1,007.7	4,217.0	1,728.9	1,586.1	142.82	12.106 SF	
12,000.0	6,906.8	6,800.0	6,799.3	143.6	2.0	87.04	-1,007.7	4,217.0	1,761.6	1,616.3	145.34	12.121	
12,007.8	6,906.7	6,800.0	6,799.3	143.9	2.0	87.04	-1,007.7	4,217.0	1,764.7	1,619.1	145.56	12.123	
12,100.0	6,905.9	6,800.0	6,799.3	146.4	2.0	87.04	-1,007.7	4,217.0	1,802.4	1,654.3	148.13	12.168	
12,106.3	6,905.9	6,800.0	6,799.3	146.6	2.0	87.04	-1,007.7	4,217.0	1,805.1	1,656.8	148.30	12.172	
12,200.0	6,905.1	6,800.0	6,799.3	149.2	2.0	87.04	-1,007.7	4,217.0	1,847.7	1,696.7	150.91	12.243	
12,204.7	6,905.1	6,800.0	6,799.3	149.4	2.0	87.04	-1,007.7	4,217.0	1,849.9	1,698.8	151.05	12.247	
12,300.0	6,904.3	6,800.0	6,799.3	152.0	2.0	87.04	-1,007.7	4,217.0	1,897.1	1,743.4	153.70	12.343	
12,303.1	6,904.3	6,800.0	6,799.3	152.1	2.0	87.04	-1,007.7	4,217.0	1,898.7	1,744.9	153.79	12.346	
12,400.0	6,903.4	6,800.0	6,799.3	154.8	2.0	87.04	-1,007.7	4,217.0	1,950.5	1,794.0	156.49	12.464	
12,401.5	6,903.4	6,800.0	6,799.3	154.8	2.0	87.04	-1,007.7	4,217.0	1,951.3	1,794.8	156.53	12.466	
12,500.0	6,902.6	6,782.9	6,782.2	157.6	2.0	86.43	-1,007.0	4,217.4	2,007.3	1,848.1	159.19	12.609	
12,598.4	6,901.8	6,780.7	6,780.0	160.3	2.0	86.36	-1,006.9	4,217.5	2,066.4	1,904.5	161.92	12.762	
12,600.0	6,901.8	6,780.7	6,780.0	160.4	2.0	86.36	-1,006.9	4,217.5	2,067.4	1,905.5	161.97	12.764	
12,696.8	6,901.0	6,778.5	6,777.9	163.1	2.0	86.28	-1,006.9	4,217.5	2,128.5	1,963.9	164.65	12.927	
12,700.0	6,900.9	6,778.5	6,777.8	163.2	2.0	86.28	-1,006.8	4,217.5	2,130.6	1,965.8	164.74	12.933	
12,795.2	6,900.1	6,776.5	6,775.8	165.8	2.0	86.21	-1,006.8	4,217.6	2,193.3	2,025.9	167.39	13.103	
12,800.0	6,900.1	6,776.4	6,775.7	166.0	2.0	86.20	-1,006.8	4,217.6	2,196.5	2,028.9	167.52	13.112	
12,893.7	6,899.3	6,774.4	6,773.8	168.6	2.0	86.14	-1,006.7	4,217.6	2,260.4	2,090.3	170.12	13.287	
12,900.0	6,899.3	6,774.3	6,773.6	168.8	2.0	86.13	-1,006.7	4,217.6	2,264.8	2,094.5	170.29	13.300	
12,992.1	6,898.5	6,772.4	6,771.8	171.3	2.0	86.07	-1,006.6	4,217.7	2,329.8	2,157.0	172.85	13.479	
13,000.0	6,898.4	6,772.3	6,771.6	171.6	2.0	86.06	-1,006.6	4,217.7	2,335.5	2,162.4	173.07	13.494	
13,090.5	6,897.7	6,770.5	6,769.8	174.1	2.0	86.00	-1,006.5	4,217.7	2,401.3	2,225.7	175.58	13.676	
13,100.0	6,897.6	6,770.3	6,769.6	174.4	2.0	85.99	-1,006.5	4,217.7	2,408.2	2,232.4	175.85	13.695	
13,188.9	6,896.9	6,768.6	6,767.9	176.8	2.0	85.93	-1,006.5	4,217.7	2,474.5	2,296.2	178.32	13.877	
13,200.0	6,896.8	6,768.4	6,767.7	177.2	2.0	85.92	-1,006.5	4,217.7	2,482.9	2,304.2	178.62	13.900	
13,287.4	6,896.0	6,766.7	6,766.0	179.6	2.0	85.86	-1,006.4	4,217.8	2,549.5	2,368.4	181.05	14.082	
13,300.0	6,895.9	6,766.5	6,765.8	180.0	2.0	85.86	-1,006.4	4,217.8	2,559.2	2,377.8	181.40	14.108	
13,385.8	6,895.2	6,764.9	6,764.2	182.4	2.0	85.80	-1,006.3	4,217.8	2,626.0	2,442.2	183.78	14.289	
13,400.0	6,895.1	6,764.6	6,764.0	182.7	2.0	85.79	-1,006.3	4,217.8	2,637.2	2,453.0	184.18	14.319	
13,484.2	6,894.4	6,763.1	6,762.4	185.1	2.0	85.74	-1,006.3	4,217.9	2,703.9	2,517.4	186.51	14.497	
13,500.0	6,894.3	6,762.8	6,762.2	185.5	2.0	85.73	-1,006.3	4,217.9	2,716.6	2,529.6	186.95	14.531	
13,582.6	6,893.6	6,761.3	6,760.7	187.9	2.0	85.68	-1,006.2	4,217.9	2,783.2	2,593.9	189.25	14.707	
13,600.0	6,893.4	6,761.0	6,760.4	188.3	2.0	85.67	-1,006.2	4,217.9	2,797.3	2,607.5	189.73	14.743	
13,681.1	6,892.8	6,759.6	6,759.0	190.6	2.0	85.62	-1,006.2	4,217.9	2,863.6	2,671.6	191.98	14.916	
13,700.0	6,892.6	6,759.3	6,758.7	191.1	2.0	85.60	-1,006.1	4,217.9	2,879.2	2,686.7	192.51	14.956	
13,779.5	6,891.9	6,757.9	6,757.3	193.4	2.0	85.56	-1,006.1	4,218.0	2,945.1	2,750.4	194.71	15.125	
13,800.0	6,891.8	6,757.6	6,757.0	193.9	2.0	85.55	-1,006.1	4,218.0	2,962.2	2,766.9	195.28	15.169	
13,877.9	6,891.1	6,756.3	6,755.7	196.1	2.0	85.50	-1,006.0	4,218.0	3,027.6	2,830.2	197.45	15.334	
13,900.0	6,890.9	6,755.9	6,755.3	196.7	2.0	85.49	-1,006.0	4,218.0	3,046.2	2,848.2	198.06	15.380	
13,976.3	6,890.3	6,754.7	6,754.1	198.9	2.0	85.44	-1,006.0	4,218.0	3,111.0	2,910.9	200.18	15.541	
14,000.0	6,890.1	6,754.3	6,753.7	199.5	2.0	85.43	-1,006.0	4,218.0	3,131.2	2,930.4	200.84	15.591	
14,074.8	6,889.5	6,753.1	6,752.5	201.6	2.0	85.39	-1,005.9	4,218.1	3,195.3	2,992.4	202.91	15.747	
14,100.0	6,889.3	6,752.7	6,752.1	202.3	2.0	85.37	-1,005.9	4,218.1	3,217.1	3,013.4	203.61	15.800	
14,173.2	6,888.7	6,751.6	6,750.9	204.4	2.0	85.33	-1,005.9	4,218.1	3,280.4	3,074.8	205.64	15.952	
14,200.0	6,888.4	6,751.2	6,750.5	205.1	2.0	85.32	-1,005.9	4,218.1	3,303.7	3,097.3	206.39	16.007	
14,271.6	6,887.8	6,750.1	6,749.4	207.1	2.0	85.28	-1,005.8	4,218.1	3,366.2	3,157.8	208.38	16.154	
14,300.0	6,887.6	6,749.6	6,749.0	207.9	2.0	85.27	-1,005.8	4,218.1	3,391.1	3,181.9	209.17	16.212	
14,370.0	6,887.0	6,748.6	6,747.9	209.9	2.0	85.23	-1,005.8	4,218.1	3,452.7	3,241.6	211.11	16.355	
14,400.0	6,886.8	6,748.1	6,747.5	210.7	2.0	85.21	-1,005.8	4,218.1	3,479.1	3,267.2	211.94	16.415	
14,468.5	6,886.2	6,747.1	6,746.5	212.6	2.0	85.18	-1,005.7	4,218.2	3,539.8	3,325.9	213.84	16.553	
14,500.0	6,885.9	6,746.7	6,746.0	213.5	2.0	85.16	-1,005.7	4,218.2	3,567.8	3,353.1	214.72	16.616	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,566.9	6,885.4	6,745.7	6,745.1	215.4	2.0	85.13	-1,005.7	4,218.2	3,627.5	3,410.9	216.58	16.749	
14,600.0	6,885.1	6,745.2	6,744.6	216.3	2.0	85.11	-1,005.7	4,218.2	3,657.1	3,439.6	217.50	16.814	
14,613.0	6,885.0	6,745.0	6,744.4	216.7	2.0	85.10	-1,005.7	4,218.2	3,668.7	3,450.9	217.86	16.840	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	112.80	-1,256.7	2,990.1	3,243.6				
98.4	98.4	71.1	71.1	0.1	0.0	112.79	-1,256.6	2,990.1	3,243.4	3,243.3	0.12	N/A	
100.0	100.0	72.7	72.7	0.1	0.0	112.79	-1,256.6	2,990.1	3,243.4	3,243.3	0.13	N/A	
196.8	196.8	173.2	173.2	0.3	0.2	112.79	-1,256.2	2,990.1	3,243.3	3,242.8	0.48	6,806.167	
200.0	200.0	176.5	176.5	0.3	0.2	112.79	-1,256.2	2,990.1	3,243.3	3,242.8	0.49	6,633.565	
295.3	295.3	278.7	278.7	0.5	0.3	112.79	-1,255.9	2,989.9	3,243.0	3,242.2	0.80	4,071.260	
300.0	300.0	283.8	283.8	0.5	0.3	112.79	-1,255.9	2,989.9	3,243.0	3,242.2	0.81	3,999.706	
393.7	393.7	373.4	373.4	0.7	0.3	112.79	-1,255.9	2,989.5	3,242.6	3,241.5	1.08	3,003.298	
400.0	400.0	379.2	379.2	0.8	0.3	112.79	-1,255.9	2,989.5	3,242.6	3,241.5	1.10	2,954.278	
492.1	492.1	465.4	465.4	1.0	0.4	112.79	-1,256.0	2,989.3	3,242.4	3,241.1	1.35	2,395.225	
500.0	500.0	472.7	472.7	1.0	0.4	112.79	-1,256.0	2,989.3	3,242.4	3,241.0	1.38	2,357.359	
590.5	590.5	567.3	567.3	1.2	0.4	112.79	-1,256.1	2,989.1	3,242.3	3,240.7	1.62	1,997.632	
600.0	600.0	577.7	577.7	1.2	0.4	112.79	-1,256.1	2,989.1	3,242.3	3,240.7	1.65	1,966.439	
689.0	689.0	673.1	673.1	1.4	0.5	112.80	-1,256.2	2,988.7	3,242.0	3,240.1	1.89	1,711.523	
700.0	700.0	684.8	684.8	1.4	0.5	112.80	-1,256.2	2,988.7	3,242.0	3,240.0	1.92	1,684.356	
787.4	787.4	774.5	774.5	1.6	0.5	112.80	-1,256.4	2,988.1	3,241.5	3,239.4	2.16	1,500.524	
800.0	800.0	787.3	787.3	1.7	0.6	112.81	-1,256.4	2,988.0	3,241.4	3,239.3	2.19	1,477.360	
885.8	885.8	871.8	871.7	1.9	0.6	112.82	-1,256.8	2,987.3	3,241.0	3,238.6	2.42	1,338.590	
900.0	900.0	885.6	885.6	1.9	0.6	112.82	-1,256.9	2,987.2	3,240.9	3,238.5	2.46	1,318.378	
984.2	984.2	973.5	973.5	2.1	0.6	112.83	-1,257.4	2,986.5	3,240.5	3,237.8	2.68	1,209.241	
1,000.0	1,000.0	990.1	990.1	2.1	0.6	112.83	-1,257.4	2,986.4	3,240.4	3,237.7	2.72	1,190.797	
1,082.7	1,082.7	1,082.4	1,082.4	2.3	0.7	112.84	-1,257.7	2,985.5	3,239.8	3,236.8	2.94	1,101.786	
1,100.0	1,100.0	1,101.7	1,101.7	2.3	0.7	112.85	-1,257.7	2,985.3	3,239.6	3,236.6	2.99	1,084.800	
1,150.0	1,150.0	1,152.9	1,152.9	2.4	0.7	112.85	-1,257.9	2,984.7	3,239.1	3,236.0	3.12	1,039.347	
1,181.1	1,181.1	1,184.8	1,184.7	2.5	0.7	145.55	-1,258.0	2,984.3	3,238.9	3,235.7	3.23	1,003.333	
1,186.2	1,186.2	1,190.0	1,190.0	2.5	0.7	145.55	-1,258.1	2,984.2	3,238.9	3,235.7	3.24	999.173	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	0.7	145.55	-1,258.1	2,984.1	3,239.0	3,235.7	3.28	988.647	
1,279.5	1,279.5	1,276.2	1,276.1	2.7	0.8	145.58	-1,258.5	2,983.1	3,240.3	3,236.8	3.48	930.802	
1,300.0	1,299.9	1,294.8	1,294.8	2.8	0.8	145.58	-1,258.6	2,982.9	3,240.9	3,237.4	3.53	917.128	
1,377.9	1,377.7	1,374.6	1,374.6	3.0	0.8	145.60	-1,259.0	2,982.1	3,244.6	3,240.8	3.74	867.638	
1,400.0	1,399.7	1,397.4	1,397.3	3.0	0.8	145.61	-1,259.1	2,981.8	3,245.9	3,242.1	3.80	854.705	
1,476.4	1,475.7	1,472.0	1,471.9	3.2	0.8	145.63	-1,259.4	2,981.0	3,251.6	3,247.6	4.00	812.511	
1,500.0	1,499.1	1,495.0	1,494.9	3.2	0.9	145.64	-1,259.5	2,980.8	3,253.7	3,249.6	4.06	800.498	
1,574.8	1,573.2	1,569.4	1,569.3	3.4	0.9	145.66	-1,259.8	2,980.0	3,261.5	3,257.2	4.27	763.629	
1,600.0	1,598.2	1,594.4	1,594.4	3.5	0.9	145.67	-1,259.9	2,979.7	3,264.4	3,260.1	4.34	752.198	
1,673.2	1,670.3	1,664.8	1,664.7	3.7	0.9	145.69	-1,260.3	2,979.0	3,274.1	3,269.6	4.55	719.717	
1,700.0	1,696.6	1,690.4	1,690.3	3.8	0.9	145.69	-1,260.4	2,978.7	3,278.1	3,273.5	4.62	708.814	
1,749.9	1,745.5	1,737.8	1,737.7	3.9	1.0	145.71	-1,260.7	2,978.2	3,286.0	3,281.2	4.77	688.648	
1,771.6	1,766.8	1,758.4	1,758.4	4.0	1.0	145.75	-1,260.9	2,978.0	3,289.6	3,284.8	4.84	680.372	
1,800.0	1,794.5	1,785.3	1,785.2	4.1	1.0	145.81	-1,261.1	2,977.8	3,294.4	3,289.4	4.92	670.024	
1,870.1	1,863.1	1,848.9	1,848.9	4.3	1.0	145.96	-1,261.6	2,977.1	3,306.1	3,301.0	5.12	645.196	
1,900.0	1,892.3	1,875.8	1,875.7	4.4	1.0	146.02	-1,261.9	2,976.9	3,311.2	3,306.0	5.21	635.436	
1,968.5	1,959.4	1,941.8	1,941.7	4.7	1.0	146.17	-1,262.5	2,976.3	3,322.8	3,317.4	5.42	613.163	
2,000.0	1,990.2	1,973.6	1,973.5	4.8	1.0	146.24	-1,262.8	2,976.1	3,328.2	3,322.7	5.51	603.664	
2,066.9	2,055.6	2,039.8	2,039.7	5.1	1.1	146.39	-1,263.5	2,975.5	3,339.6	3,333.8	5.72	584.009	
2,100.0	2,088.0	2,072.2	2,072.1	5.2	1.1	146.46	-1,263.8	2,975.2	3,345.2	3,339.4	5.82	574.682	
2,165.3	2,151.9	2,138.0	2,137.9	5.4	1.1	146.60	-1,264.4	2,974.6	3,356.3	3,350.3	6.03	556.985	
2,200.0	2,185.8	2,173.7	2,173.6	5.6	1.1	146.68	-1,264.6	2,974.3	3,362.2	3,356.1	6.13	548.073	
2,263.8	2,248.2	2,239.7	2,239.6	5.8	1.1	146.81	-1,264.8	2,973.8	3,373.0	3,366.6	6.34	532.101	
2,300.0	2,283.6	2,277.3	2,277.2	6.0	1.1	146.89	-1,264.9	2,973.5	3,379.1	3,372.6	6.46	523.469	
2,362.2	2,344.5	2,339.3	2,339.2	6.2	1.2	147.02	-1,265.0	2,972.9	3,389.5	3,382.9	6.66	509.185	
2,400.0	2,381.4	2,376.2	2,376.1	6.4	1.2	147.09	-1,265.2	2,972.5	3,395.9	3,389.1	6.78	500.969	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,433.4	2,433.3	6.6	1.2	147.21	-1,265.4	2,972.0	3,406.1	3,399.2	6.98	488.269	
2,500.0	2,479.2	2,469.7	2,469.6	6.8	1.2	147.29	-1,265.5	2,971.7	3,412.8	3,405.7	7.10	480.444	
2,559.0	2,537.0	2,524.3	2,524.2	7.0	1.2	147.40	-1,265.8	2,971.2	3,422.9	3,415.6	7.30	469.123	
2,600.0	2,577.1	2,562.2	2,562.1	7.2	1.3	147.47	-1,265.9	2,971.0	3,429.9	3,422.5	7.43	461.655	
2,657.5	2,633.3	2,616.1	2,616.0	7.4	1.3	147.58	-1,266.1	2,970.6	3,439.8	3,432.2	7.62	451.535	
2,700.0	2,674.9	2,657.2	2,657.1	7.6	1.3	147.66	-1,266.3	2,970.4	3,447.2	3,439.4	7.76	444.383	
2,755.9	2,729.6	2,711.4	2,711.3	7.9	1.3	147.77	-1,266.4	2,970.1	3,456.9	3,449.0	7.94	435.301	
2,800.0	2,772.7	2,754.4	2,754.3	8.0	1.3	147.85	-1,266.6	2,969.9	3,464.6	3,456.5	8.09	428.446	
2,854.3	2,825.8	2,806.9	2,806.8	8.3	1.3	147.95	-1,266.7	2,969.6	3,474.0	3,465.7	8.27	420.299	
2,900.0	2,870.5	2,848.5	2,848.4	8.5	1.4	148.03	-1,266.8	2,969.4	3,482.0	3,473.6	8.41	413.813	
2,952.7	2,922.1	2,900.0	2,899.9	8.7	1.4	148.13	-1,267.0	2,969.3	3,491.3	3,482.7	8.59	406.543	
3,000.0	2,968.3	2,941.9	2,941.8	8.9	1.4	148.21	-1,267.2	2,969.1	3,499.6	3,490.9	8.74	400.373	
3,051.2	3,018.4	2,991.2	2,991.1	9.1	1.4	148.30	-1,267.4	2,969.0	3,508.7	3,499.7	8.91	393.876	
3,100.0	3,066.1	3,036.8	3,036.6	9.3	1.4	148.39	-1,267.5	2,968.9	3,517.3	3,508.3	9.07	387.991	
3,149.6	3,114.7	3,082.7	3,082.6	9.5	1.4	148.48	-1,267.7	2,968.8	3,526.2	3,516.9	9.23	382.217	
3,200.0	3,164.0	3,132.0	3,131.9	9.8	1.4	148.57	-1,267.8	2,968.8	3,535.2	3,525.8	9.39	376.571	
3,248.0	3,210.9	3,180.4	3,180.3	10.0	1.5	148.66	-1,268.0	2,968.7	3,543.8	3,534.2	9.54	371.354	
3,300.0	3,261.8	3,230.3	3,230.2	10.2	1.5	148.75	-1,268.2	2,968.6	3,553.1	3,543.4	9.71	365.963	
3,346.4	3,307.2	3,273.5	3,273.4	10.4	1.5	148.82	-1,268.3	2,968.6	3,561.4	3,551.6	9.86	361.316	
3,400.0	3,359.6	3,321.7	3,321.6	10.6	1.5	148.91	-1,268.4	2,968.7	3,571.1	3,561.1	10.03	356.213	
3,444.9	3,403.5	3,360.6	3,360.5	10.8	1.5	148.98	-1,268.3	2,968.8	3,579.2	3,569.1	10.16	352.159	
3,500.0	3,457.4	3,408.4	3,408.2	11.1	1.5	149.05	-1,268.1	2,969.1	3,589.4	3,579.0	10.34	347.279	
3,543.3	3,499.8	3,446.0	3,445.8	11.3	1.5	149.11	-1,267.8	2,969.5	3,597.4	3,586.9	10.48	343.418	
3,600.0	3,555.2	3,500.0	3,499.9	11.5	1.5	149.19	-1,267.2	2,970.3	3,608.0	3,597.3	10.66	338.525	
3,641.7	3,596.0	3,529.3	3,529.2	11.7	1.5	149.23	-1,266.8	2,970.8	3,615.9	3,605.1	10.79	335.047	
3,700.0	3,653.0	3,576.4	3,576.3	11.9	1.5	149.30	-1,266.2	2,971.8	3,627.0	3,616.0	10.98	330.324	
3,740.1	3,692.3	3,611.4	3,611.3	12.1	1.5	149.34	-1,265.7	2,972.6	3,634.8	3,623.7	11.11	327.160	
3,800.0	3,750.8	3,673.7	3,673.5	12.4	1.5	149.43	-1,264.7	2,974.0	3,646.3	3,635.0	11.30	322.572	
3,838.6	3,788.6	3,711.8	3,711.6	12.6	1.5	149.47	-1,264.1	2,974.9	3,653.8	3,642.3	11.43	319.698	
3,900.0	3,848.7	3,766.3	3,766.1	12.8	1.5	149.54	-1,263.2	2,976.2	3,665.6	3,654.0	11.63	315.276	
3,937.0	3,884.9	3,800.0	3,799.7	13.0	1.5	149.59	-1,262.6	2,977.1	3,672.9	3,661.1	11.75	312.683	
4,000.0	3,946.5	3,861.9	3,861.6	13.3	1.5	149.66	-1,261.5	2,978.7	3,685.2	3,673.2	11.95	308.374	
4,035.4	3,981.1	3,897.2	3,896.9	13.4	1.5	149.71	-1,261.0	2,979.6	3,692.1	3,680.0	12.07	306.012	
4,100.0	4,044.3	3,967.8	3,967.5	13.7	1.5	149.80	-1,259.9	2,981.2	3,704.6	3,692.3	12.27	301.837	
4,133.8	4,077.4	4,004.9	4,004.5	13.9	1.5	149.85	-1,259.5	2,981.9	3,711.1	3,698.7	12.38	299.703	
4,200.0	4,142.1	4,075.9	4,075.6	14.2	1.5	149.94	-1,258.7	2,983.2	3,723.8	3,711.2	12.60	295.648	
4,232.3	4,173.7	4,111.6	4,111.2	14.3	1.5	149.99	-1,258.3	2,983.8	3,729.9	3,717.2	12.70	293.713	
4,300.0	4,239.9	4,191.0	4,190.6	14.6	1.5	150.10	-1,257.5	2,984.8	3,742.6	3,729.7	12.92	289.740	
4,330.7	4,270.0	4,228.6	4,228.2	14.7	1.5	150.15	-1,257.2	2,985.2	3,748.3	3,735.3	13.02	287.969	
4,400.0	4,337.7	4,315.3	4,314.9	15.0	1.5	150.28	-1,256.2	2,985.8	3,760.9	3,747.7	13.24	284.040	
4,429.1	4,366.2	4,352.6	4,352.2	15.2	1.5	150.33	-1,255.7	2,985.9	3,766.1	3,752.8	13.34	282.401	
4,500.0	4,435.6	4,432.7	4,432.3	15.5	1.5	150.44	-1,254.6	2,985.9	3,778.6	3,765.0	13.57	278.491	
4,527.5	4,462.5	4,459.2	4,458.8	15.6	1.5	150.48	-1,254.2	2,985.9	3,783.4	3,769.7	13.66	277.004	
4,600.0	4,533.4	4,519.8	4,519.4	15.9	1.5	150.56	-1,253.3	2,986.0	3,796.1	3,782.2	13.89	273.218	
4,626.0	4,558.8	4,536.8	4,536.4	16.0	1.5	150.58	-1,253.1	2,986.0	3,800.8	3,786.8	13.98	271.907	
4,673.6	4,605.3	4,568.0	4,567.6	16.3	1.5	150.62	-1,252.6	2,986.3	3,809.4	3,795.3	14.13	269.556	
4,700.0	4,631.2	4,600.0	4,599.6	16.4	1.5	150.71	-1,252.1	2,986.7	3,814.3	3,800.1	14.20	268.650	
4,724.4	4,655.1	4,600.0	4,599.6	16.4	1.5	150.75	-1,252.1	2,986.7	3,818.5	3,804.3	14.24	268.068	
4,800.0	4,729.5	4,663.1	4,662.7	16.7	1.5	150.94	-1,251.3	2,987.7	3,830.9	3,816.5	14.40	266.080	
4,822.8	4,752.1	4,681.7	4,681.3	16.7	1.5	150.99	-1,251.1	2,988.1	3,834.3	3,819.9	14.44	265.549	
4,900.0	4,828.4	4,748.4	4,747.9	17.0	1.5	151.14	-1,250.3	2,989.4	3,844.9	3,830.4	14.58	263.735	
4,921.2	4,849.5	4,767.2	4,766.7	17.0	1.5	151.18	-1,250.2	2,989.8	3,847.6	3,833.0	14.61	263.296	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,927.8	4,838.2	4,837.7	17.2	1.5	151.30	-1,249.6	2,991.3	3,856.3	3,841.5	14.74	261.613	
5,019.7	4,947.4	4,856.3	4,855.8	17.2	1.5	151.33	-1,249.4	2,991.7	3,858.2	3,843.4	14.77	261.241	
5,100.0	5,027.5	4,931.1	4,930.6	17.4	1.5	151.41	-1,248.9	2,993.4	3,864.8	3,849.9	14.89	259.640	
5,118.1	5,045.6	4,948.3	4,947.8	17.4	1.5	151.43	-1,248.8	2,993.8	3,866.0	3,851.1	14.91	259.317	
5,200.0	5,127.4	5,030.0	5,029.5	17.6	1.5	151.47	-1,248.3	2,995.7	3,870.3	3,855.3	15.02	257.742	
5,216.5	5,143.9	5,048.0	5,047.4	17.6	1.5	151.47	-1,248.2	2,996.2	3,870.9	3,855.9	15.04	257.440	
5,273.4	5,200.8	5,111.6	5,111.0	17.7	1.5	118.79	-1,247.7	2,997.6	3,872.4	3,854.2	18.17	213.175	
5,300.0	5,227.4	5,145.3	5,144.7	17.7	1.5	118.78	-1,247.4	2,998.3	3,872.8	3,854.5	18.20	212.744	
5,314.9	5,242.3	5,164.3	5,163.7	17.7	1.5	118.77	-1,247.2	2,998.7	3,872.9	3,854.7	18.23	212.474	
5,400.0	5,327.4	5,258.1	5,257.5	17.8	1.5	118.75	-1,246.3	3,000.4	3,873.9	3,855.5	18.36	210.951	
5,413.4	5,340.8	5,271.7	5,271.1	17.9	1.5	118.75	-1,246.2	3,000.6	3,874.0	3,855.6	18.39	210.711	
5,500.0	5,427.4	5,368.5	5,367.9	18.0	1.5	118.72	-1,245.2	3,002.2	3,874.8	3,856.3	18.53	209.160	
5,511.8	5,439.2	5,382.3	5,381.6	18.0	1.5	118.72	-1,245.0	3,002.4	3,874.9	3,856.4	18.54	208.946	
5,600.0	5,527.4	5,495.6	5,494.9	18.1	1.5	118.69	-1,243.4	3,003.8	3,875.3	3,856.6	18.69	207.340	
5,610.2	5,537.6	5,508.8	5,508.1	18.1	1.5	118.68	-1,243.2	3,003.9	3,875.3	3,856.6	18.71	207.152	
5,700.0	5,627.4	5,621.5	5,620.8	18.3	1.6	118.65	-1,241.2	3,004.6	3,875.0	3,856.1	18.86	205.487	
5,708.6	5,636.0	5,631.4	5,630.8	18.3	1.6	118.65	-1,241.0	3,004.6	3,874.9	3,856.0	18.87	205.325	
5,800.0	5,727.4	5,730.7	5,730.0	18.4	1.6	118.62	-1,239.1	3,004.8	3,874.2	3,855.2	19.03	203.627	
5,807.1	5,734.5	5,737.5	5,736.8	18.4	1.6	118.62	-1,239.0	3,004.8	3,874.1	3,855.1	19.04	203.496	
5,900.0	5,827.4	5,828.8	5,828.1	18.6	1.6	118.60	-1,237.2	3,004.9	3,873.4	3,854.2	19.20	201.790	
5,905.5	5,832.9	5,834.6	5,833.9	18.6	1.6	118.60	-1,237.1	3,004.9	3,873.3	3,854.1	19.20	201.688	
6,000.0	5,927.4	5,929.0	5,928.3	18.7	1.6	118.56	-1,234.8	3,005.3	3,872.6	3,853.2	19.37	199.962	
6,003.9	5,931.3	5,932.6	5,931.8	18.7	1.6	118.56	-1,234.7	3,005.3	3,872.5	3,853.2	19.37	199.891	
6,100.0	6,027.4	6,018.5	6,017.7	18.9	1.6	118.53	-1,232.4	3,005.9	3,871.9	3,852.3	19.54	198.171	
6,102.3	6,029.7	6,020.4	6,019.7	18.9	1.6	118.53	-1,232.3	3,005.9	3,871.9	3,852.3	19.54	198.129	
6,200.0	6,127.4	6,100.0	6,099.2	19.0	1.6	118.50	-1,230.7	3,006.5	3,871.6	3,851.9	19.71	196.422	
6,200.8	6,128.2	6,100.0	6,099.2	19.0	1.6	118.50	-1,230.7	3,006.5	3,871.6	3,851.9	19.71	196.410	
6,233.4	6,160.8	6,131.5	6,130.8	19.1	1.6	118.50	-1,230.3	3,006.7	3,871.6	3,851.8	19.77	195.841	
6,299.2	6,226.6	6,189.9	6,189.1	19.2	1.6	118.49	-1,229.8	3,007.0	3,871.6	3,851.7	19.88	194.709	
6,301.4	6,228.8	6,191.9	6,191.1	19.2	1.6	118.49	-1,229.8	3,007.1	3,871.6	3,851.7	19.89	194.671	
6,350.0	6,277.4	6,234.6	6,233.8	19.3	1.6	28.55	-1,229.7	3,007.2	3,870.3	3,853.1	17.19	225.174	
6,397.6	6,324.7	6,276.1	6,275.3	19.3	1.6	28.73	-1,229.8	3,007.4	3,866.3	3,849.1	17.23	224.452	
6,400.0	6,327.1	6,278.2	6,277.4	19.3	1.6	28.74	-1,229.8	3,007.4	3,866.0	3,848.8	17.23	224.409	
6,450.0	6,376.3	6,325.7	6,324.9	19.3	1.6	29.09	-1,230.0	3,007.6	3,858.7	3,841.5	17.28	223.342	
6,496.0	6,421.1	6,372.8	6,372.0	19.3	1.6	29.55	-1,230.3	3,007.7	3,849.4	3,832.1	17.32	222.260	
6,500.0	6,424.9	6,376.8	6,376.0	19.3	1.6	29.59	-1,230.4	3,007.7	3,848.5	3,831.1	17.32	222.171	
6,550.0	6,472.4	6,427.9	6,427.1	19.3	1.7	30.27	-1,230.8	3,007.7	3,835.2	3,817.9	17.35	221.054	
6,594.5	6,513.8	6,473.1	6,472.3	19.3	1.7	31.02	-1,231.2	3,007.7	3,821.0	3,803.6	17.35	220.172	
6,600.0	6,518.8	6,478.6	6,477.8	19.3	1.7	31.13	-1,231.2	3,007.7	3,819.1	3,801.7	17.35	220.078	
6,650.0	6,563.8	6,522.8	6,522.0	19.3	1.7	32.16	-1,231.5	3,007.7	3,800.1	3,782.8	17.33	219.297	
6,692.9	6,601.1	6,556.4	6,555.6	19.2	1.7	33.19	-1,231.8	3,007.6	3,781.7	3,764.4	17.29	218.735	
6,700.0	6,607.1	6,561.8	6,561.0	19.2	1.7	33.37	-1,231.9	3,007.6	3,778.5	3,761.2	17.28	218.659	
6,750.0	6,648.6	6,600.0	6,599.2	19.2	1.7	34.82	-1,232.3	3,007.6	3,754.4	3,737.2	17.22	218.011	
6,791.3	6,681.4	6,628.3	6,627.5	19.1	1.7	36.19	-1,232.7	3,007.6	3,732.7	3,715.6	17.18	217.322	
6,800.0	6,688.1	6,634.2	6,633.4	19.1	1.7	36.50	-1,232.8	3,007.6	3,728.0	3,710.8	17.17	217.171	
6,850.0	6,725.3	6,667.4	6,666.6	19.1	1.7	38.47	-1,233.2	3,007.6	3,699.3	3,682.2	17.14	215.831	
6,889.7	6,753.2	6,692.3	6,691.5	19.0	1.7	40.25	-1,233.6	3,007.6	3,675.0	3,657.9	17.16	214.146	
6,900.0	6,760.1	6,700.0	6,699.2	19.0	1.7	40.76	-1,233.7	3,007.6	3,668.6	3,651.4	17.17	213.641	
6,950.0	6,792.3	6,734.1	6,733.3	19.0	1.7	43.44	-1,234.2	3,007.7	3,635.9	3,618.6	17.30	210.200	
6,988.2	6,815.1	6,759.4	6,758.6	18.9	1.7	45.78	-1,234.5	3,007.7	3,609.7	3,592.2	17.48	206.513	
7,000.0	6,821.8	6,766.9	6,766.1	18.9	1.7	46.55	-1,234.6	3,007.7	3,601.4	3,583.9	17.54	205.277	
7,050.0	6,848.3	6,796.4	6,795.6	18.9	1.7	50.10	-1,235.0	3,007.7	3,565.3	3,547.4	17.93	198.837	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,086.6	6,865.9	6,813.9	6,813.1	18.9	1.7	52.96	-1,235.3	3,007.7	3,538.0	3,519.7	18.31	193.214	
7,100.0	6,871.9	6,819.7	6,818.9	18.9	1.7	54.07	-1,235.3	3,007.7	3,527.9	3,509.4	18.46	191.128	
7,150.0	6,892.3	6,839.6	6,838.8	18.8	1.7	58.51	-1,235.6	3,007.7	3,489.3	3,470.2	19.11	182.544	
7,185.0	6,904.7	6,851.7	6,850.8	18.8	1.7	61.89	-1,235.7	3,007.7	3,461.6	3,442.0	19.64	176.214	
7,200.0	6,909.5	6,856.4	6,855.5	18.9	1.7	63.41	-1,235.8	3,007.7	3,449.7	3,429.8	19.87	173.628	
7,250.0	6,923.4	6,869.9	6,869.1	19.3	1.7	68.73	-1,235.9	3,007.7	3,409.4	3,388.7	20.68	164.892	
7,283.4	6,930.8	6,877.2	6,876.4	19.8	1.7	72.48	-1,236.0	3,007.7	3,382.1	3,360.9	21.23	159.286	
7,300.0	6,933.9	6,880.3	6,879.4	20.0	1.7	74.38	-1,236.0	3,007.7	3,368.5	3,347.0	21.50	156.661	
7,350.0	6,940.9	6,887.2	6,886.4	20.8	1.7	80.24	-1,236.1	3,007.7	3,327.4	3,305.0	22.34	148.952	
7,381.9	6,943.6	6,889.9	6,889.1	21.4	1.7	84.02	-1,236.1	3,007.7	3,301.1	3,278.2	22.90	144.124	
7,400.0	6,944.5	6,890.9	6,890.0	21.7	1.7	86.16	-1,236.2	3,007.7	3,286.1	3,262.9	23.24	141.410	
7,432.4	6,945.0	6,891.4	6,890.5	22.3	1.7	89.94	-1,236.2	3,007.7	3,259.4	3,235.5	23.90	136.379	
7,480.3	6,944.6	6,891.1	6,890.2	23.2	1.7	89.93	-1,236.2	3,007.7	3,220.1	3,195.3	24.79	129.887	
7,500.0	6,944.4	6,890.9	6,890.1	23.6	1.7	89.93	-1,236.2	3,007.7	3,204.0	3,178.9	25.16	127.353	
7,578.7	6,943.7	6,890.4	6,889.6	25.2	1.7	89.91	-1,236.2	3,007.7	3,140.1	3,113.4	26.74	117.418	
7,600.0	6,943.6	6,890.3	6,889.5	25.6	1.7	89.91	-1,236.2	3,007.7	3,123.0	3,095.8	27.17	114.936	
7,677.1	6,942.9	6,889.8	6,889.0	27.3	1.7	89.89	-1,236.1	3,007.7	3,061.2	3,032.4	28.83	106.176	
7,700.0	6,942.7	6,889.7	6,888.8	27.8	1.7	89.89	-1,236.1	3,007.7	3,043.1	3,013.7	29.32	103.777	
7,775.6	6,942.1	6,889.2	6,888.4	29.5	1.7	89.87	-1,236.1	3,007.7	2,983.5	2,952.4	31.03	96.150	
7,800.0	6,941.9	6,889.0	6,888.2	30.1	1.7	89.87	-1,236.1	3,007.7	2,964.4	2,932.8	31.58	93.867	
7,874.0	6,941.3	6,888.5	6,887.7	31.8	1.7	89.85	-1,236.1	3,007.7	2,907.0	2,873.6	33.32	87.256	
7,900.0	6,941.1	6,888.4	6,887.6	32.4	1.7	89.85	-1,236.1	3,007.7	2,887.0	2,853.1	33.92	85.099	
7,972.4	6,940.4	6,887.9	6,887.1	34.2	1.7	89.83	-1,236.1	3,007.7	2,831.8	2,796.1	35.67	79.383	
8,000.0	6,940.2	6,887.7	6,886.9	34.9	1.7	89.83	-1,236.1	3,007.7	2,811.0	2,774.7	36.34	77.357	
8,070.8	6,939.6	6,887.3	6,886.4	36.6	1.7	89.81	-1,236.1	3,007.7	2,758.1	2,720.1	38.09	72.415	
8,100.0	6,939.4	6,887.1	6,886.3	37.3	1.7	89.81	-1,236.1	3,007.7	2,736.6	2,697.8	38.81	70.518	
8,169.3	6,938.8	6,886.6	6,885.8	39.1	1.7	89.79	-1,236.1	3,007.7	2,686.1	2,645.5	40.55	66.241	
8,200.0	6,938.5	6,886.4	6,885.6	39.8	1.7	89.79	-1,236.1	3,007.7	2,663.9	2,622.6	41.32	64.466	
8,267.7	6,938.0	6,886.0	6,885.2	41.6	1.7	89.77	-1,236.1	3,007.7	2,615.7	2,572.6	43.05	60.759	
8,300.0	6,937.7	6,885.8	6,884.9	42.4	1.7	89.77	-1,236.1	3,007.7	2,593.0	2,549.1	43.87	59.101	
8,366.1	6,937.2	6,885.3	6,884.5	44.1	1.7	89.75	-1,236.1	3,007.7	2,547.2	2,501.6	45.58	55.881	
8,400.0	6,936.9	6,885.1	6,884.3	45.0	1.7	89.74	-1,236.1	3,007.7	2,524.0	2,477.6	46.46	54.331	
8,464.5	6,936.3	6,884.7	6,883.8	46.6	1.7	89.73	-1,236.1	3,007.7	2,480.7	2,432.5	48.14	51.530	
8,500.0	6,936.0	6,884.4	6,883.6	47.6	1.7	89.72	-1,236.1	3,007.7	2,457.2	2,408.2	49.07	50.081	
8,563.0	6,935.5	6,884.0	6,883.2	49.2	1.7	89.71	-1,236.1	3,007.7	2,416.3	2,365.6	50.72	47.639	
8,600.0	6,935.2	6,883.8	6,882.9	50.2	1.7	89.70	-1,236.1	3,007.7	2,392.7	2,341.0	51.70	46.285	
8,661.4	6,934.7	6,883.3	6,882.5	51.8	1.7	89.69	-1,236.1	3,007.7	2,354.4	2,301.0	53.32	44.154	
8,700.0	6,934.4	6,883.1	6,882.3	52.8	1.7	89.68	-1,236.1	3,007.7	2,330.8	2,276.4	54.34	42.889	
8,759.8	6,933.9	6,882.7	6,881.8	54.4	1.7	89.67	-1,236.1	3,007.7	2,295.0	2,239.0	55.94	41.027	
8,800.0	6,933.5	6,882.4	6,881.6	55.5	1.7	89.66	-1,236.1	3,007.7	2,271.5	2,214.5	57.01	39.845	
8,858.2	6,933.0	6,882.0	6,881.2	57.1	1.7	89.65	-1,236.1	3,007.7	2,238.3	2,179.7	58.57	38.217	
8,900.0	6,932.7	6,881.7	6,880.9	58.2	1.7	89.64	-1,236.1	3,007.7	2,215.1	2,155.5	59.69	37.113	
8,956.7	6,932.2	6,881.3	6,880.5	59.7	1.7	89.63	-1,236.1	3,007.7	2,184.6	2,123.4	61.21	35.689	
9,000.0	6,931.8	6,881.0	6,880.2	60.9	1.7	89.62	-1,236.1	3,007.7	2,162.0	2,099.6	62.38	34.660	
9,055.1	6,931.4	6,880.6	6,879.8	62.4	1.7	89.61	-1,236.0	3,007.7	2,134.1	2,070.2	63.86	33.416	
9,100.0	6,931.0	6,880.3	6,879.5	63.6	1.7	89.60	-1,236.0	3,007.7	2,112.2	2,047.1	65.08	32.457	
9,153.5	6,930.6	6,880.0	6,879.1	65.0	1.7	89.59	-1,236.0	3,007.7	2,087.0	2,020.5	66.53	31.371	
9,200.0	6,930.2	6,879.6	6,878.8	66.3	1.7	89.58	-1,236.0	3,007.7	2,066.0	1,998.2	67.79	30.479	
9,251.9	6,929.7	6,879.3	6,878.4	67.7	1.7	89.56	-1,236.0	3,007.7	2,043.6	1,974.4	69.20	29.532	
9,300.0	6,929.3	6,878.9	6,878.1	69.0	1.7	89.55	-1,236.0	3,007.7	2,023.8	1,953.3	70.50	28.705	
9,350.4	6,928.9	6,878.6	6,877.8	70.4	1.7	89.54	-1,236.0	3,007.7	2,004.1	1,932.2	71.88	27.882	
9,400.0	6,928.5	6,878.2	6,877.4	71.7	1.7	89.53	-1,236.0	3,007.7	1,985.7	1,912.4	73.23	27.116	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,448.8	6,928.1	6,877.9	6,877.1	73.0	1.7	89.52	-1,236.0	3,007.7	1,968.7	1,894.1	74.56	26.403	
9,500.0	6,927.7	6,877.5	6,876.7	74.4	1.7	89.51	-1,236.0	3,007.7	1,952.0	1,876.0	75.96	25.698	
9,547.2	6,927.3	6,877.2	6,876.4	75.7	1.7	89.50	-1,236.0	3,007.7	1,937.6	1,860.4	77.25	25.082	
9,600.0	6,926.8	6,876.8	6,876.0	77.2	1.7	89.49	-1,236.0	3,007.7	1,922.8	1,844.2	78.70	24.434	
9,645.6	6,926.4	6,876.5	6,875.6	78.4	1.7	89.48	-1,236.0	3,007.7	1,911.2	1,831.2	79.95	23.905	
9,700.0	6,926.0	6,876.1	6,875.3	79.9	1.7	89.47	-1,236.0	3,007.7	1,898.6	1,817.1	81.44	23.313	
9,744.1	6,925.6	6,875.8	6,874.9	81.1	1.7	89.46	-1,236.0	3,007.7	1,889.4	1,806.8	82.65	22.862	
9,800.0	6,925.2	6,875.3	6,874.5	82.6	1.7	89.44	-1,236.0	3,007.7	1,879.3	1,795.1	84.18	22.324	
9,842.5	6,924.8	6,875.0	6,874.2	83.8	1.7	89.43	-1,236.0	3,007.7	1,872.7	1,787.3	85.35	21.941	
9,900.0	6,924.3	6,874.6	6,873.8	85.4	1.7	89.42	-1,236.0	3,007.7	1,865.2	1,778.3	86.93	21.456	
9,940.9	6,924.0	6,874.3	6,873.5	86.5	1.7	89.41	-1,236.0	3,007.7	1,860.9	1,772.9	88.06	21.133	
10,000.0	6,923.5	6,873.9	6,873.1	88.1	1.7	89.40	-1,236.0	3,007.7	1,856.4	1,766.7	89.69	20.699	
10,039.3	6,923.2	6,873.6	6,872.8	89.2	1.7	89.39	-1,236.0	3,007.7	1,854.4	1,763.6	90.77	20.429	
10,100.0	6,922.6	6,873.1	6,872.3	90.9	1.7	89.38	-1,236.0	3,007.7	1,852.9	1,760.5	92.44	20.044	
10,114.0	6,922.5	6,873.0	6,872.2	91.3	1.7	89.37	-1,236.0	3,007.7	1,852.9	1,760.1	92.83	19.960 CC	
10,137.8	6,922.3	6,872.9	6,872.0	91.9	1.7	89.37	-1,236.0	3,007.7	1,853.0	1,759.6	93.49	19.822 ES	
10,200.0	6,921.8	6,872.4	6,871.6	93.7	1.7	89.35	-1,236.0	3,007.7	1,854.9	1,759.7	95.20	19.483	
10,236.2	6,921.5	6,872.1	6,871.3	94.7	1.7	89.34	-1,236.0	3,007.7	1,856.9	1,760.7	96.20	19.302	
10,300.0	6,921.0	6,871.7	6,870.8	96.4	1.7	89.33	-1,236.0	3,007.7	1,862.2	1,764.2	97.97	19.009	
10,334.6	6,920.7	6,871.4	6,870.6	97.4	1.7	89.32	-1,235.9	3,007.7	1,866.0	1,767.1	98.92	18.863	
10,400.0	6,920.1	6,870.9	6,870.1	99.2	1.7	89.31	-1,235.9	3,007.7	1,874.8	1,774.1	100.73	18.612	
10,433.0	6,919.9	6,870.7	6,869.8	100.1	1.7	89.30	-1,235.9	3,007.7	1,880.2	1,778.5	101.65	18.497	
10,500.0	6,919.3	6,870.1	6,869.3	101.9	1.7	89.28	-1,235.9	3,007.7	1,892.7	1,789.2	103.50	18.287	
10,531.5	6,919.0	6,869.9	6,869.1	102.8	1.7	89.28	-1,235.9	3,007.7	1,899.3	1,795.0	104.37	18.198	
10,600.0	6,918.5	6,869.4	6,868.6	104.7	1.7	89.26	-1,235.9	3,007.7	1,915.6	1,809.3	106.27	18.026	
10,629.9	6,918.2	6,869.2	6,868.3	105.5	1.7	89.25	-1,235.9	3,007.7	1,923.4	1,816.3	107.10	17.959	
10,700.0	6,917.6	6,868.6	6,867.8	107.5	1.7	89.24	-1,235.9	3,007.7	1,943.3	1,834.3	109.04	17.822	
10,728.3	6,917.4	6,868.4	6,867.6	108.3	1.7	89.23	-1,235.9	3,007.7	1,952.1	1,842.2	109.83	17.774	
10,800.0	6,916.8	6,867.8	6,867.0	110.3	1.7	89.21	-1,235.9	3,007.7	1,975.8	1,864.0	111.81	17.670	
10,826.7	6,916.6	6,867.6	6,866.8	111.0	1.7	89.20	-1,235.9	3,007.7	1,985.2	1,872.7	112.56	17.638	
10,900.0	6,916.0	6,867.1	6,866.2	113.0	1.7	89.19	-1,235.9	3,007.7	2,012.7	1,898.1	114.59	17.565	
10,925.2	6,915.8	6,866.9	6,866.1	113.7	1.7	89.18	-1,235.9	3,007.7	2,022.7	1,907.4	115.29	17.544	
11,000.0	6,915.1	6,866.3	6,865.5	115.8	1.7	89.16	-1,235.9	3,007.7	2,053.8	1,936.5	117.37	17.499	
11,023.6	6,914.9	6,866.1	6,865.3	116.5	1.7	89.16	-1,235.9	3,007.7	2,064.1	1,946.1	118.02	17.489	
11,100.0	6,914.3	6,865.5	6,864.7	118.6	1.7	89.14	-1,235.9	3,007.7	2,098.9	1,978.8	120.14	17.470	
11,122.0	6,914.1	6,865.3	6,864.5	119.2	1.7	89.13	-1,235.9	3,007.7	2,109.3	1,988.6	120.76	17.468 SF	
11,200.0	6,913.5	6,864.7	6,863.9	121.4	1.7	89.11	-1,235.9	3,007.7	2,147.7	2,024.8	122.92	17.472	
11,220.4	6,913.3	6,864.5	6,863.7	121.9	1.7	89.11	-1,235.9	3,007.7	2,158.1	2,034.6	123.49	17.476	
11,300.0	6,912.6	6,863.9	6,863.1	124.1	1.7	89.09	-1,235.9	3,007.7	2,199.9	2,074.2	125.70	17.501	
11,318.9	6,912.5	6,863.8	6,862.9	124.7	1.7	89.08	-1,235.9	3,007.7	2,210.2	2,083.9	126.23	17.509	
11,400.0	6,911.8	6,863.1	6,862.3	126.9	1.7	89.06	-1,235.9	3,007.7	2,255.4	2,126.9	128.49	17.554	
11,417.3	6,911.6	6,863.0	6,862.1	127.4	1.7	89.06	-1,235.9	3,007.7	2,265.3	2,136.4	128.97	17.565	
11,500.0	6,911.0	6,862.3	6,861.5	129.7	1.7	89.04	-1,235.8	3,007.7	2,313.9	2,182.6	131.27	17.627	
11,515.7	6,910.8	6,862.2	6,861.4	130.2	1.7	89.04	-1,235.8	3,007.7	2,323.4	2,191.6	131.71	17.640	
11,600.0	6,910.1	6,861.5	6,860.7	132.5	1.7	89.01	-1,235.8	3,007.7	2,375.1	2,241.1	134.05	17.718	
11,614.1	6,910.0	6,861.4	6,860.5	132.9	1.7	89.01	-1,235.8	3,007.7	2,384.0	2,249.6	134.45	17.732	
11,700.0	6,909.3	6,860.7	6,859.8	135.3	1.7	88.99	-1,235.8	3,007.7	2,439.0	2,302.1	136.84	17.824	
11,712.6	6,909.2	6,860.6	6,859.7	135.6	1.7	88.99	-1,235.8	3,007.7	2,447.2	2,310.0	137.19	17.838	
11,800.0	6,908.5	6,859.8	6,859.0	138.1	1.7	88.96	-1,235.8	3,007.7	2,505.1	2,365.5	139.62	17.942	
11,811.0	6,908.4	6,859.7	6,858.9	138.4	1.7	88.96	-1,235.8	3,007.7	2,512.6	2,372.6	139.93	17.956	
11,900.0	6,907.6	6,859.0	6,858.2	140.9	1.7	88.94	-1,235.8	3,007.7	2,573.5	2,431.1	142.41	18.071	
11,909.4	6,907.5	6,858.9	6,858.1	141.1	1.7	88.94	-1,235.8	3,007.7	2,580.0	2,437.4	142.67	18.084	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,000.0	6,906.8	6,858.2	6,857.4	143.6	1.7	88.91	-1,235.8	3,007.7	2,643.9	2,498.7	145.20	18.209	
12,007.8	6,906.7	6,858.1	6,857.3	143.9	1.7	88.91	-1,235.8	3,007.7	2,649.5	2,504.1	145.42	18.220	
12,100.0	6,905.9	6,857.3	6,856.5	146.4	1.7	88.89	-1,235.8	3,007.7	2,716.1	2,568.1	147.99	18.354	
12,106.3	6,905.9	6,857.3	6,856.5	146.6	1.7	88.88	-1,235.8	3,007.7	2,720.7	2,572.5	148.16	18.363	
12,200.0	6,905.1	6,856.5	6,855.7	149.2	1.7	88.86	-1,235.8	3,007.7	2,790.1	2,639.3	150.78	18.505	
12,204.7	6,905.1	6,856.4	6,855.6	149.4	1.7	88.86	-1,235.8	3,007.7	2,793.6	2,642.7	150.91	18.512	
12,300.0	6,904.3	6,855.6	6,854.8	152.0	1.7	88.83	-1,235.8	3,007.7	2,865.6	2,712.0	153.56	18.661	
12,303.1	6,904.3	6,855.6	6,854.8	152.1	1.7	88.83	-1,235.8	3,007.7	2,868.0	2,714.3	153.65	18.665	
12,400.0	6,903.4	6,854.8	6,854.0	154.8	1.7	88.81	-1,235.8	3,007.7	2,942.6	2,786.2	156.35	18.820	
12,401.5	6,903.4	6,854.8	6,853.9	154.8	1.7	88.81	-1,235.8	3,007.7	2,943.8	2,787.4	156.40	18.822	
12,500.0	6,902.6	6,853.9	6,853.1	157.6	1.7	88.78	-1,235.8	3,007.7	3,020.9	2,861.8	159.14	18.982	
12,598.4	6,901.8	6,853.1	6,852.2	160.3	1.7	88.75	-1,235.7	3,007.7	3,099.2	2,937.3	161.89	19.144	
12,600.0	6,901.8	6,853.0	6,852.2	160.4	1.7	88.75	-1,235.7	3,007.7	3,100.5	2,938.6	161.94	19.147	
12,696.8	6,901.0	6,852.2	6,851.4	163.1	1.7	88.73	-1,235.7	3,007.7	3,178.7	3,014.0	164.64	19.307	
12,700.0	6,900.9	6,852.2	6,851.3	163.2	1.7	88.73	-1,235.7	3,007.7	3,181.2	3,016.5	164.73	19.312	
12,795.2	6,900.1	6,851.3	6,850.5	165.8	1.7	88.70	-1,235.7	3,007.7	3,259.1	3,091.8	167.39	19.471	
12,800.0	6,900.1	6,851.3	6,850.5	166.0	1.7	88.70	-1,235.7	3,007.7	3,263.1	3,095.5	167.52	19.479	
12,893.7	6,899.3	6,850.4	6,849.6	168.6	1.7	88.67	-1,235.7	3,007.7	3,340.6	3,170.4	170.13	19.635	
12,900.0	6,899.3	6,850.4	6,849.6	168.8	1.7	88.67	-1,235.7	3,007.7	3,345.8	3,175.5	170.31	19.645	
12,992.1	6,898.5	6,849.6	6,848.7	171.3	1.7	88.65	-1,235.7	3,007.7	3,422.9	3,250.0	172.88	19.799	
13,000.0	6,898.4	6,849.5	6,848.7	171.6	1.7	88.64	-1,235.7	3,007.7	3,429.6	3,256.5	173.10	19.812	
13,090.5	6,897.7	6,848.7	6,847.9	174.1	1.7	88.62	-1,235.7	3,007.7	3,506.1	3,330.4	175.63	19.963	
13,100.0	6,897.6	6,848.6	6,847.8	174.4	1.7	88.62	-1,235.7	3,007.7	3,514.1	3,338.2	175.90	19.978	
13,188.9	6,896.9	6,847.8	6,847.0	176.8	1.7	88.59	-1,235.7	3,007.7	3,590.0	3,411.6	178.38	20.125	
13,200.0	6,896.8	6,847.7	6,846.9	177.2	1.7	88.59	-1,235.7	3,007.7	3,599.5	3,420.8	178.69	20.144	
13,287.4	6,896.0	6,846.9	6,846.1	179.6	1.7	88.56	-1,235.7	3,007.7	3,674.7	3,493.5	181.13	20.287	
13,300.0	6,895.9	6,846.8	6,846.0	180.0	1.7	88.56	-1,235.7	3,007.7	3,685.6	3,504.1	181.48	20.308	
13,385.8	6,895.2	6,846.0	6,845.2	182.4	1.7	88.54	-1,235.7	3,007.7	3,760.0	3,576.1	183.88	20.448	
13,400.0	6,895.1	6,845.8	6,845.0	182.7	1.7	88.53	-1,235.7	3,007.7	3,772.3	3,588.1	184.28	20.471	
13,484.2	6,894.4	6,845.1	6,844.2	185.1	1.7	88.51	-1,235.6	3,007.7	3,845.9	3,659.3	186.63	20.607	
13,500.0	6,894.3	6,844.9	6,844.1	185.5	1.7	88.50	-1,235.6	3,007.7	3,859.8	3,672.7	187.07	20.633	
13,582.6	6,893.6	6,844.1	6,843.3	187.9	1.7	88.48	-1,235.6	3,007.7	3,932.5	3,743.1	189.38	20.765	
13,600.0	6,893.4	6,844.0	6,843.2	188.3	1.7	88.47	-1,235.6	3,007.7	3,947.8	3,757.9	189.87	20.792	
13,681.1	6,892.8	6,843.2	6,842.4	190.6	1.7	88.45	-1,235.6	3,007.7	4,019.5	3,827.4	192.13	20.921	
13,700.0	6,892.6	6,843.0	6,842.2	191.1	1.7	88.45	-1,235.6	3,007.7	4,036.3	3,843.7	192.66	20.951	
13,779.5	6,891.9	6,842.3	6,841.5	193.4	1.7	88.42	-1,235.6	3,007.7	4,107.1	3,912.2	194.88	21.075	
13,800.0	6,891.8	6,842.1	6,841.3	193.9	1.7	88.42	-1,235.6	3,007.7	4,125.4	3,930.0	195.45	21.107	
13,877.9	6,891.1	6,841.4	6,840.5	196.1	1.7	88.39	-1,235.6	3,007.7	4,195.2	3,997.6	197.63	21.227	
13,900.0	6,890.9	6,841.1	6,840.3	196.7	1.7	88.39	-1,235.6	3,007.7	4,215.0	4,016.8	198.25	21.261	
13,976.3	6,890.3	6,840.4	6,839.6	198.9	1.7	88.36	-1,235.6	3,007.7	4,283.7	4,083.3	200.38	21.378	
14,000.0	6,890.1	6,840.2	6,839.4	199.5	1.7	88.36	-1,235.6	3,007.7	4,305.1	4,104.0	201.04	21.413	
14,074.8	6,889.5	6,839.5	6,838.6	201.6	1.7	88.34	-1,235.6	3,007.7	4,372.7	4,169.5	203.13	21.526	
14,100.0	6,889.3	6,839.2	6,838.4	202.3	1.7	88.33	-1,235.6	3,007.7	4,395.5	4,191.7	203.84	21.564	
14,173.2	6,888.7	6,838.5	6,837.7	204.4	1.7	88.31	-1,235.6	3,007.7	4,462.0	4,256.1	205.89	21.672	
14,200.0	6,888.4	6,838.2	6,837.4	205.1	1.7	88.30	-1,235.6	3,007.7	4,486.4	4,279.8	206.64	21.712	
14,271.6	6,887.8	6,837.5	6,836.7	207.1	1.7	88.28	-1,235.6	3,007.7	4,551.7	4,343.1	208.64	21.816	
14,300.0	6,887.6	6,837.3	6,836.4	207.9	1.7	88.27	-1,235.6	3,007.7	4,577.7	4,368.2	209.43	21.858	
14,370.0	6,887.0	6,836.6	6,835.7	209.9	1.7	88.25	-1,235.5	3,007.7	4,641.8	4,430.4	211.39	21.959	
14,400.0	6,886.8	6,836.3	6,835.4	210.7	1.7	88.24	-1,235.5	3,007.7	4,669.3	4,457.0	212.23	22.001	
14,468.5	6,886.2	6,835.6	6,834.8	212.6	1.7	88.22	-1,235.5	3,007.7	4,732.2	4,518.1	214.14	22.099	
14,500.0	6,885.9	6,835.3	6,834.4	213.5	1.7	88.21	-1,235.5	3,007.7	4,761.2	4,546.2	215.02	22.143	
14,566.9	6,885.4	6,834.6	6,833.8	215.4	1.7	88.19	-1,235.5	3,007.7	4,822.9	4,606.0	216.89	22.236	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,600.0	6,885.1	6,834.3	6,833.4	216.3	1.7	88.18	-1,235.5	3,007.7	4,853.5	4,635.7	217.82	22.282	
14,613.0	6,885.0	6,834.1	6,833.3	216.7	1.7	88.17	-1,235.5	3,007.7	4,865.5	4,647.3	218.18	22.300	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+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	82.44	382.7	2,884.0	2,909.4				
98.4	98.4	79.5	79.5	0.1	0.0	82.45	382.4	2,884.0	2,909.2	2,909.1	0.12	N/A	
100.0	100.0	81.2	81.2	0.1	0.0	82.45	382.4	2,884.0	2,909.2	2,909.1	0.13	N/A	
196.8	196.8	184.6	184.6	0.3	0.2	82.46	381.6	2,883.7	2,908.9	2,908.4	0.49	5,927.987	
200.0	200.0	187.9	187.9	0.3	0.2	82.46	381.6	2,883.7	2,908.8	2,908.3	0.50	5,780.403	
295.3	295.3	276.4	276.4	0.5	0.3	82.47	381.1	2,883.4	2,908.5	2,907.7	0.80	3,622.519	
300.0	300.0	280.7	280.7	0.5	0.3	82.47	381.1	2,883.4	2,908.5	2,907.6	0.82	3,559.014	
393.7	393.7	375.5	375.5	0.7	0.4	82.47	380.9	2,883.2	2,908.3	2,907.2	1.09	2,657.276	
400.0	400.0	382.1	382.1	0.8	0.4	82.47	380.9	2,883.2	2,908.2	2,907.1	1.11	2,613.092	
492.1	492.1	473.5	473.5	1.0	0.4	82.48	380.7	2,882.9	2,908.0	2,906.6	1.35	2,148.865	
500.0	500.0	481.2	481.2	1.0	0.4	82.48	380.8	2,882.9	2,908.0	2,906.6	1.37	2,117.638	
590.5	590.5	575.4	575.4	1.2	0.4	82.47	381.1	2,882.6	2,907.7	2,906.1	1.62	1,790.341	
600.0	600.0	585.4	585.4	1.2	0.5	82.47	381.2	2,882.6	2,907.7	2,906.0	1.65	1,761.282	
689.0	689.0	687.4	687.4	1.4	0.5	82.46	381.6	2,881.9	2,907.1	2,905.2	1.90	1,529.774	
700.0	700.0	700.0	700.0	1.4	0.5	82.46	381.7	2,881.8	2,907.0	2,905.1	1.93	1,505.367	
787.4	787.4	785.4	785.4	1.6	0.5	82.45	381.9	2,881.0	2,906.3	2,904.1	2.17	1,339.642	
800.0	800.0	797.7	797.7	1.7	0.6	82.45	381.9	2,880.9	2,906.2	2,904.0	2.20	1,318.718	
885.8	885.8	882.0	882.0	1.9	0.6	82.44	382.1	2,880.2	2,905.5	2,903.1	2.43	1,193.247	
900.0	900.0	895.9	895.9	1.9	0.6	82.44	382.1	2,880.1	2,905.4	2,902.9	2.47	1,174.789	
984.2	984.2	982.7	982.7	2.1	0.6	82.44	382.0	2,879.4	2,904.7	2,902.0	2.70	1,075.484	
1,000.0	1,000.0	999.0	999.0	2.1	0.6	82.44	382.0	2,879.3	2,904.6	2,901.9	2.74	1,058.742	
1,082.7	1,082.7	1,082.5	1,082.5	2.3	0.7	82.44	381.9	2,878.5	2,903.9	2,900.9	2.96	979.912	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	0.7	82.44	381.9	2,878.4	2,903.7	2,900.7	3.01	964.857	
1,150.0	1,150.0	1,150.1	1,150.1	2.4	0.7	82.44	381.7	2,878.0	2,903.3	2,900.1	3.14	924.169	
1,181.1	1,181.1	1,181.3	1,181.2	2.5	0.7	115.14	381.6	2,877.7	2,903.1	2,899.8	3.24	895.555	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	0.7	115.15	381.6	2,877.5	2,903.0	2,899.7	3.29	881.934	
1,210.4	1,210.4	1,210.4	1,210.4	2.6	0.7	115.15	381.5	2,877.4	2,903.0	2,899.7	3.32	874.705	
1,279.5	1,279.5	1,278.5	1,278.4	2.7	0.8	115.19	381.3	2,876.9	2,903.4	2,899.9	3.50	829.637	
1,300.0	1,299.9	1,298.6	1,298.6	2.8	0.8	115.20	381.2	2,876.7	2,903.6	2,900.1	3.55	817.202	
1,377.9	1,377.7	1,368.8	1,368.8	3.0	0.8	115.26	380.9	2,876.2	2,905.3	2,901.5	3.75	774.229	
1,400.0	1,399.7	1,388.6	1,388.6	3.0	0.8	115.28	380.7	2,876.1	2,905.9	2,902.1	3.81	762.932	
1,476.4	1,475.7	1,455.9	1,455.8	3.2	0.8	115.36	380.2	2,876.0	2,908.9	2,904.9	4.01	725.862	
1,500.0	1,499.1	1,476.6	1,476.5	3.2	0.8	115.38	379.9	2,876.0	2,910.1	2,906.0	4.07	715.201	
1,574.8	1,573.2	1,548.6	1,548.6	3.4	0.9	115.50	379.0	2,876.0	2,914.4	2,910.2	4.28	681.677	
1,600.0	1,598.2	1,574.1	1,574.1	3.5	0.9	115.54	378.7	2,876.1	2,916.1	2,911.7	4.35	671.095	
1,673.2	1,670.3	1,650.9	1,650.9	3.7	0.9	115.70	377.6	2,876.1	2,921.4	2,916.8	4.57	639.852	
1,700.0	1,696.6	1,679.5	1,679.5	3.8	0.9	115.76	377.1	2,876.1	2,923.5	2,918.9	4.65	629.148	
1,749.9	1,745.5	1,730.7	1,730.7	3.9	0.9	115.88	376.4	2,876.0	2,927.7	2,922.9	4.81	608.862	
1,771.6	1,766.8	1,752.6	1,752.5	4.0	0.9	115.97	376.1	2,875.9	2,929.7	2,924.8	4.88	600.195	
1,800.0	1,794.5	1,781.0	1,780.9	4.1	0.9	116.08	375.7	2,875.8	2,932.2	2,927.2	4.98	589.299	
1,870.1	1,863.1	1,850.5	1,850.4	4.3	1.0	116.35	375.0	2,875.6	2,938.4	2,933.2	5.22	562.998	
1,900.0	1,892.3	1,880.0	1,879.9	4.4	1.0	116.46	374.7	2,875.5	2,941.1	2,935.8	5.32	552.488	
1,968.5	1,959.4	1,945.9	1,945.8	4.7	1.0	116.71	374.1	2,875.3	2,947.3	2,941.7	5.57	528.999	
2,000.0	1,990.2	1,975.9	1,975.8	4.8	1.0	116.82	373.8	2,875.2	2,950.1	2,944.5	5.68	518.935	
2,066.9	2,055.6	2,038.6	2,038.5	5.1	1.0	117.06	373.3	2,875.0	2,956.3	2,950.4	5.93	498.308	
2,100.0	2,088.0	2,069.3	2,069.2	5.2	1.0	117.17	373.0	2,874.9	2,959.4	2,953.4	6.06	488.689	
2,165.3	2,151.9	2,124.6	2,124.5	5.4	1.0	117.38	372.5	2,874.9	2,965.7	2,959.4	6.30	470.715	
2,200.0	2,185.8	2,151.0	2,150.9	5.6	1.1	117.48	372.3	2,875.0	2,969.1	2,962.7	6.43	461.921	
2,263.8	2,248.2	2,200.0	2,199.9	5.8	1.1	117.67	371.8	2,875.3	2,975.7	2,969.0	6.67	446.264	
2,300.0	2,283.6	2,234.5	2,234.4	6.0	1.1	117.80	371.5	2,875.6	2,979.5	2,972.7	6.80	437.896	
2,362.2	2,344.5	2,294.9	2,294.8	6.2	1.1	118.02	370.9	2,876.1	2,986.2	2,979.1	7.04	424.058	
2,400.0	2,381.4	2,330.3	2,330.1	6.4	1.1	118.15	370.5	2,876.4	2,990.3	2,983.1	7.19	416.155	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,386.6	2,386.5	6.6	1.1	118.36	370.0	2,876.9	2,996.9	2,989.5	7.42	403.995	
2,500.0	2,479.2	2,422.2	2,422.1	6.8	1.1	118.50	369.5	2,877.3	3,001.2	2,993.7	7.57	396.527	
2,559.0	2,537.0	2,475.0	2,474.9	7.0	1.1	118.69	369.0	2,877.9	3,007.9	3,000.1	7.80	385.781	
2,600.0	2,577.1	2,511.9	2,511.8	7.2	1.1	118.83	368.8	2,878.4	3,012.6	3,004.6	7.95	378.711	
2,657.5	2,633.3	2,564.7	2,564.5	7.4	1.1	119.02	368.4	2,879.2	3,019.2	3,011.0	8.18	369.183	
2,700.0	2,674.9	2,604.0	2,603.9	7.6	1.1	119.16	368.2	2,879.7	3,024.2	3,015.9	8.34	362.478	
2,755.9	2,729.6	2,659.4	2,659.3	7.9	1.2	119.36	367.8	2,880.6	3,030.8	3,022.3	8.56	354.005	
2,800.0	2,772.7	2,700.0	2,699.8	8.0	1.2	119.51	367.4	2,881.2	3,036.1	3,027.3	8.73	347.640	
2,854.3	2,825.8	2,742.4	2,742.3	8.3	1.2	119.66	366.9	2,881.9	3,042.6	3,033.7	8.95	340.069	
2,900.0	2,870.5	2,776.1	2,775.9	8.5	1.2	119.79	366.5	2,882.6	3,048.4	3,039.3	9.13	334.015	
2,952.7	2,922.1	2,818.6	2,818.4	8.7	1.2	119.94	365.9	2,883.7	3,055.2	3,045.9	9.34	327.286	
3,000.0	2,968.3	2,862.1	2,861.9	8.9	1.2	120.10	365.2	2,884.8	3,061.5	3,051.9	9.52	321.505	
3,051.2	3,018.4	2,909.5	2,909.3	9.1	1.2	120.28	364.3	2,886.1	3,068.3	3,058.6	9.73	315.486	
3,100.0	3,066.1	2,956.2	2,956.0	9.3	1.2	120.46	363.5	2,887.4	3,074.8	3,064.9	9.92	310.016	
3,149.6	3,114.7	3,004.4	3,004.1	9.5	1.2	120.63	362.7	2,888.8	3,081.5	3,071.4	10.11	304.660	
3,200.0	3,164.0	3,060.9	3,060.5	9.8	1.2	120.84	362.0	2,890.3	3,088.3	3,078.0	10.31	299.444	
3,248.0	3,210.9	3,115.1	3,114.7	10.0	1.2	121.03	361.4	2,891.6	3,094.7	3,084.2	10.50	294.642	
3,300.0	3,261.8	3,174.7	3,174.3	10.2	1.3	121.24	360.9	2,892.8	3,101.5	3,090.8	10.71	289.646	
3,346.4	3,307.2	3,226.4	3,226.0	10.4	1.3	121.41	360.5	2,893.8	3,107.5	3,096.6	10.89	285.320	
3,400.0	3,359.6	3,284.3	3,283.9	10.6	1.3	121.61	359.9	2,894.8	3,114.3	3,103.2	11.10	280.513	
3,444.9	3,403.5	3,327.1	3,326.7	10.8	1.3	121.76	359.4	2,895.5	3,120.0	3,108.7	11.28	276.600	
3,500.0	3,457.4	3,376.3	3,375.9	11.1	1.3	121.94	358.8	2,896.3	3,127.1	3,115.6	11.50	271.964	
3,543.3	3,499.8	3,413.5	3,413.1	11.3	1.3	122.06	358.4	2,897.0	3,132.7	3,121.0	11.67	268.440	
3,600.0	3,555.2	3,459.3	3,458.9	11.5	1.3	122.22	357.9	2,897.9	3,140.3	3,128.4	11.90	263.984	
3,641.7	3,596.0	3,500.0	3,499.6	11.7	1.3	122.36	357.5	2,898.9	3,146.0	3,133.9	12.06	260.808	
3,700.0	3,653.0	3,552.3	3,551.9	11.9	1.3	122.54	357.1	2,900.2	3,154.0	3,141.7	12.29	256.546	
3,740.1	3,692.3	3,594.8	3,594.4	12.1	1.3	122.68	356.9	2,901.2	3,159.5	3,147.1	12.45	253.690	
3,800.0	3,750.8	3,653.7	3,653.3	12.4	1.4	122.87	356.8	2,902.5	3,167.7	3,155.0	12.69	249.584	
3,838.6	3,788.6	3,691.4	3,691.0	12.6	1.4	122.99	356.7	2,903.4	3,173.0	3,160.2	12.85	247.020	
3,900.0	3,848.7	3,750.3	3,749.8	12.8	1.4	123.18	356.6	2,904.7	3,181.5	3,168.4	13.09	243.059	
3,937.0	3,884.9	3,785.6	3,785.1	13.0	1.4	123.29	356.5	2,905.5	3,186.6	3,173.4	13.24	240.743	
4,000.0	3,946.5	3,853.3	3,852.7	13.3	1.4	123.50	356.7	2,907.0	3,195.4	3,181.9	13.49	236.919	
4,035.4	3,981.1	3,892.6	3,892.1	13.4	1.4	123.62	356.8	2,907.8	3,200.3	3,186.6	13.63	234.825	
4,100.0	4,044.3	3,955.4	3,954.9	13.7	1.4	123.80	357.4	2,909.1	3,209.1	3,195.2	13.88	231.130	
4,133.8	4,077.4	3,987.9	3,987.3	13.9	1.4	123.89	358.0	2,909.7	3,213.7	3,199.7	14.02	229.245	
4,200.0	4,142.1	4,067.7	4,067.1	14.2	1.4	124.10	360.1	2,911.3	3,222.8	3,208.5	14.28	225.653	
4,232.3	4,173.7	4,111.0	4,110.3	14.3	1.4	124.21	361.7	2,911.9	3,227.0	3,212.6	14.41	223.939	
4,300.0	4,239.9	4,200.0	4,199.3	14.6	1.4	124.42	365.3	2,912.6	3,235.5	3,220.8	14.68	220.444	
4,330.7	4,270.0	4,229.1	4,228.4	14.7	1.4	124.48	366.6	2,912.7	3,239.2	3,224.4	14.80	218.878	
4,400.0	4,337.7	4,276.0	4,275.2	15.0	1.4	124.59	368.7	2,913.2	3,248.1	3,233.0	15.07	215.480	
4,429.1	4,366.2	4,300.0	4,299.2	15.2	1.4	124.64	369.8	2,913.6	3,251.9	3,236.7	15.19	214.094	
4,500.0	4,435.6	4,365.2	4,364.3	15.5	1.4	124.78	372.9	2,914.6	3,261.4	3,246.0	15.47	210.779	
4,527.5	4,462.5	4,393.0	4,392.1	15.6	1.4	124.84	374.2	2,915.1	3,265.1	3,249.6	15.58	209.518	
4,600.0	4,533.4	4,493.2	4,492.1	15.9	1.4	125.05	379.5	2,916.3	3,274.6	3,258.7	15.87	206.313	
4,626.0	4,558.8	4,524.0	4,522.9	16.0	1.4	125.12	381.2	2,916.5	3,277.8	3,261.9	15.97	205.192	
4,673.6	4,605.3	4,577.8	4,576.6	16.3	1.5	125.22	384.1	2,916.8	3,283.7	3,267.6	16.16	203.176	
4,700.0	4,631.2	4,600.0	4,598.8	16.4	1.5	125.32	385.3	2,916.8	3,286.9	3,270.6	16.25	202.328	
4,724.4	4,655.1	4,626.6	4,625.3	16.4	1.5	125.42	386.7	2,916.9	3,289.7	3,273.4	16.31	201.700	
4,800.0	4,729.5	4,691.1	4,689.8	16.7	1.5	125.65	390.1	2,917.3	3,297.8	3,281.3	16.51	199.753	
4,822.8	4,752.1	4,715.5	4,714.1	16.7	1.5	125.72	391.3	2,917.5	3,300.0	3,283.4	16.56	199.239	
4,900.0	4,828.4	4,809.5	4,808.1	17.0	1.5	125.95	395.3	2,917.8	3,306.6	3,289.8	16.75	197.446	
4,921.2	4,849.5	4,830.8	4,829.3	17.0	1.5	126.00	396.0	2,917.8	3,308.1	3,291.3	16.79	197.024	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,910.1	4,908.6	17.2	1.5	126.16	398.4	2,917.8	3,313.1	3,296.1	16.95	195.409	
5,019.7	4,947.4	4,931.0	4,929.5	17.2	1.5	126.20	398.9	2,917.8	3,314.1	3,297.1	16.99	195.062	
5,100.0	5,027.5	5,014.6	5,013.1	17.4	1.5	126.31	400.6	2,917.6	3,317.4	3,300.2	17.14	193.586	
5,118.1	5,045.6	5,032.0	5,030.4	17.4	1.5	126.33	400.9	2,917.6	3,317.9	3,300.8	17.16	193.306	
5,200.0	5,127.4	5,111.3	5,109.8	17.6	1.5	126.38	401.7	2,917.4	3,319.6	3,302.4	17.29	191.986	
5,216.5	5,143.9	5,128.5	5,127.0	17.6	1.5	126.39	401.8	2,917.4	3,319.8	3,302.5	17.31	191.771	
5,273.4	5,200.8	5,187.7	5,186.2	17.7	1.5	93.71	402.0	2,917.2	3,320.0	3,304.0	16.01	207.344	
5,300.0	5,227.4	5,217.0	5,215.5	17.7	1.5	93.71	401.9	2,917.1	3,319.9	3,303.8	16.06	206.762	
5,314.9	5,242.3	5,234.3	5,232.7	17.7	1.5	93.71	401.8	2,917.0	3,319.8	3,303.7	16.09	206.387	
5,400.0	5,327.4	5,327.3	5,325.7	17.8	1.5	93.72	401.2	2,916.4	3,319.3	3,303.0	16.25	204.263	
5,413.4	5,340.8	5,340.3	5,338.7	17.9	1.5	93.73	401.1	2,916.2	3,319.2	3,302.9	16.28	203.932	
5,500.0	5,427.4	5,424.1	5,422.6	18.0	1.5	93.74	400.2	2,915.6	3,318.6	3,302.1	16.44	201.812	
5,511.8	5,439.2	5,435.4	5,433.8	18.0	1.5	93.74	400.1	2,915.5	3,318.5	3,302.0	16.47	201.524	
5,600.0	5,527.4	5,522.8	5,521.2	18.1	1.5	93.77	398.6	2,914.9	3,318.0	3,301.3	16.64	199.386	
5,610.2	5,537.6	5,534.4	5,532.8	18.1	1.5	93.77	398.4	2,914.9	3,317.9	3,301.3	16.66	199.135	
5,700.0	5,627.4	5,631.2	5,629.6	18.3	1.6	93.80	396.9	2,914.0	3,317.2	3,300.4	16.84	196.964	
5,708.6	5,636.0	5,639.7	5,638.1	18.3	1.6	93.80	396.7	2,913.9	3,317.1	3,300.3	16.86	196.757	
5,800.0	5,727.4	5,726.4	5,724.7	18.4	1.6	93.83	395.4	2,913.1	3,316.4	3,299.4	17.04	194.613	
5,807.1	5,734.5	5,732.5	5,730.9	18.4	1.6	93.83	395.3	2,913.1	3,316.4	3,299.3	17.06	194.449	
5,900.0	5,827.4	5,814.3	5,812.7	18.6	1.6	93.86	393.8	2,912.6	3,315.9	3,298.6	17.24	192.329	
5,905.5	5,832.9	5,819.3	5,817.7	18.6	1.6	93.86	393.7	2,912.5	3,315.9	3,298.6	17.25	192.204	
5,995.0	5,922.4	5,900.0	5,898.3	18.7	1.6	93.89	391.9	2,912.2	3,315.7	3,298.2	17.43	190.194	
6,000.0	5,927.4	5,900.0	5,898.3	18.7	1.6	93.89	391.9	2,912.2	3,315.7	3,298.2	17.44	190.096	
6,003.9	5,931.3	5,900.0	5,898.3	18.7	1.6	93.89	391.9	2,912.2	3,315.7	3,298.2	17.45	190.019	
6,100.0	6,027.4	5,981.8	5,980.2	18.9	1.6	93.92	390.0	2,912.3	3,316.0	3,298.3	17.64	187.940	
6,102.3	6,029.7	5,983.6	5,982.0	18.9	1.6	93.92	389.9	2,912.3	3,316.0	3,298.3	17.65	187.890	
6,200.0	6,127.4	6,100.0	6,098.3	19.0	1.7	93.98	386.7	2,912.7	3,316.4	3,298.6	17.86	185.726	
6,200.8	6,128.2	6,100.0	6,098.3	19.0	1.7	93.98	386.7	2,912.7	3,316.4	3,298.6	17.86	185.711	
6,299.2	6,226.6	6,173.3	6,171.5	19.2	1.7	94.02	384.2	2,912.8	3,316.9	3,298.8	18.06	183.673	
6,301.4	6,228.8	6,174.9	6,173.1	19.2	1.7	94.02	384.1	2,912.8	3,316.9	3,298.9	18.06	183.628	
6,350.0	6,277.4	6,215.8	6,214.0	19.3	1.7	4.06	382.6	2,913.2	3,315.8	3,296.6	19.17	172.980	
6,397.6	6,324.7	6,269.8	6,268.0	19.3	1.7	4.12	380.5	2,913.6	3,311.5	3,292.3	19.23	172.199	
6,400.0	6,327.1	6,272.5	6,270.7	19.3	1.7	4.13	380.4	2,913.6	3,311.2	3,292.0	19.23	172.152	
6,450.0	6,376.3	6,319.5	6,317.6	19.3	1.7	4.22	378.4	2,913.9	3,303.1	3,283.8	19.31	171.081	
6,496.0	6,421.1	6,354.3	6,352.4	19.3	1.7	4.32	376.8	2,914.1	3,292.7	3,273.3	19.36	170.080	
6,500.0	6,424.9	6,357.2	6,355.3	19.3	1.7	4.33	376.7	2,914.2	3,291.7	3,272.3	19.36	169.998	
6,550.0	6,472.4	6,400.0	6,398.0	19.3	1.7	4.48	374.8	2,914.7	3,277.1	3,257.7	19.39	169.038	
6,594.5	6,513.8	6,425.2	6,423.2	19.3	1.7	4.62	373.7	2,915.1	3,261.4	3,242.1	19.36	168.440	
6,600.0	6,518.8	6,428.9	6,426.9	19.3	1.7	4.64	373.5	2,915.1	3,259.3	3,240.0	19.36	168.380	
6,650.0	6,563.8	6,462.3	6,460.3	19.3	1.7	4.84	372.0	2,915.7	3,238.6	3,219.3	19.28	168.015	
6,692.9	6,601.1	6,500.0	6,497.9	19.2	1.8	5.07	370.2	2,916.6	3,218.4	3,199.3	19.17	167.922	
6,700.0	6,607.1	6,500.0	6,497.9	19.2	1.8	5.10	370.2	2,916.6	3,214.9	3,195.7	19.14	167.963	
6,750.0	6,648.6	6,543.3	6,541.1	19.2	1.8	5.42	368.1	2,917.6	3,188.2	3,169.2	18.96	168.187	
6,791.3	6,681.4	6,584.4	6,582.2	19.1	1.8	5.75	366.1	2,918.4	3,163.9	3,145.1	18.77	168.567	
6,800.0	6,688.1	6,592.8	6,590.5	19.1	1.8	5.83	365.6	2,918.6	3,158.6	3,139.8	18.73	168.677	
6,850.0	6,725.3	6,632.1	6,629.8	19.1	1.8	6.30	363.6	2,919.3	3,126.1	3,107.7	18.44	169.522	
6,889.7	6,753.2	6,660.6	6,658.3	19.0	1.8	6.75	362.1	2,919.8	3,098.5	3,080.3	18.18	170.406	
6,900.0	6,760.1	6,667.7	6,665.4	19.0	1.8	6.87	361.7	2,919.9	3,091.1	3,073.0	18.11	170.667	
6,950.0	6,792.3	6,700.0	6,697.6	19.0	1.8	7.57	360.0	2,920.5	3,053.8	3,036.0	17.75	172.057	
6,988.2	6,815.1	6,723.3	6,720.8	18.9	1.8	8.22	358.8	2,920.9	3,023.7	3,006.3	17.46	173.199	
7,000.0	6,821.8	6,729.9	6,727.5	18.9	1.8	8.45	358.4	2,921.1	3,014.2	2,996.8	17.37	173.574	
7,050.0	6,848.3	6,756.4	6,753.9	18.9	1.8	9.55	356.9	2,921.5	2,972.6	2,955.6	16.98	175.057	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,086.6	6,865.9	6,773.9	6,771.4	18.9	1.8	10.56	355.9	2,921.9	2,941.1	2,924.3	16.72	175.927	
7,100.0	6,871.9	6,779.9	6,777.4	18.9	1.8	10.99	355.6	2,922.0	2,929.3	2,912.6	16.63	176.195	
7,150.0	6,892.3	6,800.0	6,797.4	18.8	1.8	12.91	354.4	2,922.3	2,884.3	2,868.0	16.34	176.481	
7,185.0	6,904.7	6,812.8	6,810.2	18.8	1.8	14.69	353.6	2,922.6	2,852.0	2,835.8	16.24	175.667	
7,200.0	6,909.5	6,817.6	6,815.0	18.9	1.8	15.60	353.3	2,922.7	2,838.0	2,821.8	16.22	175.014	
7,250.0	6,923.4	6,831.6	6,828.9	19.3	1.8	19.57	352.5	2,922.9	2,790.5	2,774.2	16.38	170.313	
7,283.4	6,930.8	6,839.1	6,836.5	19.8	1.8	23.43	352.0	2,923.1	2,758.3	2,741.5	16.79	164.268	
7,300.0	6,933.9	6,842.4	6,839.7	20.0	1.8	25.88	351.8	2,923.1	2,742.2	2,725.0	17.13	160.051	
7,350.0	6,940.9	6,849.9	6,847.3	20.8	1.8	36.98	351.3	2,923.3	2,693.1	2,674.1	18.97	141.951	
7,381.9	6,943.6	6,853.1	6,850.4	21.4	1.8	48.92	351.1	2,923.3	2,661.6	2,640.6	20.93	127.183	
7,400.0	6,944.5	6,854.2	6,851.5	21.7	1.8	58.35	351.0	2,923.3	2,643.6	2,621.4	22.17	119.260	
7,432.4	6,945.0	6,855.2	6,852.6	22.3	1.8	80.46	350.9	2,923.4	2,611.4	2,587.6	23.78	109.805	
7,480.3	6,944.6	6,855.7	6,853.0	23.2	1.8	80.57	350.9	2,923.4	2,563.7	2,539.1	24.67	103.942	
7,500.0	6,944.4	6,855.9	6,853.2	23.6	1.8	80.61	350.9	2,923.4	2,544.2	2,519.1	25.03	101.651	
7,578.7	6,943.7	6,856.7	6,854.0	25.2	1.8	80.77	350.8	2,923.4	2,465.9	2,439.3	26.60	92.705	
7,600.0	6,943.6	6,856.9	6,854.2	25.6	1.8	80.82	350.8	2,923.4	2,444.7	2,417.7	27.02	90.465	
7,677.1	6,942.9	6,857.7	6,855.0	27.3	1.8	80.98	350.8	2,923.4	2,368.1	2,339.4	28.67	82.591	
7,700.0	6,942.7	6,857.9	6,855.2	27.8	1.8	81.03	350.8	2,923.4	2,345.4	2,316.2	29.16	80.430	
7,775.6	6,942.1	6,858.7	6,856.0	29.5	1.8	81.19	350.7	2,923.4	2,270.3	2,239.5	30.86	73.578	
7,800.0	6,941.9	6,858.9	6,856.2	30.1	1.8	81.24	350.7	2,923.4	2,246.1	2,214.7	31.40	71.522	
7,874.0	6,941.3	6,859.7	6,857.0	31.8	1.8	81.40	350.7	2,923.4	2,172.6	2,139.5	33.13	65.579	
7,900.0	6,941.1	6,859.9	6,857.2	32.4	1.8	81.45	350.6	2,923.4	2,146.8	2,113.1	33.74	63.636	
7,972.4	6,940.4	6,860.6	6,857.9	34.2	1.8	81.61	350.6	2,923.5	2,075.0	2,039.5	35.48	58.490	
8,000.0	6,940.2	6,860.9	6,858.2	34.9	1.8	81.66	350.6	2,923.5	2,047.6	2,011.5	36.14	56.661	
8,070.8	6,939.6	6,861.6	6,858.9	36.6	1.8	81.82	350.5	2,923.5	1,977.4	1,939.6	37.88	52.200	
8,100.0	6,939.4	6,861.9	6,859.2	37.3	1.8	81.88	350.5	2,923.5	1,948.6	1,910.0	38.60	50.482	
8,169.3	6,938.8	6,862.6	6,859.9	39.1	1.9	82.03	350.5	2,923.5	1,880.0	1,839.6	40.34	46.608	
8,200.0	6,938.5	6,862.9	6,860.2	39.8	1.9	82.09	350.4	2,923.5	1,849.6	1,808.5	41.11	44.995	
8,267.7	6,938.0	6,863.6	6,860.9	41.6	1.9	82.24	350.4	2,923.5	1,782.6	1,739.8	42.83	41.621	
8,300.0	6,937.7	6,863.9	6,861.2	42.4	1.9	82.31	350.4	2,923.5	1,750.7	1,707.0	43.65	40.105	
8,366.1	6,937.2	6,864.6	6,861.9	44.1	1.9	82.45	350.3	2,923.5	1,685.4	1,640.0	45.36	37.158	
8,400.0	6,936.9	6,865.0	6,862.2	45.0	1.9	82.52	350.3	2,923.5	1,651.9	1,605.7	46.23	35.733	
8,464.5	6,936.3	6,865.6	6,862.9	46.6	1.9	82.66	350.3	2,923.6	1,588.3	1,540.4	47.91	33.150	
8,500.0	6,936.0	6,866.0	6,863.2	47.6	1.9	82.74	350.2	2,923.6	1,553.4	1,504.5	48.84	31.807	
8,563.0	6,935.5	6,866.6	6,863.9	49.2	1.9	82.87	350.2	2,923.6	1,491.4	1,440.9	50.49	29.537	
8,600.0	6,935.2	6,867.0	6,864.3	50.2	1.9	82.95	350.2	2,923.6	1,455.0	1,403.5	51.47	28.270	
8,661.4	6,934.7	6,867.6	6,864.9	51.8	1.9	83.08	350.1	2,923.6	1,394.7	1,341.6	53.09	26.269	
8,700.0	6,934.4	6,868.0	6,865.3	52.8	1.9	83.17	350.1	2,923.6	1,356.8	1,302.7	54.12	25.072	
8,759.8	6,933.9	6,868.6	6,865.9	54.4	1.9	83.30	350.1	2,923.6	1,298.2	1,242.5	55.71	23.303	
8,800.0	6,933.5	6,869.0	6,866.3	55.5	1.9	83.38	350.0	2,923.6	1,259.0	1,202.2	56.78	22.171	
8,858.2	6,933.0	6,869.6	6,866.9	57.1	1.9	83.51	350.0	2,923.6	1,202.1	1,143.8	58.35	20.603	
8,900.0	6,932.7	6,870.0	6,867.3	58.2	1.9	83.60	350.0	2,923.6	1,161.5	1,102.0	59.47	19.532	
8,956.7	6,932.2	6,870.6	6,867.9	59.7	1.9	83.72	349.9	2,923.6	1,106.4	1,045.4	60.99	18.140	
9,000.0	6,931.8	6,871.1	6,868.3	60.9	1.9	83.82	349.9	2,923.7	1,064.4	1,002.2	62.16	17.123	
9,055.1	6,931.4	6,871.6	6,868.9	62.4	1.9	83.94	349.9	2,923.7	1,011.2	947.5	63.65	15.886	
9,100.0	6,931.0	6,872.1	6,869.3	63.6	1.9	84.04	349.8	2,923.7	968.0	903.1	64.87	14.922	
9,153.5	6,930.6	6,872.6	6,869.9	65.0	1.9	84.15	349.8	2,923.7	916.7	850.3	66.32	13.821	
9,200.0	6,930.2	6,873.1	6,870.4	66.3	1.9	84.26	349.8	2,923.7	872.3	804.7	67.59	12.907	
9,251.9	6,929.7	6,873.6	6,870.9	67.7	1.9	84.37	349.7	2,923.7	823.1	754.1	69.00	11.928	
9,300.0	6,929.3	6,874.1	6,871.4	69.0	1.9	84.47	349.7	2,923.7	777.8	707.5	70.31	11.062	
9,350.4	6,928.9	6,874.6	6,871.9	70.4	1.9	84.59	349.7	2,923.7	730.7	659.0	71.69	10.193	
9,400.0	6,928.5	6,875.2	6,872.4	71.7	1.9	84.69	349.6	2,923.7	684.8	611.8	73.05	9.375	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,448.8	6,928.1	6,875.7	6,872.9	73.0	1.9	84.80	349.6	2,923.7	640.2	565.8	74.39	8.606	
9,500.0	6,927.7	6,876.2	6,873.4	74.4	1.9	84.91	349.5	2,923.8	594.1	518.3	75.79	7.838	
9,547.2	6,927.3	6,876.7	6,873.9	75.7	1.9	85.02	349.5	2,923.8	552.4	475.3	77.09	7.165	
9,600.0	6,926.8	6,877.2	6,874.5	77.2	1.9	85.13	349.5	2,923.8	506.9	428.3	78.54	6.454	
9,645.6	6,926.4	6,877.7	6,875.0	78.4	1.9	85.24	349.4	2,923.8	468.8	389.0	79.80	5.874	
9,700.0	6,926.0	6,878.3	6,875.5	79.9	1.9	85.36	349.4	2,923.8	425.3	344.0	81.30	5.232	
9,744.1	6,925.6	6,878.7	6,876.0	81.1	1.9	85.45	349.4	2,923.8	392.1	309.6	82.51	4.752	
9,800.0	6,925.2	6,879.3	6,876.5	82.6	1.9	85.58	349.3	2,923.8	353.4	269.4	84.06	4.204	
9,842.5	6,924.8	6,879.7	6,877.0	83.8	1.9	85.67	349.3	2,923.8	327.3	242.1	85.23	3.841	
9,900.0	6,924.3	6,880.3	6,877.6	85.4	1.9	85.80	349.3	2,923.8	298.1	211.3	86.82	3.434	
9,940.9	6,924.0	6,880.8	6,878.0	86.5	1.9	85.89	349.2	2,923.8	282.7	194.7	87.96	3.214	
10,000.0	6,923.5	6,881.4	6,878.6	88.1	1.9	86.02	349.2	2,923.9	269.9	180.3	89.60	3.013	
10,030.1	6,923.2	6,881.7	6,878.9	89.0	1.9	86.09	349.2	2,923.9	268.3	177.8	90.43	2.966 CC	
10,039.3	6,923.2	6,881.8	6,879.0	89.2	1.9	86.11	349.2	2,923.9	268.4	177.7	90.69	2.960 ES, SF	
10,100.0	6,922.6	6,882.4	6,879.7	90.9	1.9	86.24	349.1	2,923.9	277.2	184.8	92.37	3.001	
10,137.8	6,922.3	6,882.8	6,880.1	91.9	1.9	86.33	349.1	2,923.9	289.1	195.6	93.42	3.094	
10,200.0	6,921.8	6,883.5	6,880.7	93.7	1.9	86.47	349.1	2,923.9	317.5	222.4	95.15	3.337	
10,236.2	6,921.5	6,883.8	6,881.1	94.7	1.9	86.55	349.0	2,923.9	338.3	242.1	96.15	3.518	
10,300.0	6,921.0	6,884.5	6,881.7	96.4	1.9	86.69	349.0	2,923.9	380.5	282.6	97.93	3.886	
10,334.6	6,920.7	6,884.9	6,882.1	97.4	1.9	86.77	349.0	2,923.9	405.8	306.9	98.89	4.104	
10,400.0	6,920.1	6,885.6	6,882.8	99.2	1.9	86.91	348.9	2,923.9	456.9	356.2	100.71	4.537	
10,433.0	6,919.9	6,885.9	6,883.1	100.1	1.9	86.99	348.9	2,923.9	484.0	382.4	101.63	4.763	
10,500.0	6,919.3	6,886.6	6,883.8	101.9	1.9	87.14	348.8	2,924.0	541.0	437.5	103.50	5.228	
10,531.5	6,919.0	6,886.9	6,884.2	102.8	1.9	87.21	348.8	2,924.0	568.6	464.2	104.38	5.448	
10,600.0	6,918.5	6,887.7	6,884.9	104.7	1.9	87.36	348.8	2,924.0	629.8	523.6	106.29	5.926	
10,629.9	6,918.2	6,888.0	6,885.2	105.5	1.9	87.43	348.7	2,924.0	657.0	549.9	107.12	6.133	
10,700.0	6,917.6	6,888.7	6,885.9	107.5	1.9	87.59	348.7	2,924.0	721.6	612.5	109.08	6.615	
10,728.3	6,917.4	6,889.0	6,886.2	108.3	1.9	87.65	348.7	2,924.0	747.9	638.1	109.87	6.808	
10,800.0	6,916.8	6,889.8	6,887.0	110.3	1.9	87.81	348.6	2,924.0	815.2	703.4	111.87	7.287	
10,826.7	6,916.6	6,890.0	6,887.3	111.0	1.9	87.87	348.6	2,924.0	840.6	727.9	112.62	7.464	
10,900.0	6,916.0	6,890.8	6,888.0	113.0	1.9	88.04	348.5	2,924.0	910.3	795.6	114.66	7.939	
10,925.2	6,915.8	6,891.1	6,888.3	113.7	1.9	88.09	348.5	2,924.0	934.4	819.0	115.37	8.099	
11,000.0	6,915.1	6,891.9	6,889.1	115.8	1.9	88.26	348.5	2,924.1	1,006.3	888.8	117.46	8.567	
11,023.6	6,914.9	6,892.1	6,889.3	116.5	1.9	88.32	348.5	2,924.1	1,029.0	910.9	118.12	8.712	
11,100.0	6,914.3	6,892.9	6,890.2	118.6	1.9	88.49	348.4	2,924.1	1,102.9	982.7	120.25	9.172	
11,122.0	6,914.1	6,893.2	6,890.4	119.2	1.9	88.54	348.4	2,924.1	1,124.3	1,003.5	120.87	9.302	
11,200.0	6,913.5	6,894.0	6,891.2	121.4	1.9	88.72	348.3	2,924.1	1,200.2	1,077.1	123.05	9.754	
11,220.4	6,913.3	6,894.2	6,891.4	121.9	1.9	88.76	348.3	2,924.1	1,220.1	1,096.5	123.62	9.870	
11,300.0	6,912.6	6,895.1	6,892.3	124.1	1.9	88.94	348.3	2,924.1	1,297.8	1,172.0	125.85	10.313	
11,318.9	6,912.5	6,895.3	6,892.5	124.7	1.9	88.99	348.2	2,924.1	1,316.3	1,189.9	126.38	10.416	
11,400.0	6,911.8	6,896.1	6,893.3	126.9	1.9	89.17	348.2	2,924.1	1,395.8	1,267.2	128.65	10.850	
11,417.3	6,911.6	6,896.3	6,893.5	127.4	1.9	89.21	348.2	2,924.1	1,412.8	1,283.7	129.13	10.941	
11,500.0	6,911.0	6,897.2	6,894.4	129.7	1.9	89.40	348.1	2,924.2	1,494.1	1,362.6	131.44	11.367	
11,515.7	6,910.8	6,897.4	6,894.6	130.2	1.9	89.43	348.1	2,924.2	1,509.6	1,377.7	131.88	11.446	
11,600.0	6,910.1	6,898.3	6,895.5	132.5	1.9	89.63	348.0	2,924.2	1,592.6	1,458.3	134.24	11.863	
11,614.1	6,910.0	6,898.4	6,895.6	132.9	1.9	89.66	348.0	2,924.2	1,606.5	1,471.9	134.64	11.932	
11,700.0	6,909.3	6,899.3	6,896.5	135.3	1.9	89.86	348.0	2,924.2	1,691.2	1,554.2	137.04	12.341	
11,712.6	6,909.2	6,900.0	6,897.2	135.6	1.9	89.99	347.9	2,924.2	1,703.6	1,566.2	137.39	12.400	
11,800.0	6,908.5	6,900.0	6,897.2	138.1	1.9	89.99	347.9	2,924.2	1,790.0	1,650.2	139.83	12.801	
11,811.0	6,908.4	6,900.0	6,897.2	138.4	1.9	89.99	347.9	2,924.2	1,800.9	1,660.7	140.14	12.851	
11,900.0	6,907.6	6,900.0	6,897.2	140.9	1.9	90.00	347.9	2,924.2	1,888.9	1,746.3	142.62	13.245	
11,909.4	6,907.5	6,900.0	6,897.2	141.1	1.9	90.00	347.9	2,924.2	1,898.3	1,755.4	142.88	13.286	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,000.0	6,906.8	6,900.0	6,897.2	143.6	1.9	90.00	347.9	2,924.2	1,988.0	1,842.6	145.41	13.672		
12,007.8	6,906.7	6,900.0	6,897.2	143.9	1.9	90.00	347.9	2,924.2	1,995.7	1,850.1	145.63	13.704		
12,100.0	6,905.9	6,900.0	6,897.2	146.4	1.9	90.00	347.9	2,924.2	2,087.1	1,938.9	148.20	14.083		
12,106.3	6,905.9	6,900.0	6,897.2	146.6	1.9	90.00	347.9	2,924.2	2,093.3	1,944.9	148.37	14.108		
12,200.0	6,905.1	6,904.0	6,901.2	149.2	1.9	90.85	347.6	2,924.3	2,186.3	2,035.3	151.01	14.478		
12,204.7	6,905.1	6,904.1	6,901.3	149.4	1.9	90.86	347.6	2,924.3	2,191.0	2,039.8	151.14	14.496		
12,300.0	6,904.3	6,904.9	6,902.1	152.0	1.9	91.04	347.6	2,924.3	2,285.6	2,131.8	153.80	14.860		
12,303.1	6,904.3	6,904.9	6,902.1	152.1	1.9	91.04	347.6	2,924.3	2,288.7	2,134.8	153.89	14.872		
12,400.0	6,903.4	6,905.8	6,903.0	154.8	1.9	91.22	347.5	2,924.3	2,384.9	2,228.3	156.59	15.230		
12,401.5	6,903.4	6,905.8	6,903.0	154.8	1.9	91.23	347.5	2,924.3	2,386.4	2,229.8	156.64	15.236		
12,500.0	6,902.6	6,906.7	6,903.8	157.6	1.9	91.41	347.4	2,924.3	2,484.3	2,324.9	159.38	15.587		
12,598.4	6,901.8	6,907.5	6,904.7	160.3	1.9	91.59	347.4	2,924.3	2,582.1	2,420.0	162.13	15.926		
12,600.0	6,901.8	6,907.5	6,904.7	160.4	1.9	91.59	347.4	2,924.3	2,583.7	2,421.5	162.17	15.932		
12,696.8	6,901.0	6,908.3	6,905.5	163.1	1.9	91.76	347.3	2,924.4	2,680.0	2,515.2	164.87	16.255		
12,700.0	6,900.9	6,908.4	6,905.5	163.2	1.9	91.77	347.3	2,924.4	2,683.2	2,518.2	164.96	16.265		
12,795.2	6,900.1	6,909.2	6,906.3	165.8	1.9	91.94	347.3	2,924.4	2,778.0	2,610.4	167.62	16.573		
12,800.0	6,900.1	6,909.2	6,906.4	166.0	1.9	91.95	347.3	2,924.4	2,782.7	2,614.9	167.75	16.588		
12,893.7	6,899.3	6,910.0	6,907.1	168.6	1.9	92.11	347.2	2,924.4	2,875.9	2,705.6	170.36	16.882		
12,900.0	6,899.3	6,910.0	6,907.2	168.8	1.9	92.12	347.2	2,924.4	2,882.2	2,711.7	170.54	16.901		
12,992.1	6,898.5	6,910.8	6,907.9	171.3	1.9	92.28	347.1	2,924.4	2,974.0	2,800.8	173.10	17.180		
13,000.0	6,898.4	6,910.8	6,908.0	171.6	1.9	92.29	347.1	2,924.4	2,981.8	2,808.5	173.32	17.204		
13,090.5	6,897.7	6,911.6	6,908.7	174.1	1.9	92.45	347.1	2,924.4	3,072.0	2,896.1	175.84	17.470		
13,100.0	6,897.6	6,911.6	6,908.8	174.4	1.9	92.47	347.1	2,924.4	3,081.4	2,905.3	176.11	17.498		
13,188.9	6,896.9	6,912.4	6,909.5	176.8	1.9	92.62	347.0	2,924.4	3,170.0	2,991.5	178.58	17.751		
13,200.0	6,896.8	6,912.4	6,909.6	177.2	1.9	92.63	347.0	2,924.4	3,181.0	3,002.2	178.89	17.782		
13,287.4	6,896.0	6,913.1	6,910.3	179.6	1.9	92.78	347.0	2,924.5	3,268.1	3,086.8	181.32	18.024		
13,300.0	6,895.9	6,913.2	6,910.4	180.0	1.9	92.80	347.0	2,924.5	3,280.7	3,099.0	181.67	18.059		
13,385.8	6,895.2	6,913.9	6,911.1	182.4	1.9	92.94	346.9	2,924.5	3,366.2	3,182.2	184.06	18.289		
13,400.0	6,895.1	6,914.0	6,911.2	182.7	1.9	92.97	346.9	2,924.5	3,380.4	3,195.9	184.45	18.327		
13,484.2	6,894.4	6,914.7	6,911.8	185.1	1.9	93.10	346.9	2,924.5	3,464.3	3,277.5	186.79	18.547		
13,500.0	6,894.3	6,914.8	6,911.9	185.5	1.9	93.13	346.9	2,924.5	3,480.1	3,292.8	187.23	18.587		
13,582.6	6,893.6	6,915.4	6,912.6	187.9	1.9	93.26	346.8	2,924.5	3,562.5	3,372.9	189.52	18.797		
13,600.0	6,893.4	6,915.6	6,912.7	188.3	1.9	93.29	346.8	2,924.5	3,579.8	3,389.8	190.01	18.840		
13,681.1	6,892.8	6,916.2	6,913.3	190.6	1.9	93.42	346.8	2,924.5	3,660.6	3,468.4	192.26	19.040		
13,700.0	6,892.6	6,916.3	6,913.5	191.1	1.9	93.45	346.7	2,924.5	3,679.5	3,486.7	192.78	19.086		
13,779.5	6,891.9	6,916.9	6,914.1	193.4	1.9	93.58	346.7	2,924.5	3,758.8	3,563.8	194.99	19.277		
13,800.0	6,891.8	6,917.1	6,914.2	193.9	1.9	93.61	346.7	2,924.5	3,779.2	3,583.7	195.56	19.325		
13,877.9	6,891.1	6,917.6	6,914.8	196.1	1.9	93.73	346.7	2,924.5	3,857.0	3,659.2	197.72	19.507		
13,900.0	6,890.9	6,917.8	6,914.9	196.7	1.9	93.76	346.6	2,924.5	3,879.0	3,680.6	198.33	19.558		
13,976.3	6,890.3	6,918.4	6,915.5	198.9	1.9	93.88	346.6	2,924.5	3,955.1	3,754.7	200.45	19.732		
14,000.0	6,890.1	6,918.5	6,915.7	199.5	1.9	93.92	346.6	2,924.6	3,978.7	3,777.6	201.10	19.785		
14,074.8	6,889.5	6,919.1	6,916.2	201.6	1.9	94.03	346.5	2,924.6	4,053.3	3,850.2	203.17	19.950		
14,100.0	6,889.3	6,919.3	6,916.4	202.3	1.9	94.07	346.5	2,924.6	4,078.5	3,874.6	203.87	20.005		
14,173.2	6,888.7	6,919.8	6,916.9	204.4	1.9	94.18	346.5	2,924.6	4,151.5	3,945.6	205.90	20.163		
14,200.0	6,888.4	6,920.0	6,917.1	205.1	1.9	94.22	346.5	2,924.6	4,178.3	3,971.7	206.64	20.220		
14,271.6	6,887.8	6,920.5	6,917.6	207.1	1.9	94.33	346.4	2,924.6	4,249.8	4,041.1	208.62	20.371		
14,300.0	6,887.6	6,920.7	6,917.8	207.9	1.9	94.37	346.4	2,924.6	4,278.1	4,068.7	209.41	20.430		
14,370.0	6,887.0	6,921.2	6,918.3	209.9	1.9	94.47	346.4	2,924.6	4,348.0	4,136.7	211.34	20.573		
14,400.0	6,886.8	6,921.4	6,918.5	210.7	1.9	94.52	346.4	2,924.6	4,377.9	4,165.7	212.17	20.634		
14,468.5	6,886.2	6,921.9	6,919.0	212.6	1.9	94.62	346.3	2,924.6	4,446.2	4,232.2	214.07	20.770		
14,500.0	6,885.9	6,922.1	6,919.2	213.5	1.9	94.66	346.3	2,924.6	4,477.7	4,262.8	214.94	20.833		
14,566.9	6,885.4	6,922.5	6,919.7	215.4	1.9	94.76	346.3	2,924.6	4,544.5	4,327.7	216.78	20.963		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,600.0	6,885.1	6,922.8	6,919.9	216.3	1.9	94.81	346.3	2,924.6	4,577.5	4,359.8	217.70	21.027	
14,613.0	6,885.0	6,922.9	6,920.0	216.7	1.9	94.82	346.3	2,924.6	4,590.5	4,372.5	218.06	21.052	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	96.34	-400.5	3,603.1	3,625.3				
98.4	98.4	69.4	69.4	0.1	0.0	96.34	-400.5	3,603.1	3,625.3	3,625.2	0.12	N/A	
100.0	100.0	70.9	70.9	0.1	0.0	96.34	-400.5	3,603.1	3,625.3	3,625.2	0.12	N/A	
196.8	196.8	161.8	161.8	0.3	0.2	96.34	-400.5	3,603.2	3,625.4	3,625.0	0.45	7,983.354	
200.0	200.0	164.7	164.7	0.3	0.2	96.34	-400.5	3,603.2	3,625.4	3,625.0	0.47	7,779.692	
295.3	295.3	279.0	279.0	0.5	0.2	96.34	-400.4	3,603.4	3,625.6	3,624.8	0.74	4,867.562	
300.0	300.0	285.5	285.5	0.5	0.2	96.34	-400.4	3,603.4	3,625.6	3,624.8	0.76	4,795.669	
393.7	393.7	453.1	453.1	0.7	0.3	96.33	-399.8	3,601.0	3,624.2	3,623.1	1.08	3,346.816	
400.0	400.0	461.8	461.8	0.8	0.3	96.33	-399.8	3,600.8	3,624.0	3,622.9	1.10	3,285.483	
492.1	492.1	560.1	560.0	1.0	0.4	96.34	-399.7	3,598.2	3,621.6	3,620.2	1.37	2,639.291	
500.0	500.0	567.5	567.4	1.0	0.4	96.34	-399.7	3,598.0	3,621.4	3,620.0	1.39	2,597.454	
590.5	590.5	663.1	663.0	1.2	0.5	96.34	-399.6	3,595.6	3,619.0	3,617.4	1.65	2,193.283	
600.0	600.0	673.8	673.7	1.2	0.5	96.34	-399.6	3,595.3	3,618.8	3,617.1	1.68	2,157.982	
689.0	689.0	782.4	782.3	1.4	0.5	96.35	-399.6	3,592.0	3,616.1	3,614.2	1.93	1,872.098	
700.0	700.0	796.2	796.1	1.4	0.5	96.35	-399.6	3,591.5	3,615.7	3,613.8	1.96	1,841.752	
787.4	787.4	883.4	883.2	1.6	0.6	96.35	-399.5	3,588.6	3,612.8	3,610.6	2.20	1,641.791	
800.0	800.0	895.8	895.6	1.7	0.6	96.35	-399.5	3,588.1	3,612.4	3,610.1	2.23	1,616.513	
885.8	885.8	984.4	984.1	1.9	0.6	96.35	-399.3	3,585.1	3,609.4	3,607.0	2.47	1,463.410	
900.0	900.0	999.0	998.7	1.9	0.6	96.36	-399.3	3,584.6	3,608.9	3,606.4	2.50	1,440.850	
984.2	984.2	1,089.9	1,089.6	2.1	0.7	96.36	-399.2	3,581.4	3,606.0	3,603.2	2.73	1,319.780	
1,000.0	1,000.0	1,105.9	1,105.5	2.1	0.7	96.36	-399.2	3,580.8	3,605.4	3,602.6	2.77	1,299.646	
1,082.7	1,082.7	1,181.7	1,181.3	2.3	0.7	96.37	-399.5	3,578.1	3,602.4	3,599.5	2.99	1,205.204	
1,100.0	1,100.0	1,200.0	1,199.6	2.3	0.7	96.37	-399.7	3,577.4	3,601.8	3,598.8	3.04	1,186.747	
1,150.0	1,150.0	1,249.0	1,248.6	2.4	0.7	96.38	-399.9	3,575.7	3,600.1	3,597.0	3.17	1,137.219	
1,181.1	1,181.1	1,281.2	1,280.7	2.5	0.7	129.09	-399.8	3,574.6	3,599.2	3,595.9	3.26	1,103.513	
1,200.0	1,200.0	1,300.0	1,299.5	2.6	0.8	129.10	-399.7	3,573.9	3,598.7	3,595.4	3.31	1,087.117	
1,279.5	1,279.5	1,367.5	1,367.0	2.7	0.8	129.14	-399.6	3,571.7	3,597.6	3,594.1	3.51	1,025.128	
1,291.0	1,290.9	1,377.1	1,376.6	2.8	0.8	129.15	-399.6	3,571.4	3,597.6	3,594.0	3.54	1,016.805	
1,300.0	1,299.9	1,384.7	1,384.2	2.8	0.8	129.15	-399.6	3,571.1	3,597.6	3,594.0	3.56	1,010.336	
1,377.9	1,377.7	1,454.0	1,453.4	3.0	0.8	129.21	-400.1	3,569.0	3,598.5	3,594.8	3.76	956.765	
1,400.0	1,399.7	1,473.9	1,473.3	3.0	0.8	129.22	-400.3	3,568.4	3,599.1	3,595.3	3.82	942.635	
1,476.4	1,475.7	1,542.0	1,541.4	3.2	0.8	129.27	-400.7	3,566.6	3,601.9	3,597.9	4.02	895.765	
1,500.0	1,499.1	1,562.9	1,562.4	3.2	0.9	129.29	-400.8	3,566.0	3,603.1	3,599.0	4.08	882.318	
1,574.8	1,573.2	1,634.0	1,633.4	3.4	0.9	129.34	-401.2	3,564.3	3,607.7	3,603.4	4.29	840.247	
1,600.0	1,598.2	1,660.0	1,659.4	3.5	0.9	129.37	-401.3	3,563.6	3,609.6	3,605.2	4.36	826.953	
1,673.2	1,670.3	1,731.2	1,730.6	3.7	0.9	129.43	-401.6	3,561.9	3,615.7	3,611.1	4.58	788.681	
1,700.0	1,696.6	1,755.5	1,754.9	3.8	0.9	129.45	-401.7	3,561.3	3,618.3	3,613.6	4.66	775.830	
1,749.9	1,745.5	1,800.0	1,799.3	3.9	1.0	129.48	-401.8	3,560.2	3,623.5	3,618.7	4.82	751.699	
1,771.6	1,766.8	1,817.7	1,817.1	4.0	1.0	129.53	-401.9	3,559.8	3,626.0	3,621.1	4.89	741.585	
1,800.0	1,794.5	1,840.1	1,839.4	4.1	1.0	129.58	-401.9	3,559.4	3,629.2	3,624.2	4.98	728.921	
1,870.1	1,863.1	1,900.0	1,899.3	4.3	1.0	129.73	-401.6	3,558.3	3,637.4	3,632.2	5.21	698.154	
1,900.0	1,892.3	1,921.3	1,920.6	4.4	1.0	129.79	-401.4	3,558.0	3,640.9	3,635.6	5.31	686.105	
1,968.5	1,959.4	1,981.4	1,980.7	4.7	1.0	129.93	-400.9	3,557.3	3,649.2	3,643.7	5.54	658.439	
2,000.0	1,990.2	2,010.9	2,010.2	4.8	1.0	130.00	-400.6	3,556.9	3,653.1	3,647.4	5.65	646.583	
2,066.9	2,055.6	2,081.9	2,081.2	5.1	1.0	130.17	-400.0	3,556.1	3,661.2	3,655.4	5.89	621.922	
2,100.0	2,088.0	2,112.3	2,111.5	5.2	1.1	130.25	-399.8	3,555.6	3,665.3	3,659.3	6.00	610.467	
2,165.3	2,151.9	2,162.1	2,161.4	5.4	1.1	130.37	-399.5	3,555.1	3,673.4	3,667.2	6.24	589.119	
2,200.0	2,185.8	2,188.5	2,187.8	5.6	1.1	130.43	-399.4	3,554.9	3,677.8	3,671.5	6.36	578.455	
2,263.8	2,248.2	2,239.1	2,238.4	5.8	1.1	130.55	-399.2	3,554.6	3,686.2	3,679.6	6.58	560.037	
2,300.0	2,283.6	2,268.2	2,267.5	6.0	1.1	130.63	-399.2	3,554.5	3,691.0	3,684.3	6.71	550.254	
2,362.2	2,344.5	2,317.3	2,316.6	6.2	1.1	130.75	-399.3	3,554.4	3,699.5	3,692.5	6.93	534.186	
2,400.0	2,381.4	2,346.4	2,345.7	6.4	1.1	130.82	-399.4	3,554.5	3,704.7	3,697.7	7.06	525.117	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
2,460.6	2,440.7	2,400.0	2,399.3	6.6	1.1	130.95	-399.5	3,554.7	3,713.4	3,706.1	7.26	511.155		
2,500.0	2,479.2	2,431.4	2,430.7	6.8	1.1	131.03	-399.6	3,554.9	3,719.0	3,711.6	7.40	502.526		
2,559.0	2,537.0	2,492.4	2,491.6	7.0	1.1	131.18	-399.8	3,555.2	3,727.5	3,719.9	7.61	489.997		
2,600.0	2,577.1	2,534.6	2,533.9	7.2	1.1	131.29	-399.9	3,555.4	3,733.4	3,725.7	7.75	481.705		
2,657.5	2,633.3	2,593.8	2,593.1	7.4	1.1	131.43	-400.2	3,555.6	3,741.6	3,733.7	7.95	470.436		
2,700.0	2,674.9	2,633.9	2,633.2	7.6	1.1	131.53	-400.3	3,555.7	3,747.7	3,739.6	8.10	462.477		
2,755.9	2,729.6	2,685.8	2,685.1	7.9	1.1	131.66	-400.5	3,556.0	3,755.8	3,747.5	8.30	452.402		
2,800.0	2,772.7	2,726.1	2,725.3	8.0	1.1	131.76	-400.6	3,556.2	3,762.2	3,753.8	8.46	444.805		
2,854.3	2,825.8	2,775.1	2,774.4	8.3	1.1	131.87	-400.7	3,556.4	3,770.2	3,761.5	8.65	435.755		
2,900.0	2,870.5	2,818.7	2,817.9	8.5	1.1	131.98	-400.8	3,556.7	3,776.9	3,768.1	8.81	428.473		
2,952.7	2,922.1	2,873.0	2,872.3	8.7	1.1	132.11	-401.1	3,557.1	3,784.7	3,775.7	9.00	420.352		
3,000.0	2,968.3	2,919.0	2,918.2	8.9	1.1	132.22	-401.4	3,557.3	3,791.7	3,782.5	9.17	413.375		
3,051.2	3,018.4	2,965.0	2,964.3	9.1	1.1	132.33	-401.7	3,557.6	3,799.3	3,789.9	9.36	406.070		
3,100.0	3,066.1	3,009.6	3,008.9	9.3	1.2	132.44	-401.8	3,557.9	3,806.6	3,797.0	9.53	399.376		
3,149.6	3,114.7	3,057.3	3,056.6	9.5	1.2	132.55	-402.0	3,558.3	3,814.0	3,804.3	9.71	392.776		
3,200.0	3,164.0	3,105.8	3,105.1	9.8	1.2	132.67	-402.1	3,558.6	3,821.6	3,811.7	9.89	386.335		
3,248.0	3,210.9	3,152.0	3,151.3	10.0	1.2	132.77	-402.2	3,559.0	3,828.9	3,818.8	10.06	380.432		
3,300.0	3,261.8	3,200.0	3,199.3	10.2	1.2	132.88	-402.0	3,559.5	3,836.8	3,826.5	10.25	374.271		
3,346.4	3,307.2	3,239.4	3,238.7	10.4	1.2	132.96	-401.8	3,560.0	3,843.9	3,833.5	10.42	368.858		
3,400.0	3,359.6	3,282.9	3,282.2	10.6	1.2	133.06	-401.5	3,560.6	3,852.2	3,841.6	10.62	362.857		
3,444.9	3,403.5	3,321.1	3,320.4	10.8	1.2	133.14	-401.3	3,561.2	3,859.3	3,848.6	10.78	357.982		
3,500.0	3,457.4	3,369.9	3,369.2	11.1	1.2	133.24	-400.9	3,562.0	3,868.1	3,857.1	10.98	352.196		
3,543.3	3,499.8	3,412.8	3,412.1	11.3	1.2	133.33	-400.6	3,562.8	3,875.1	3,863.9	11.14	347.797		
3,600.0	3,555.2	3,491.1	3,490.4	11.5	1.2	133.49	-399.7	3,564.0	3,884.0	3,872.7	11.35	342.230		
3,641.7	3,596.0	3,543.8	3,543.0	11.7	1.2	133.60	-398.8	3,564.6	3,890.4	3,878.9	11.50	338.241		
3,700.0	3,653.0	3,613.3	3,612.5	11.9	1.2	133.74	-397.7	3,565.2	3,899.2	3,887.4	11.72	332.828		
3,740.1	3,692.3	3,654.2	3,653.4	12.1	1.2	133.82	-397.1	3,565.5	3,905.1	3,893.3	11.86	329.192		
3,800.0	3,750.8	3,712.2	3,711.4	12.4	1.2	133.93	-396.1	3,565.9	3,914.0	3,902.0	12.08	323.921		
3,838.6	3,788.6	3,744.0	3,743.1	12.6	1.2	133.99	-395.6	3,566.1	3,919.8	3,907.6	12.23	320.625		
3,900.0	3,848.7	3,800.0	3,799.2	12.8	1.2	134.10	-394.6	3,566.7	3,929.2	3,916.7	12.45	315.533		
3,937.0	3,884.9	3,820.9	3,820.1	13.0	1.2	134.14	-394.3	3,567.0	3,934.9	3,922.3	12.59	312.584		
4,000.0	3,946.5	3,864.4	3,863.5	13.3	1.3	134.23	-393.6	3,567.6	3,944.9	3,932.1	12.82	307.709		
4,035.4	3,981.1	3,900.0	3,899.1	13.4	1.3	134.30	-393.2	3,568.3	3,950.7	3,937.7	12.95	305.024		
4,100.0	4,044.3	3,947.6	3,946.7	13.7	1.3	134.39	-392.5	3,569.4	3,961.3	3,948.1	13.19	300.337		
4,133.8	4,077.4	3,981.0	3,980.1	13.9	1.3	134.45	-392.0	3,570.1	3,966.9	3,953.6	13.31	297.928		
4,200.0	4,142.1	4,057.8	4,056.9	14.2	1.3	134.59	-390.3	3,571.8	3,977.8	3,964.2	13.56	293.367		
4,232.3	4,173.7	4,097.7	4,096.8	14.3	1.3	134.66	-389.3	3,572.6	3,983.0	3,969.3	13.68	291.197		
4,300.0	4,239.9	4,182.7	4,181.7	14.6	1.3	134.81	-387.3	3,573.9	3,993.7	3,979.8	13.93	286.776		
4,330.7	4,270.0	4,214.7	4,213.7	14.7	1.3	134.87	-386.8	3,574.3	3,998.5	3,984.4	14.04	284.820		
4,400.0	4,337.7	4,274.8	4,273.8	15.0	1.3	134.98	-385.9	3,575.1	4,009.3	3,995.1	14.29	280.534		
4,429.1	4,366.2	4,300.0	4,299.0	15.2	1.3	135.03	-385.5	3,575.4	4,014.0	3,999.6	14.40	278.782		
4,500.0	4,435.6	4,346.9	4,345.9	15.5	1.3	135.12	-385.1	3,576.1	4,025.4	4,010.8	14.66	274.627		
4,527.5	4,462.5	4,365.2	4,364.1	15.6	1.3	135.15	-385.0	3,576.5	4,030.0	4,015.2	14.76	273.059		
4,600.0	4,533.4	4,433.3	4,432.3	15.9	1.3	135.29	-384.7	3,577.9	4,042.3	4,027.2	15.02	269.050		
4,626.0	4,558.8	4,477.2	4,476.2	16.0	1.4	135.38	-384.7	3,578.7	4,046.6	4,031.4	15.12	267.639		
4,673.6	4,605.3	4,529.1	4,528.1	16.3	1.4	135.48	-384.6	3,579.4	4,054.3	4,039.0	15.29	265.124		
4,700.0	4,631.2	4,551.8	4,550.7	16.4	1.4	135.59	-384.5	3,579.7	4,058.5	4,043.1	15.36	264.145		
4,724.4	4,655.1	4,572.7	4,571.7	16.4	1.4	135.68	-384.3	3,580.0	4,062.2	4,046.8	15.42	263.440		
4,800.0	4,729.5	4,633.3	4,632.2	16.7	1.4	135.92	-383.5	3,581.2	4,073.1	4,057.5	15.59	261.191		
4,822.8	4,752.1	4,650.6	4,649.6	16.7	1.4	135.99	-383.2	3,581.6	4,076.2	4,060.5	15.64	260.591		
4,900.0	4,828.4	4,712.3	4,711.2	17.0	1.4	136.18	-381.8	3,583.3	4,085.8	4,070.0	15.80	258.520		
4,921.2	4,849.5	4,733.5	4,732.4	17.0	1.4	136.23	-381.3	3,583.9	4,088.2	4,072.4	15.84	258.020		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,813.8	4,812.6	17.2	1.4	136.38	-378.4	3,586.4	4,096.2	4,080.2	16.00	256.089	
5,019.7	4,947.4	4,836.2	4,835.0	17.2	1.4	136.41	-377.6	3,587.1	4,097.9	4,081.9	16.03	255.668	
5,100.0	5,027.5	4,929.6	4,928.3	17.4	1.4	136.50	-374.1	3,589.9	4,103.8	4,087.7	16.17	253.851	
5,118.1	5,045.6	4,951.6	4,950.2	17.4	1.4	136.52	-373.4	3,590.4	4,104.9	4,088.7	16.19	253.493	
5,200.0	5,127.4	5,047.3	5,045.8	17.6	1.5	136.56	-370.5	3,592.6	4,108.5	4,092.2	16.32	251.770	
5,216.5	5,143.9	5,065.8	5,064.4	17.6	1.5	136.56	-370.0	3,593.0	4,109.0	4,092.7	16.34	251.458	
5,273.4	5,200.8	5,151.9	5,150.4	17.7	1.5	103.86	-367.6	3,594.5	4,110.0	4,093.1	16.96	242.382	
5,300.0	5,227.4	5,200.0	5,198.5	17.7	1.5	103.84	-366.3	3,595.0	4,110.1	4,093.1	17.00	241.713	
5,314.9	5,242.3	5,216.1	5,214.6	17.7	1.5	103.83	-365.8	3,595.1	4,110.1	4,093.1	17.03	241.323	
5,400.0	5,327.4	5,296.2	5,294.6	17.8	1.5	103.80	-363.6	3,595.8	4,110.2	4,093.0	17.19	239.164	
5,413.4	5,340.8	5,314.2	5,312.6	17.9	1.5	103.79	-363.0	3,595.9	4,110.2	4,093.0	17.21	238.811	
5,500.0	5,427.4	5,431.1	5,429.4	18.0	1.6	103.74	-359.3	3,596.4	4,109.8	4,092.5	17.38	236.516	
5,511.8	5,439.2	5,443.3	5,441.7	18.0	1.6	103.73	-358.9	3,596.4	4,109.8	4,092.4	17.40	236.212	
5,600.0	5,527.4	5,523.0	5,521.3	18.1	1.6	103.70	-356.3	3,596.4	4,109.2	4,091.6	17.56	233.998	
5,610.2	5,537.6	5,530.0	5,528.3	18.1	1.6	103.70	-356.0	3,596.5	4,109.1	4,091.5	17.58	233.750	
5,658.7	5,586.1	5,563.2	5,561.6	18.2	1.6	103.68	-355.2	3,596.6	4,109.0	4,091.3	17.67	232.584	
5,700.0	5,627.4	5,600.0	5,598.3	18.3	1.6	103.67	-354.4	3,596.9	4,109.1	4,091.3	17.74	231.583	
5,708.6	5,636.0	5,600.0	5,598.3	18.3	1.6	103.67	-354.4	3,596.9	4,109.1	4,091.3	17.76	231.394	
5,800.0	5,727.4	5,686.9	5,685.2	18.4	1.6	103.65	-352.8	3,597.6	4,109.4	4,091.5	17.93	229.182	
5,807.1	5,734.5	5,693.9	5,692.2	18.4	1.6	103.65	-352.7	3,597.6	4,109.5	4,091.5	17.94	229.010	
5,900.0	5,827.4	5,854.9	5,853.2	18.6	1.6	103.63	-351.1	3,597.2	4,108.9	4,090.8	18.13	226.669	
5,905.5	5,832.9	5,862.4	5,860.7	18.6	1.6	103.63	-351.1	3,597.1	4,108.9	4,090.7	18.14	226.534	
6,000.0	5,927.4	5,955.5	5,953.8	18.7	1.7	103.63	-351.0	3,595.7	4,107.5	4,089.2	18.31	224.325	
6,003.9	5,931.3	5,958.8	5,957.1	18.7	1.7	103.63	-351.0	3,595.7	4,107.5	4,089.2	18.32	224.235	
6,100.0	6,027.4	6,043.0	6,041.3	18.9	1.7	103.64	-351.2	3,594.7	4,106.4	4,087.9	18.49	222.078	
6,102.3	6,029.7	6,045.2	6,043.5	18.9	1.7	103.64	-351.2	3,594.7	4,106.4	4,087.9	18.50	222.025	
6,200.0	6,127.4	6,132.0	6,130.3	19.0	1.7	103.65	-351.7	3,593.8	4,105.6	4,086.9	18.67	219.893	
6,200.8	6,128.2	6,132.7	6,130.9	19.0	1.7	103.65	-351.7	3,593.8	4,105.6	4,086.9	18.67	219.876	
6,299.2	6,226.6	6,219.8	6,218.1	19.2	1.7	103.66	-352.5	3,593.1	4,105.1	4,086.2	18.85	217.788	
6,301.4	6,228.8	6,222.3	6,220.6	19.2	1.7	103.66	-352.6	3,593.1	4,105.0	4,086.2	18.85	217.741	
6,350.0	6,277.4	6,277.3	6,275.5	19.3	1.7	13.71	-353.1	3,592.7	4,103.2	4,084.8	18.36	223.465	
6,397.6	6,324.7	6,352.3	6,350.6	19.3	1.7	13.84	-353.7	3,591.9	4,098.1	4,079.7	18.43	222.367	
6,400.0	6,327.1	6,356.8	6,355.1	19.3	1.7	13.85	-353.7	3,591.8	4,097.8	4,079.4	18.43	222.299	
6,450.0	6,376.3	6,350.0	6,348.2	19.3	1.7	14.02	-353.7	3,591.9	4,089.2	4,070.7	18.50	221.044	
6,496.0	6,421.1	6,350.0	6,348.2	19.3	1.7	14.22	-353.7	3,591.9	4,078.8	4,060.3	18.54	219.971	
6,500.0	6,424.9	6,350.0	6,348.2	19.3	1.7	14.24	-353.7	3,591.9	4,077.9	4,059.3	18.54	219.891	
6,550.0	6,472.4	6,350.0	6,348.2	19.3	1.7	14.53	-353.7	3,591.9	4,063.8	4,045.3	18.55	219.067	
6,594.5	6,513.8	6,350.0	6,348.2	19.3	1.7	14.85	-353.7	3,591.9	4,049.1	4,030.6	18.51	218.711	
6,600.0	6,518.8	6,350.0	6,348.2	19.3	1.7	14.89	-353.7	3,591.9	4,047.1	4,028.6	18.51	218.697	
6,650.0	6,563.8	6,350.0	6,348.2	19.3	1.7	15.33	-353.7	3,591.9	4,027.8	4,009.4	18.41	218.843	
6,692.9	6,601.1	6,350.0	6,348.2	19.2	1.7	15.77	-353.7	3,591.9	4,009.2	3,990.9	18.27	219.392	
6,700.0	6,607.1	6,350.0	6,348.2	19.2	1.7	15.85	-353.7	3,591.9	4,006.0	3,987.7	18.25	219.526	
6,750.0	6,648.6	6,350.0	6,348.2	19.2	1.7	16.48	-353.7	3,591.9	3,981.6	3,963.6	18.04	220.731	
6,791.3	6,681.4	6,350.0	6,348.2	19.1	1.7	17.07	-353.7	3,591.9	3,959.7	3,941.8	17.83	222.077	
6,800.0	6,688.1	6,350.0	6,348.2	19.1	1.7	17.21	-353.7	3,591.9	3,954.9	3,937.1	17.78	222.407	
6,850.0	6,725.3	6,350.0	6,348.2	19.1	1.7	18.08	-353.7	3,591.9	3,925.8	3,908.3	17.49	224.455	
6,889.7	6,753.2	6,350.0	6,348.2	19.0	1.7	18.88	-353.7	3,591.9	3,901.0	3,883.8	17.24	226.221	
6,900.0	6,760.1	6,350.0	6,348.2	19.0	1.7	19.10	-353.7	3,591.9	3,894.4	3,877.3	17.18	226.707	
6,950.0	6,792.3	6,350.0	6,348.2	19.0	1.7	20.32	-353.7	3,591.9	3,861.0	3,844.1	16.87	228.889	
6,988.2	6,815.1	6,350.0	6,348.2	18.9	1.7	21.40	-353.7	3,591.9	3,834.1	3,817.4	16.65	230.222	
7,000.0	6,821.8	6,350.0	6,348.2	18.9	1.7	21.77	-353.7	3,591.9	3,825.5	3,808.9	16.59	230.587	
7,050.0	6,848.3	6,350.0	6,348.2	18.9	1.7	23.50	-353.7	3,591.9	3,788.1	3,771.7	16.38	231.208	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,086.6	6,865.9	6,350.0	6,348.2	18.9	1.7	25.00	-353.7	3,591.9	3,759.6	3,743.3	16.31	230.483	
7,100.0	6,871.9	6,350.0	6,348.2	18.9	1.7	25.60	-353.7	3,591.9	3,748.9	3,732.6	16.30	229.991	
7,150.0	6,892.3	6,350.0	6,348.2	18.8	1.7	28.16	-353.7	3,591.9	3,708.1	3,691.7	16.40	226.105	
7,185.0	6,904.7	6,350.0	6,348.2	18.8	1.7	30.30	-353.7	3,591.9	3,678.6	3,661.9	16.62	221.329	
7,200.0	6,909.5	6,350.0	6,348.2	18.9	1.7	31.32	-353.7	3,591.9	3,665.7	3,649.0	16.75	218.885	
7,250.0	6,923.4	6,350.0	6,348.2	19.3	1.7	35.26	-353.7	3,591.9	3,622.1	3,604.7	17.40	208.143	
7,283.4	6,930.8	6,350.0	6,348.2	19.8	1.7	38.45	-353.7	3,591.9	3,592.2	3,574.2	18.03	199.235	
7,300.0	6,933.9	6,350.0	6,348.2	20.0	1.7	40.22	-353.7	3,591.9	3,577.2	3,558.8	18.40	194.384	
7,350.0	6,940.9	6,350.0	6,348.2	20.8	1.7	46.53	-353.7	3,591.9	3,531.4	3,511.6	19.75	178.773	
7,381.9	6,943.6	6,350.0	6,348.2	21.4	1.7	51.41	-353.7	3,591.9	3,501.7	3,480.9	20.78	168.550	
7,400.0	6,944.5	6,350.0	6,348.2	21.7	1.7	54.53	-353.7	3,591.9	3,484.7	3,463.3	21.39	162.931	
7,432.4	6,945.0	6,350.0	6,348.2	22.3	1.7	60.76	-353.7	3,591.9	3,454.2	3,431.6	22.52	153.385	
7,480.3	6,944.6	6,350.0	6,348.2	23.2	1.7	60.76	-353.7	3,591.9	3,408.9	3,385.6	23.30	146.291	
7,500.0	6,944.4	6,350.0	6,348.2	23.6	1.7	60.76	-353.7	3,591.9	3,390.2	3,366.6	23.62	143.512	
7,578.7	6,943.7	6,350.0	6,348.2	25.2	1.7	60.76	-353.7	3,591.9	3,316.0	3,291.0	25.02	132.549	
7,600.0	6,943.6	6,350.0	6,348.2	25.6	1.7	60.76	-353.7	3,591.9	3,295.9	3,270.5	25.39	129.796	
7,677.1	6,942.9	6,350.0	6,348.2	27.3	1.7	60.76	-353.7	3,591.9	3,223.4	3,196.6	26.86	120.024	
7,700.0	6,942.7	6,350.0	6,348.2	27.8	1.7	60.76	-353.7	3,591.9	3,202.0	3,174.7	27.29	117.334	
7,775.6	6,942.1	6,350.0	6,348.2	29.5	1.7	60.76	-353.7	3,591.9	3,131.2	3,102.4	28.79	108.742	
7,800.0	6,941.9	6,350.0	6,348.2	30.1	1.7	60.76	-353.7	3,591.9	3,108.4	3,079.1	29.28	106.158	
7,874.0	6,941.3	6,350.0	6,348.2	31.8	1.7	60.76	-353.7	3,591.9	3,039.4	3,008.6	30.81	98.642	
7,900.0	6,941.1	6,350.0	6,348.2	32.4	1.7	60.76	-353.7	3,591.9	3,015.2	2,983.9	31.35	96.178	
7,972.4	6,940.4	6,350.0	6,348.2	34.2	1.7	60.76	-353.7	3,591.9	2,948.0	2,915.1	32.89	89.622	
8,000.0	6,940.2	6,350.0	6,348.2	34.9	1.7	60.75	-353.7	3,591.9	2,922.5	2,889.0	33.48	87.287	
8,070.8	6,939.6	6,350.0	6,348.2	36.6	1.7	60.75	-353.7	3,591.9	2,857.1	2,822.1	35.03	81.570	
8,100.0	6,939.4	6,350.0	6,348.2	37.3	1.7	60.75	-353.7	3,591.9	2,830.3	2,794.6	35.66	79.364	
8,169.3	6,938.8	6,350.0	6,348.2	39.1	1.7	60.75	-353.7	3,591.9	2,766.7	2,729.5	37.20	74.373	
8,200.0	6,938.5	6,350.0	6,348.2	39.8	1.7	60.75	-353.7	3,591.9	2,738.6	2,700.7	37.88	72.292	
8,267.7	6,938.0	6,350.0	6,348.2	41.6	1.7	60.75	-353.7	3,591.9	2,676.9	2,637.5	39.41	67.927	
8,300.0	6,937.7	6,350.0	6,348.2	42.4	1.7	60.75	-353.7	3,591.9	2,647.6	2,607.4	40.14	65.965	
8,366.1	6,937.2	6,350.0	6,348.2	44.1	1.7	60.75	-353.7	3,591.9	2,587.7	2,546.1	41.64	62.138	
8,400.0	6,936.9	6,350.0	6,348.2	45.0	1.7	60.75	-353.7	3,591.9	2,557.2	2,514.7	42.42	60.287	
8,464.5	6,936.3	6,350.0	6,348.2	46.6	1.7	60.75	-353.7	3,591.9	2,499.2	2,455.3	43.90	56.925	
8,500.0	6,936.0	6,350.0	6,348.2	47.6	1.7	60.75	-353.7	3,591.9	2,467.5	2,422.8	44.72	55.177	
8,563.0	6,935.5	6,350.0	6,348.2	49.2	1.7	60.75	-353.7	3,591.9	2,411.4	2,365.3	46.18	52.217	
8,600.0	6,935.2	6,350.0	6,348.2	50.2	1.7	60.75	-353.7	3,591.9	2,378.7	2,331.6	47.04	50.566	
8,661.4	6,934.7	6,350.0	6,348.2	51.8	1.7	60.75	-353.7	3,591.9	2,324.6	2,276.1	48.48	47.952	
8,700.0	6,934.4	6,350.0	6,348.2	52.8	1.7	60.75	-353.7	3,591.9	2,290.7	2,241.4	49.38	46.391	
8,759.8	6,933.9	6,350.0	6,348.2	54.4	1.7	60.75	-353.7	3,591.9	2,238.6	2,187.8	50.79	44.080	
8,800.0	6,933.5	6,350.0	6,348.2	55.5	1.7	60.75	-353.7	3,591.9	2,203.9	2,152.1	51.73	42.603	
8,858.2	6,933.0	6,350.0	6,348.2	57.1	1.7	60.75	-353.7	3,591.9	2,153.8	2,100.7	53.11	40.555	
8,900.0	6,932.7	6,350.0	6,348.2	58.2	1.7	60.75	-353.7	3,591.9	2,118.1	2,064.0	54.09	39.156	
8,956.7	6,932.2	6,350.0	6,348.2	59.7	1.7	60.75	-353.7	3,591.9	2,070.1	2,014.7	55.44	37.340	
9,000.0	6,931.8	6,350.0	6,348.2	60.9	1.7	60.75	-353.7	3,591.9	2,033.7	1,977.2	56.47	36.015	
9,055.1	6,931.4	6,350.0	6,348.2	62.4	1.7	60.75	-353.7	3,591.9	1,987.8	1,930.0	57.78	34.403	
9,100.0	6,931.0	6,350.0	6,348.2	63.6	1.7	60.75	-353.7	3,591.9	1,950.7	1,891.9	58.85	33.148	
9,153.5	6,930.6	6,350.0	6,348.2	65.0	1.7	60.75	-353.7	3,591.9	1,907.0	1,846.9	60.13	31.715	
9,200.0	6,930.2	6,350.0	6,348.2	66.3	1.7	60.75	-353.7	3,591.9	1,869.5	1,808.2	61.24	30.527	
9,251.9	6,929.7	6,350.0	6,348.2	67.7	1.7	60.75	-353.7	3,591.9	1,828.0	1,765.5	62.49	29.254	
9,300.0	6,929.3	6,350.0	6,348.2	69.0	1.7	60.75	-353.7	3,591.9	1,790.1	1,726.4	63.64	28.129	
9,350.4	6,928.9	6,350.0	6,348.2	70.4	1.7	60.75	-353.7	3,591.9	1,750.9	1,686.0	64.85	27.000	
9,400.0	6,928.5	6,350.0	6,348.2	71.7	1.7	60.75	-353.7	3,591.9	1,712.8	1,646.8	66.04	25.936	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	6,350.0	6,348.2	73.0	1.7	60.75	-353.7	3,591.9	1,676.0	1,608.8	67.22	24.935	
9,500.0	6,927.7	6,350.0	6,348.2	74.4	1.7	60.75	-353.7	3,591.9	1,638.1	1,569.6	68.45	23.931	
9,547.2	6,927.3	6,350.0	6,348.2	75.7	1.7	60.75	-353.7	3,591.9	1,603.7	1,534.1	69.59	23.046	
9,600.0	6,926.8	6,350.0	6,348.2	77.2	1.7	60.75	-353.7	3,591.9	1,566.1	1,495.3	70.86	22.101	
9,645.6	6,926.4	6,350.0	6,348.2	78.4	1.7	60.75	-353.7	3,591.9	1,534.3	1,462.4	71.97	21.320	
9,700.0	6,926.0	6,350.0	6,348.2	79.9	1.7	60.75	-353.7	3,591.9	1,497.4	1,424.1	73.28	20.434	
9,744.1	6,925.6	6,350.0	6,348.2	81.1	1.7	60.75	-353.7	3,591.9	1,468.3	1,393.9	74.35	19.749	
9,800.0	6,925.2	6,350.0	6,348.2	82.6	1.7	60.75	-353.7	3,591.9	1,432.4	1,356.7	75.70	18.921	
9,842.5	6,924.8	6,350.0	6,348.2	83.8	1.7	60.75	-353.7	3,591.9	1,406.0	1,329.3	76.73	18.323	
9,900.0	6,924.3	6,350.0	6,348.2	85.4	1.7	60.75	-353.7	3,591.9	1,371.6	1,293.5	78.13	17.556	
9,940.9	6,924.0	6,350.0	6,348.2	86.5	1.7	60.75	-353.7	3,591.9	1,348.0	1,268.9	79.12	17.038	
10,000.0	6,923.5	6,350.0	6,348.2	88.1	1.7	60.75	-353.7	3,591.9	1,315.6	1,235.0	80.56	16.331	
10,039.3	6,923.2	6,350.0	6,348.2	89.2	1.7	60.75	-353.7	3,591.9	1,295.0	1,213.5	81.51	15.887	
10,100.0	6,922.6	6,350.0	6,348.2	90.9	1.7	60.75	-353.7	3,591.9	1,265.0	1,182.0	82.99	15.243	
10,137.8	6,922.3	6,350.0	6,348.2	91.9	1.7	60.75	-353.7	3,591.9	1,247.4	1,163.5	83.91	14.867	
10,200.0	6,921.8	6,350.0	6,348.2	93.7	1.7	60.75	-353.7	3,591.9	1,220.5	1,135.1	85.42	14.288	
10,236.2	6,921.5	6,350.0	6,348.2	94.7	1.7	60.75	-353.7	3,591.9	1,206.1	1,119.8	86.30	13.975	
10,300.0	6,921.0	6,350.0	6,348.2	96.4	1.7	60.75	-353.7	3,591.9	1,182.9	1,095.0	87.86	13.464	
10,334.6	6,920.7	6,350.0	6,348.2	97.4	1.7	60.75	-353.7	3,591.9	1,171.5	1,082.8	88.70	13.208	
10,400.0	6,920.1	6,350.0	6,348.2	99.2	1.7	60.75	-353.7	3,591.9	1,152.7	1,062.4	90.30	12.766	
10,433.0	6,919.9	6,350.0	6,348.2	100.1	1.7	60.75	-353.7	3,591.9	1,144.4	1,053.3	91.10	12.562	
10,500.0	6,919.3	6,350.0	6,348.2	101.9	1.7	60.75	-353.7	3,591.9	1,130.6	1,037.8	92.74	12.191	
10,531.5	6,919.0	6,350.0	6,348.2	102.8	1.7	60.75	-353.7	3,591.9	1,125.3	1,031.8	93.51	12.035	
10,600.0	6,918.5	6,350.0	6,348.2	104.7	1.7	60.75	-353.7	3,591.9	1,117.0	1,021.8	95.18	11.736	
10,629.9	6,918.2	6,350.0	6,348.2	105.5	1.7	60.75	-353.7	3,591.9	1,114.6	1,018.7	95.91	11.622	
10,700.0	6,917.6	6,350.0	6,348.2	107.5	1.7	60.75	-353.7	3,591.9	1,112.3	1,014.6	97.62	11.393	
10,702.6	6,917.6	6,350.0	6,348.2	107.6	1.7	60.75	-353.7	3,591.9	1,112.3	1,014.6	97.69	11.386 CC	
10,728.3	6,917.4	6,350.0	6,348.2	108.3	1.7	60.75	-353.7	3,591.9	1,112.6	1,014.2	98.32	11.316 ES	
10,800.0	6,916.8	6,350.0	6,348.2	110.3	1.7	60.75	-353.7	3,591.9	1,116.5	1,016.4	100.07	11.157	
10,826.7	6,916.6	6,350.0	6,348.2	111.0	1.7	60.75	-353.7	3,591.9	1,119.2	1,018.4	100.72	11.111	
10,900.0	6,916.0	6,350.0	6,348.2	113.0	1.7	60.75	-353.7	3,591.9	1,129.6	1,027.1	102.52	11.019	
10,925.2	6,915.8	6,350.0	6,348.2	113.7	1.7	60.75	-353.7	3,591.9	1,134.3	1,031.2	103.13	10.999	
11,000.0	6,915.1	6,350.0	6,348.2	115.8	1.7	60.75	-353.7	3,591.9	1,151.3	1,046.4	104.96	10.969	
11,023.6	6,914.9	6,350.0	6,348.2	116.5	1.7	60.75	-353.7	3,591.9	1,157.7	1,052.1	105.54	10.969 SF	
11,100.0	6,914.3	6,350.0	6,348.2	118.6	1.7	60.75	-353.7	3,591.9	1,181.1	1,073.7	107.41	10.996	
11,122.0	6,914.1	6,350.0	6,348.2	119.2	1.7	60.75	-353.7	3,591.9	1,188.7	1,080.8	107.95	11.011	
11,200.0	6,913.5	6,350.0	6,348.2	121.4	1.7	60.75	-353.7	3,591.9	1,218.4	1,108.5	109.87	11.090	
11,220.4	6,913.3	6,350.0	6,348.2	121.9	1.7	60.75	-353.7	3,591.9	1,226.9	1,116.5	110.37	11.117	
11,300.0	6,912.6	6,350.0	6,348.2	124.1	1.7	60.75	-353.7	3,591.9	1,262.5	1,150.2	112.32	11.241	
11,318.9	6,912.5	6,350.0	6,348.2	124.7	1.7	60.75	-353.7	3,591.9	1,271.6	1,158.8	112.78	11.275	
11,400.0	6,911.8	6,350.0	6,348.2	126.9	1.7	60.75	-353.7	3,591.9	1,312.8	1,198.0	114.77	11.439	
11,417.3	6,911.6	6,350.0	6,348.2	127.4	1.7	60.75	-353.7	3,591.9	1,322.1	1,206.9	115.19	11.477	
11,500.0	6,911.0	6,350.0	6,348.2	129.7	1.7	60.75	-353.7	3,591.9	1,368.6	1,251.3	117.22	11.675	
11,515.7	6,910.8	6,350.0	6,348.2	130.2	1.7	60.75	-353.7	3,591.9	1,377.8	1,260.2	117.61	11.715	
11,600.0	6,910.1	6,350.0	6,348.2	132.5	1.7	60.75	-353.7	3,591.9	1,429.1	1,309.5	119.68	11.941	
11,614.1	6,910.0	6,350.0	6,348.2	132.9	1.7	60.75	-353.7	3,591.9	1,438.1	1,318.0	120.03	11.981	
11,700.0	6,909.3	6,350.0	6,348.2	135.3	1.7	60.75	-353.7	3,591.9	1,494.0	1,371.8	122.13	12.232	
11,712.6	6,909.2	6,350.0	6,348.2	135.6	1.7	60.75	-353.7	3,591.9	1,502.4	1,380.0	122.44	12.270	
11,800.0	6,908.5	6,350.0	6,348.2	138.1	1.7	60.75	-353.7	3,591.9	1,562.5	1,437.9	124.59	12.541	
11,811.0	6,908.4	6,350.0	6,348.2	138.4	1.7	60.75	-353.7	3,591.9	1,570.3	1,445.4	124.86	12.576	
11,900.0	6,907.6	6,350.0	6,348.2	140.9	1.7	60.75	-353.7	3,591.9	1,634.3	1,507.2	127.05	12.864	
11,909.4	6,907.5	6,350.0	6,348.2	141.1	1.7	60.75	-353.7	3,591.9	1,641.2	1,513.9	127.28	12.894	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,000.0	6,906.8	6,350.0	6,348.2	143.6	1.7	60.75	-353.7	3,591.9	1,708.9	1,579.4	129.51	13.196		
12,007.8	6,906.7	6,350.0	6,348.2	143.9	1.7	60.75	-353.7	3,591.9	1,714.9	1,585.2	129.70	13.222		
12,100.0	6,905.9	6,350.0	6,348.2	146.4	1.7	60.75	-353.7	3,591.9	1,786.0	1,654.1	131.97	13.534		
12,106.3	6,905.9	6,350.0	6,348.2	146.6	1.7	60.75	-353.7	3,591.9	1,790.9	1,658.8	132.12	13.555		
12,200.0	6,905.1	6,350.0	6,348.2	149.2	1.7	60.75	-353.7	3,591.9	1,865.3	1,730.9	134.42	13.876		
12,204.7	6,905.1	6,350.0	6,348.2	149.4	1.7	60.75	-353.7	3,591.9	1,869.1	1,734.5	134.54	13.892		
12,300.0	6,904.3	6,350.0	6,348.2	152.0	1.7	60.75	-353.7	3,591.9	1,946.5	1,809.6	136.88	14.220		
12,303.1	6,904.3	6,350.0	6,348.2	152.1	1.7	60.75	-353.7	3,591.9	1,949.1	1,812.1	136.96	14.231		
12,400.0	6,903.4	6,350.0	6,348.2	154.8	1.7	60.75	-353.7	3,591.9	2,029.4	1,890.0	139.35	14.564		
12,401.5	6,903.4	6,350.0	6,348.2	154.8	1.7	60.75	-353.7	3,591.9	2,030.7	1,891.3	139.38	14.569		
12,500.0	6,902.6	6,350.0	6,348.2	157.6	1.7	60.75	-353.7	3,591.9	2,113.7	1,971.9	141.81	14.906		
12,598.4	6,901.8	6,350.0	6,348.2	160.3	1.7	60.75	-353.7	3,591.9	2,198.0	2,053.8	144.23	15.240		
12,600.0	6,901.8	6,350.0	6,348.2	160.4	1.7	60.75	-353.7	3,591.9	2,199.4	2,055.1	144.27	15.245		
12,696.8	6,901.0	6,350.0	6,348.2	163.1	1.7	60.75	-353.7	3,591.9	2,283.4	2,136.8	146.65	15.571		
12,700.0	6,900.9	6,350.0	6,348.2	163.2	1.7	60.75	-353.7	3,591.9	2,286.2	2,139.5	146.73	15.581		
12,795.2	6,900.1	6,350.0	6,348.2	165.8	1.7	60.75	-353.7	3,591.9	2,369.9	2,220.8	149.08	15.897		
12,800.0	6,900.1	6,350.0	6,348.2	166.0	1.7	60.75	-353.7	3,591.9	2,374.1	2,224.9	149.19	15.913		
12,893.7	6,899.3	6,350.0	6,348.2	168.6	1.7	60.75	-353.7	3,591.9	2,457.2	2,305.7	151.50	16.219		
12,900.0	6,899.3	6,350.0	6,348.2	168.8	1.7	60.75	-353.7	3,591.9	2,462.9	2,311.2	151.66	16.240		
12,992.1	6,898.5	6,350.0	6,348.2	171.3	1.7	60.75	-353.7	3,591.9	2,545.4	2,391.5	153.92	16.537		
13,000.0	6,898.4	6,350.0	6,348.2	171.6	1.7	60.75	-353.7	3,591.9	2,552.5	2,398.4	154.12	16.562		
13,090.5	6,897.7	6,350.0	6,348.2	174.1	1.7	60.75	-353.7	3,591.9	2,634.3	2,477.9	156.35	16.849		
13,100.0	6,897.6	6,350.0	6,348.2	174.4	1.7	60.75	-353.7	3,591.9	2,642.9	2,486.3	156.58	16.878		
13,188.9	6,896.9	6,350.0	6,348.2	176.8	1.7	60.75	-353.7	3,591.9	2,723.8	2,565.0	158.77	17.155		
13,200.0	6,896.8	6,350.0	6,348.2	177.2	1.7	60.75	-353.7	3,591.9	2,733.9	2,574.9	159.05	17.189		
13,287.4	6,896.0	6,350.0	6,348.2	179.6	1.7	60.75	-353.7	3,591.9	2,813.9	2,652.7	161.20	17.456		
13,300.0	6,895.9	6,350.0	6,348.2	180.0	1.7	60.75	-353.7	3,591.9	2,825.5	2,664.0	161.51	17.494		
13,385.8	6,895.2	6,350.0	6,348.2	182.4	1.7	60.75	-353.7	3,591.9	2,904.6	2,741.0	163.63	17.752		
13,400.0	6,895.1	6,350.0	6,348.2	182.7	1.7	60.75	-353.7	3,591.9	2,917.7	2,753.8	163.98	17.794		
13,484.2	6,894.4	6,350.0	6,348.2	185.1	1.7	60.75	-353.7	3,591.9	2,995.8	2,829.7	166.05	18.041		
13,500.0	6,894.3	6,350.0	6,348.2	185.5	1.7	60.76	-353.7	3,591.9	3,010.4	2,844.0	166.44	18.087		
13,582.6	6,893.6	6,350.0	6,348.2	187.9	1.7	60.76	-353.7	3,591.9	3,087.4	2,918.9	168.48	18.325		
13,600.0	6,893.4	6,350.0	6,348.2	188.3	1.7	60.76	-353.7	3,591.9	3,103.6	2,934.7	168.91	18.375		
13,681.1	6,892.8	6,350.0	6,348.2	190.6	1.7	60.76	-353.7	3,591.9	3,179.4	3,008.5	170.90	18.603		
13,700.0	6,892.6	6,350.0	6,348.2	191.1	1.7	60.76	-353.7	3,591.9	3,197.1	3,025.8	171.37	18.656		
13,779.5	6,891.9	6,350.0	6,348.2	193.4	1.7	60.76	-353.7	3,591.9	3,271.8	3,098.5	173.33	18.876		
13,800.0	6,891.8	6,350.0	6,348.2	193.9	1.7	60.76	-353.7	3,591.9	3,291.1	3,117.2	173.84	18.932		
13,877.9	6,891.1	6,350.0	6,348.2	196.1	1.7	60.76	-353.7	3,591.9	3,364.5	3,188.8	175.76	19.143		
13,900.0	6,890.9	6,350.0	6,348.2	196.7	1.7	60.76	-353.7	3,591.9	3,385.4	3,209.0	176.30	19.202		
13,976.3	6,890.3	6,350.0	6,348.2	198.9	1.7	60.76	-353.7	3,591.9	3,457.6	3,279.4	178.19	19.404		
14,000.0	6,890.1	6,350.0	6,348.2	199.5	1.7	60.76	-353.7	3,591.9	3,480.0	3,301.2	178.77	19.466		
14,074.8	6,889.5	6,350.0	6,348.2	201.6	1.7	60.76	-353.7	3,591.9	3,550.9	3,370.3	180.61	19.660		
14,100.0	6,889.3	6,350.0	6,348.2	202.3	1.7	60.76	-353.7	3,591.9	3,574.9	3,393.6	181.24	19.725		
14,173.2	6,888.7	6,350.0	6,348.2	204.4	1.7	60.76	-353.7	3,591.9	3,644.5	3,461.5	183.04	19.911		
14,200.0	6,888.4	6,350.0	6,348.2	205.1	1.7	60.76	-353.7	3,591.9	3,670.0	3,486.3	183.70	19.978		
14,271.6	6,887.8	6,350.0	6,348.2	207.1	1.7	60.76	-353.7	3,591.9	3,738.3	3,552.9	185.47	20.156		
14,300.0	6,887.6	6,350.0	6,348.2	207.9	1.7	60.76	-353.7	3,591.9	3,765.4	3,579.3	186.17	20.226		
14,370.0	6,887.0	6,350.0	6,348.2	209.9	1.7	60.76	-353.7	3,591.9	3,832.4	3,644.5	187.90	20.396		
14,400.0	6,886.8	6,350.0	6,348.2	210.7	1.7	60.76	-353.7	3,591.9	3,861.1	3,672.5	188.64	20.468		
14,468.5	6,886.2	6,350.0	6,348.2	212.6	1.7	60.76	-353.7	3,591.9	3,926.7	3,736.4	190.33	20.631		
14,500.0	6,885.9	6,350.0	6,348.2	213.5	1.7	60.76	-353.7	3,591.9	3,957.0	3,765.9	191.11	20.706		
14,566.9	6,885.4	6,350.0	6,348.2	215.4	1.7	60.76	-353.7	3,591.9	4,021.2	3,828.5	192.76	20.862		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,600.0	6,885.1	6,350.0	6,348.2	216.3	1.7	60.76	-353.7	3,591.9	4,053.0	3,859.5	193.57	20.938	
14,613.0	6,885.0	6,350.0	6,348.2	216.7	1.7	60.76	-353.7	3,591.9	4,065.5	3,871.6	193.90	20.968	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	84.76	382.9	4,174.2	4,191.8				
98.4	98.4	84.6	84.6	0.1	0.0	84.76	382.7	4,174.1	4,191.6	4,191.5	0.13	N/A	
100.0	100.0	86.4	86.4	0.1	0.0	84.76	382.7	4,174.0	4,191.6	4,191.4	0.13	N/A	
196.8	196.8	183.3	183.3	0.3	0.2	84.77	382.3	4,173.7	4,191.2	4,190.7	0.47	8,849.909	
200.0	200.0	186.4	186.4	0.3	0.2	84.77	382.3	4,173.7	4,191.2	4,190.7	0.49	8,640.829	
295.3	295.3	292.6	292.6	0.5	0.3	84.77	382.2	4,173.2	4,190.8	4,190.0	0.81	5,198.454	
300.0	300.0	297.9	297.9	0.5	0.3	84.77	382.2	4,173.2	4,190.7	4,189.9	0.82	5,099.060	
393.7	393.7	388.5	388.5	0.7	0.4	84.76	382.4	4,172.6	4,190.2	4,189.1	1.10	3,824.950	
400.0	400.0	394.5	394.5	0.8	0.4	84.76	382.4	4,172.6	4,190.2	4,189.0	1.11	3,761.942	
492.1	492.1	504.9	504.9	1.0	0.4	84.76	382.9	4,171.7	4,189.5	4,188.1	1.39	3,010.543	
500.0	500.0	512.1	512.1	1.0	0.4	84.76	382.9	4,171.7	4,189.4	4,188.0	1.41	2,964.028	
590.5	590.5	594.7	594.7	1.2	0.5	84.75	383.3	4,170.9	4,188.6	4,186.9	1.66	2,515.999	
600.0	600.0	604.0	603.9	1.2	0.5	84.75	383.4	4,170.8	4,188.5	4,186.8	1.69	2,476.639	
689.0	689.0	699.4	699.4	1.4	0.5	84.74	383.9	4,170.0	4,187.8	4,185.8	1.94	2,155.869	
700.0	700.0	709.9	709.8	1.4	0.5	84.74	384.0	4,169.9	4,187.7	4,185.7	1.97	2,122.962	
787.4	787.4	792.0	792.0	1.6	0.6	84.73	384.4	4,169.1	4,187.0	4,184.7	2.21	1,894.051	
800.0	800.0	804.4	804.4	1.7	0.6	84.73	384.5	4,169.0	4,186.9	4,184.6	2.25	1,864.920	
885.8	885.8	896.1	896.0	1.9	0.6	84.72	384.9	4,168.2	4,186.1	4,183.7	2.48	1,686.559	
900.0	900.0	910.6	910.6	1.9	0.6	84.72	384.9	4,168.1	4,186.0	4,183.5	2.52	1,660.626	
984.2	984.2	995.8	995.7	2.1	0.7	84.72	385.2	4,167.3	4,185.2	4,182.5	2.75	1,522.057	
1,000.0	1,000.0	1,011.1	1,011.1	2.1	0.7	84.72	385.3	4,167.1	4,185.1	4,182.3	2.79	1,499.028	
1,082.7	1,082.7	1,090.4	1,090.3	2.3	0.7	84.72	385.4	4,166.4	4,184.3	4,181.3	3.01	1,389.305	
1,100.0	1,100.0	1,107.2	1,107.1	2.3	0.7	84.72	385.4	4,166.3	4,184.2	4,181.1	3.06	1,368.461	
1,150.0	1,150.0	1,156.3	1,156.3	2.4	0.7	84.72	385.3	4,165.8	4,183.8	4,180.6	3.19	1,312.189	
1,181.1	1,181.1	1,186.9	1,186.9	2.5	0.8	117.41	385.2	4,165.6	4,183.6	4,180.3	3.27	1,280.856	
1,200.0	1,200.0	1,205.9	1,205.8	2.6	0.8	117.41	385.1	4,165.5	4,183.6	4,180.2	3.32	1,261.697	
1,200.3	1,200.3	1,206.2	1,206.2	2.6	0.8	117.42	385.1	4,165.5	4,183.6	4,180.2	3.32	1,261.368	
1,279.5	1,279.5	1,289.3	1,289.3	2.7	0.8	117.44	384.9	4,164.8	4,184.0	4,180.5	3.52	1,187.373	
1,300.0	1,299.9	1,309.1	1,309.1	2.8	0.8	117.45	384.9	4,164.6	4,184.3	4,180.7	3.58	1,169.888	
1,377.9	1,377.7	1,378.0	1,378.0	3.0	0.8	117.47	384.9	4,164.0	4,186.1	4,182.3	3.78	1,107.931	
1,400.0	1,399.7	1,400.0	1,399.9	3.0	0.8	117.48	384.8	4,163.9	4,186.8	4,182.9	3.84	1,091.348	
1,476.4	1,475.7	1,482.4	1,482.4	3.2	0.9	117.54	384.2	4,163.4	4,189.8	4,185.7	4.04	1,036.237	
1,500.0	1,499.1	1,507.1	1,507.0	3.2	0.9	117.56	383.9	4,163.2	4,190.9	4,186.8	4.11	1,020.473	
1,574.8	1,573.2	1,573.7	1,573.7	3.4	0.9	117.60	382.9	4,162.8	4,195.0	4,190.7	4.31	972.526	
1,600.0	1,598.2	1,600.0	1,599.9	3.5	0.9	117.63	382.5	4,162.6	4,196.6	4,192.3	4.38	957.188	
1,673.2	1,670.3	1,692.0	1,691.9	3.7	0.9	117.74	381.1	4,161.9	4,201.8	4,197.2	4.61	911.310	
1,700.0	1,696.6	1,715.3	1,715.3	3.8	0.9	117.76	380.9	4,161.7	4,203.8	4,199.1	4.69	896.165	
1,749.9	1,745.5	1,752.1	1,752.0	3.9	0.9	117.78	380.5	4,161.3	4,208.1	4,203.2	4.85	867.793	
1,771.6	1,766.8	1,768.1	1,768.0	4.0	1.0	117.83	380.3	4,161.2	4,210.0	4,205.1	4.92	855.613	
1,800.0	1,794.5	1,800.0	1,799.9	4.1	1.0	117.91	380.0	4,161.1	4,212.7	4,207.7	5.02	839.711	
1,870.1	1,863.1	1,851.3	1,851.2	4.3	1.0	118.05	379.4	4,160.9	4,219.3	4,214.1	5.26	802.905	
1,900.0	1,892.3	1,879.3	1,879.2	4.4	1.0	118.12	379.1	4,160.8	4,222.2	4,216.8	5.36	787.948	
1,968.5	1,959.4	1,933.9	1,933.8	4.7	1.0	118.27	378.4	4,160.7	4,228.9	4,223.3	5.60	755.010	
2,000.0	1,990.2	1,956.9	1,956.8	4.8	1.0	118.33	378.0	4,160.8	4,232.0	4,226.3	5.71	741.077	
2,066.9	2,055.6	2,000.0	1,999.9	5.1	1.0	118.45	377.1	4,161.0	4,239.0	4,233.0	5.95	712.377	
2,100.0	2,088.0	2,032.3	2,032.2	5.2	1.0	118.54	376.3	4,161.2	4,242.5	4,236.4	6.07	698.779	
2,165.3	2,151.9	2,084.1	2,083.9	5.4	1.0	118.68	375.0	4,161.7	4,249.6	4,243.3	6.31	673.186	
2,200.0	2,185.8	2,118.4	2,118.2	5.6	1.0	118.78	374.1	4,162.1	4,253.5	4,247.1	6.44	660.329	
2,263.8	2,248.2	2,198.9	2,198.7	5.8	1.1	119.01	372.1	4,162.8	4,260.5	4,253.8	6.68	637.423	
2,300.0	2,283.6	2,243.4	2,243.2	6.0	1.1	119.13	371.0	4,163.0	4,264.4	4,257.5	6.82	625.169	
2,362.2	2,344.5	2,318.1	2,317.9	6.2	1.1	119.33	369.4	4,163.2	4,270.8	4,263.8	7.06	604.904	
2,400.0	2,381.4	2,360.2	2,360.0	6.4	1.1	119.45	368.6	4,163.2	4,274.7	4,267.5	7.21	593.223	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,425.7	2,425.5	6.6	1.1	119.62	367.4	4,163.1	4,280.9	4,273.5	7.44	575.126	
2,500.0	2,479.2	2,466.4	2,466.2	6.8	1.1	119.73	366.7	4,163.0	4,284.9	4,277.3	7.60	564.009	
2,559.0	2,537.0	2,525.8	2,525.5	7.0	1.1	119.89	365.5	4,162.8	4,290.9	4,283.0	7.83	548.019	
2,600.0	2,577.1	2,565.6	2,565.3	7.2	1.2	120.00	364.8	4,162.7	4,295.0	4,287.0	7.99	537.490	
2,657.5	2,633.3	2,622.1	2,621.8	7.4	1.2	120.15	363.7	4,162.5	4,300.9	4,292.7	8.22	523.293	
2,700.0	2,674.9	2,664.6	2,664.3	7.6	1.2	120.26	362.9	4,162.3	4,305.2	4,296.9	8.39	513.296	
2,755.9	2,729.6	2,718.3	2,718.1	7.9	1.2	120.40	361.8	4,162.2	4,311.0	4,302.4	8.61	500.694	
2,800.0	2,772.7	2,757.8	2,757.5	8.0	1.2	120.51	361.1	4,162.0	4,315.6	4,306.8	8.78	491.247	
2,854.3	2,825.8	2,806.9	2,806.6	8.3	1.2	120.63	360.4	4,161.9	4,321.3	4,312.3	9.00	480.057	
2,900.0	2,870.5	2,850.5	2,850.2	8.5	1.2	120.74	359.9	4,161.9	4,326.1	4,316.9	9.18	471.061	
2,952.7	2,922.1	2,900.0	2,899.7	8.7	1.3	120.87	359.3	4,161.8	4,331.7	4,322.3	9.39	461.071	
3,000.0	2,968.3	2,940.5	2,940.2	8.9	1.3	120.97	358.9	4,161.8	4,336.8	4,327.2	9.58	452.589	
3,051.2	3,018.4	2,983.5	2,983.2	9.1	1.3	121.08	358.5	4,161.8	4,342.4	4,332.6	9.79	443.771	
3,100.0	3,066.1	3,028.4	3,028.1	9.3	1.3	121.19	358.2	4,161.9	4,347.9	4,337.9	9.98	435.837	
3,149.6	3,114.7	3,076.7	3,076.4	9.5	1.3	121.30	358.0	4,162.1	4,353.4	4,343.2	10.17	428.139	
3,200.0	3,164.0	3,122.6	3,122.2	9.8	1.3	121.41	358.0	4,162.2	4,359.1	4,348.7	10.36	420.616	
3,248.0	3,210.9	3,163.5	3,163.2	10.0	1.3	121.51	358.1	4,162.3	4,364.6	4,354.0	10.55	413.691	
3,300.0	3,261.8	3,200.0	3,199.7	10.2	1.3	121.59	358.3	4,162.5	4,370.6	4,359.8	10.75	406.475	
3,346.4	3,307.2	3,242.5	3,242.2	10.4	1.3	121.68	358.7	4,162.8	4,376.1	4,365.1	10.94	400.155	
3,400.0	3,359.6	3,283.4	3,283.1	10.6	1.3	121.77	359.0	4,163.2	4,382.5	4,371.4	11.15	393.153	
3,444.9	3,403.5	3,320.1	3,319.8	10.8	1.3	121.86	359.3	4,163.6	4,388.1	4,376.8	11.32	387.486	
3,500.0	3,457.4	3,368.1	3,367.7	11.1	1.3	121.96	359.6	4,164.3	4,395.0	4,383.4	11.54	380.782	
3,543.3	3,499.8	3,407.7	3,407.4	11.3	1.3	122.05	359.9	4,164.9	4,400.5	4,388.8	11.71	375.689	
3,600.0	3,555.2	3,474.1	3,473.8	11.5	1.3	122.20	360.4	4,165.8	4,407.6	4,395.7	11.94	369.267	
3,641.7	3,596.0	3,520.7	3,520.4	11.7	1.3	122.30	360.8	4,166.3	4,412.8	4,400.7	12.10	364.683	
3,700.0	3,653.0	3,582.0	3,581.7	11.9	1.3	122.44	361.2	4,166.9	4,420.0	4,407.6	12.33	358.495	
3,740.1	3,692.3	3,619.8	3,619.4	12.1	1.3	122.52	361.3	4,167.3	4,424.9	4,412.4	12.49	354.346	
3,800.0	3,750.8	3,671.1	3,670.7	12.4	1.3	122.63	361.7	4,167.9	4,432.4	4,419.7	12.72	348.352	
3,838.6	3,788.6	3,704.9	3,704.5	12.6	1.3	122.71	361.9	4,168.3	4,437.3	4,424.4	12.88	344.605	
3,900.0	3,848.7	3,766.1	3,765.7	12.8	1.3	122.84	362.3	4,169.0	4,445.0	4,431.9	13.12	338.815	
3,937.0	3,884.9	3,802.9	3,802.5	13.0	1.3	122.92	362.5	4,169.5	4,449.7	4,436.5	13.27	335.429	
4,000.0	3,946.5	3,864.4	3,864.1	13.3	1.3	123.06	362.8	4,170.3	4,457.8	4,444.2	13.51	329.842	
4,035.4	3,981.1	3,899.1	3,898.7	13.4	1.3	123.13	363.1	4,170.7	4,462.3	4,448.6	13.65	326.788	
4,100.0	4,044.3	3,966.2	3,965.8	13.7	1.3	123.27	363.8	4,171.5	4,470.5	4,456.6	13.91	321.360	
4,133.8	4,077.4	4,001.6	4,001.2	13.9	1.3	123.35	364.2	4,171.9	4,474.8	4,460.8	14.05	318.592	
4,200.0	4,142.1	4,081.6	4,081.2	14.2	1.3	123.51	365.2	4,172.6	4,483.1	4,468.8	14.31	313.330	
4,232.3	4,173.7	4,117.8	4,117.4	14.3	1.3	123.59	365.7	4,172.9	4,487.1	4,472.7	14.44	310.822	
4,300.0	4,239.9	4,188.2	4,187.7	14.6	1.3	123.73	366.9	4,173.3	4,495.4	4,480.7	14.71	305.695	
4,330.7	4,270.0	4,220.0	4,219.5	14.7	1.4	123.79	367.5	4,173.5	4,499.2	4,484.3	14.83	303.425	
4,400.0	4,337.7	4,291.6	4,291.2	15.0	1.4	123.93	368.9	4,173.9	4,507.6	4,492.5	15.10	298.436	
4,429.1	4,366.2	4,323.8	4,323.4	15.2	1.4	124.00	369.5	4,174.0	4,511.2	4,496.0	15.22	296.390	
4,500.0	4,435.6	4,412.1	4,411.6	15.5	1.4	124.16	371.6	4,174.3	4,519.7	4,504.2	15.50	291.545	
4,527.5	4,462.5	4,499.7	4,499.2	15.6	1.4	124.33	373.6	4,173.7	4,522.8	4,507.2	15.61	289.685	
4,600.0	4,533.4	4,587.9	4,587.3	15.9	1.4	124.51	374.7	4,172.3	4,530.2	4,514.3	15.90	284.935	
4,626.0	4,558.8	4,614.8	4,614.3	16.0	1.4	124.57	374.9	4,171.8	4,532.8	4,516.8	16.00	283.267	
4,673.6	4,605.3	4,658.8	4,658.3	16.3	1.4	124.66	375.0	4,171.0	4,537.7	4,521.5	16.19	280.246	
4,700.0	4,631.2	4,683.3	4,682.8	16.4	1.4	124.76	375.1	4,170.6	4,540.3	4,524.0	16.28	278.930	
4,724.4	4,655.1	4,706.1	4,705.6	16.4	1.4	124.84	375.1	4,170.2	4,542.6	4,526.3	16.34	277.954	
4,800.0	4,729.5	4,778.7	4,778.1	16.7	1.4	125.07	375.8	4,169.0	4,549.1	4,532.6	16.55	274.919	
4,822.8	4,752.1	4,800.0	4,799.4	16.7	1.4	125.13	376.1	4,168.6	4,550.8	4,534.2	16.60	274.112	
4,900.0	4,828.4	4,863.6	4,863.0	17.0	1.4	125.30	377.2	4,167.7	4,556.1	4,539.3	16.79	271.355	
4,921.2	4,849.5	4,881.0	4,880.4	17.0	1.4	125.34	377.5	4,167.5	4,557.4	4,540.5	16.84	270.699	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,946.9	4,946.4	17.2	1.5	125.47	378.6	4,166.8	4,561.4	4,544.4	17.01	268.239	
5,019.7	4,947.4	4,963.6	4,963.0	17.2	1.5	125.49	378.9	4,166.6	4,562.3	4,545.3	17.04	267.712	
5,100.0	5,027.5	5,038.0	5,037.4	17.4	1.5	125.57	380.9	4,166.1	4,565.1	4,547.9	17.19	265.495	
5,118.1	5,045.6	5,056.4	5,055.8	17.4	1.5	125.58	381.3	4,166.0	4,565.5	4,548.3	17.22	265.067	
5,200.0	5,127.4	5,132.4	5,131.7	17.6	1.5	125.62	382.4	4,165.4	4,566.8	4,549.4	17.36	263.090	
5,216.5	5,143.9	5,146.1	5,145.5	17.6	1.5	125.62	382.6	4,165.3	4,566.9	4,549.5	17.38	262.751	
5,273.4	5,200.8	5,200.0	5,199.4	17.7	1.5	92.94	382.8	4,165.0	4,566.9	4,551.0	15.92	286.823	
5,300.0	5,227.4	5,222.4	5,221.7	17.7	1.5	92.94	382.8	4,164.9	4,566.8	4,550.8	15.97	286.027	
5,314.9	5,242.3	5,240.3	5,239.7	17.7	1.5	92.94	382.7	4,164.8	4,566.7	4,550.7	15.99	285.518	
5,400.0	5,327.4	5,336.8	5,336.2	17.8	1.5	92.95	381.9	4,164.1	4,566.1	4,550.0	16.16	282.619	
5,413.4	5,340.8	5,350.7	5,350.0	17.9	1.5	92.95	381.8	4,164.0	4,566.0	4,549.8	16.18	282.161	
5,500.0	5,427.4	5,438.4	5,437.7	18.0	1.5	92.96	380.7	4,163.2	4,565.3	4,548.9	16.35	279.234	
5,511.8	5,439.2	5,450.0	5,449.3	18.0	1.5	92.97	380.6	4,163.1	4,565.2	4,548.8	16.37	278.838	
5,600.0	5,527.4	5,554.2	5,553.5	18.1	1.6	92.98	379.2	4,162.1	4,564.4	4,547.8	16.55	275.862	
5,610.2	5,537.6	5,569.1	5,568.4	18.1	1.6	92.99	379.1	4,161.9	4,564.3	4,547.7	16.57	275.509	
5,700.0	5,627.4	5,658.6	5,657.9	18.3	1.6	93.00	378.2	4,160.6	4,563.0	4,546.3	16.74	272.557	
5,708.6	5,636.0	5,666.0	5,665.3	18.3	1.6	93.00	378.1	4,160.5	4,562.9	4,546.1	16.76	272.278	
5,800.0	5,727.4	5,748.2	5,747.5	18.4	1.6	93.01	377.2	4,159.5	4,561.9	4,544.9	16.94	269.358	
5,807.1	5,734.5	5,754.8	5,754.1	18.4	1.6	93.01	377.1	4,159.4	4,561.8	4,544.8	16.95	269.132	
5,900.0	5,827.4	5,837.4	5,836.7	18.6	1.6	93.03	375.7	4,158.6	4,560.9	4,543.8	17.13	266.206	
5,905.5	5,832.9	5,842.0	5,841.3	18.6	1.6	93.03	375.7	4,158.5	4,560.9	4,543.7	17.14	266.035	
6,000.0	5,927.4	5,924.6	5,923.8	18.7	1.6	93.05	374.2	4,157.9	4,560.2	4,542.9	17.33	263.120	
6,003.9	5,931.3	5,928.4	5,927.6	18.7	1.6	93.05	374.1	4,157.9	4,560.2	4,542.9	17.34	262.998	
6,100.0	6,027.4	6,020.0	6,019.3	18.9	1.7	93.07	372.2	4,157.3	4,559.7	4,542.2	17.53	260.059	
6,102.3	6,029.7	6,022.2	6,021.4	18.9	1.7	93.08	372.2	4,157.3	4,559.7	4,542.2	17.54	259.987	
6,200.0	6,127.4	6,110.8	6,110.0	19.0	1.7	93.10	370.0	4,156.9	4,559.4	4,541.7	17.74	257.060	
6,200.8	6,128.2	6,111.5	6,110.7	19.0	1.7	93.10	370.0	4,156.9	4,559.4	4,541.7	17.74	257.037	
6,299.2	6,226.6	6,200.0	6,199.2	19.2	1.7	93.13	367.6	4,156.7	4,559.3	4,541.4	17.94	254.149	
6,301.4	6,228.8	6,200.0	6,199.2	19.2	1.7	93.13	367.6	4,156.7	4,559.3	4,541.4	17.94	254.091	
6,304.8	6,232.2	6,207.8	6,207.0	19.2	1.7	3.14	367.4	4,156.7	4,559.3	4,540.1	19.26	236.729	
6,350.0	6,277.4	6,315.5	6,314.6	19.3	1.7	3.19	364.3	4,155.6	4,557.2	4,537.9	19.32	235.873	
6,397.6	6,324.7	6,352.2	6,351.3	19.3	1.7	3.23	363.2	4,155.0	4,551.8	4,532.4	19.40	234.676	
6,400.0	6,327.1	6,354.0	6,353.2	19.3	1.7	3.23	363.1	4,155.0	4,551.4	4,532.0	19.40	234.608	
6,450.0	6,376.3	6,400.0	6,399.1	19.3	1.7	3.30	361.5	4,154.4	4,542.3	4,522.8	19.49	233.086	
6,496.0	6,421.1	6,425.2	6,424.2	19.3	1.7	3.37	360.6	4,154.2	4,531.0	4,511.5	19.55	231.820	
6,500.0	6,424.9	6,427.9	6,427.0	19.3	1.7	3.38	360.5	4,154.1	4,529.9	4,510.4	19.55	231.717	
6,550.0	6,472.4	6,462.4	6,461.5	19.3	1.8	3.48	359.1	4,153.9	4,514.4	4,494.8	19.58	230.603	
6,594.5	6,513.8	6,500.0	6,499.0	19.3	1.8	3.61	357.5	4,153.7	4,497.9	4,478.3	19.56	229.907	
6,600.0	6,518.8	6,500.0	6,499.0	19.3	1.8	3.62	357.5	4,153.7	4,495.7	4,476.1	19.56	229.872	
6,650.0	6,563.8	6,530.5	6,529.5	19.3	1.8	3.78	356.1	4,153.6	4,473.9	4,454.4	19.48	229.662	
6,692.9	6,601.1	6,559.3	6,558.2	19.2	1.8	3.94	354.7	4,153.6	4,452.8	4,433.4	19.37	229.875	
6,700.0	6,607.1	6,564.0	6,562.9	19.2	1.8	3.97	354.5	4,153.6	4,449.1	4,429.8	19.35	229.949	
6,750.0	6,648.6	6,600.0	6,598.9	19.2	1.8	4.21	352.7	4,153.7	4,421.5	4,402.3	19.16	230.741	
6,791.3	6,681.4	6,620.7	6,619.6	19.1	1.8	4.43	351.7	4,153.8	4,396.6	4,377.6	18.96	231.885	
6,800.0	6,688.1	6,625.7	6,624.6	19.1	1.8	4.48	351.4	4,153.8	4,391.1	4,372.2	18.91	232.168	
6,850.0	6,725.3	6,653.6	6,652.4	19.1	1.8	4.82	349.9	4,154.0	4,358.1	4,339.5	18.62	234.098	
6,889.7	6,753.2	6,674.6	6,673.4	19.0	1.8	5.14	348.7	4,154.1	4,330.2	4,311.8	18.35	235.992	
6,900.0	6,760.1	6,679.9	6,678.6	19.0	1.8	5.23	348.4	4,154.2	4,322.7	4,304.4	18.28	236.536	
6,950.0	6,792.3	6,705.3	6,704.0	19.0	1.8	5.74	346.8	4,154.4	4,285.0	4,267.1	17.90	239.401	
6,988.2	6,815.1	6,726.8	6,725.5	18.9	1.8	6.22	345.5	4,154.6	4,254.7	4,237.1	17.60	241.747	
7,000.0	6,821.8	6,733.2	6,731.8	18.9	1.8	6.39	345.1	4,154.7	4,245.1	4,227.6	17.50	242.516	
7,050.0	6,848.3	6,758.3	6,756.9	18.9	1.8	7.22	343.4	4,155.0	4,203.3	4,186.2	17.10	245.768	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,086.6	6,865.9	6,775.0	6,773.6	18.9	1.8	7.98	342.3	4,155.1	4,171.5	4,154.7	16.82	248.040	
7,100.0	6,871.9	6,780.7	6,779.3	18.9	1.8	8.30	341.9	4,155.2	4,159.6	4,142.9	16.72	248.847	
7,150.0	6,892.3	6,800.0	6,798.5	18.8	1.8	9.76	340.6	4,155.4	4,114.4	4,098.1	16.38	251.244	
7,185.0	6,904.7	6,800.0	6,798.5	18.8	1.8	11.01	340.6	4,155.4	4,082.0	4,065.8	16.18	252.306	
7,200.0	6,909.5	6,800.0	6,798.5	18.9	1.8	11.64	340.6	4,155.4	4,067.9	4,051.8	16.11	252.497	
7,250.0	6,923.4	6,800.0	6,798.5	19.3	1.8	14.45	340.6	4,155.4	4,020.3	4,004.3	16.03	250.744	
7,283.4	6,930.8	6,824.4	6,822.8	19.8	1.8	17.77	338.9	4,155.7	3,987.9	3,971.6	16.25	245.404	
7,300.0	6,933.9	6,826.4	6,824.8	20.0	1.8	19.73	338.7	4,155.8	3,971.7	3,955.3	16.44	241.517	
7,350.0	6,940.9	6,831.2	6,829.6	20.8	1.8	29.14	338.4	4,155.9	3,922.5	3,904.7	17.81	220.275	
7,381.9	6,943.6	6,833.1	6,831.5	21.4	1.8	40.60	338.2	4,155.9	3,890.9	3,871.1	19.76	196.868	
7,400.0	6,944.5	6,833.9	6,832.3	21.7	1.8	50.89	338.2	4,155.9	3,872.9	3,851.5	21.34	181.514	
7,432.4	6,945.0	6,834.5	6,832.9	22.3	1.8	79.43	338.1	4,155.9	3,840.6	3,816.9	23.68	162.192	
7,480.3	6,944.6	6,834.7	6,833.1	23.2	1.8	79.48	338.1	4,155.9	3,792.8	3,768.2	24.56	154.441	
7,500.0	6,944.4	6,834.8	6,833.2	23.6	1.8	79.50	338.1	4,155.9	3,773.1	3,748.2	24.92	151.411	
7,578.7	6,943.7	6,835.3	6,833.7	25.2	1.8	79.59	338.1	4,155.9	3,694.7	3,668.2	26.48	139.508	
7,600.0	6,943.6	6,835.4	6,833.8	25.6	1.8	79.61	338.1	4,155.9	3,673.4	3,646.5	26.91	136.529	
7,677.1	6,942.9	6,835.8	6,834.2	27.3	1.8	79.69	338.1	4,155.9	3,596.5	3,568.0	28.55	125.991	
7,700.0	6,942.7	6,835.9	6,834.3	27.8	1.8	79.72	338.0	4,155.9	3,573.7	3,544.7	29.03	123.099	
7,775.6	6,942.1	6,836.3	6,834.7	29.5	1.8	79.80	338.0	4,155.9	3,498.4	3,467.7	30.72	113.887	
7,800.0	6,941.9	6,836.5	6,834.9	30.1	1.8	79.83	338.0	4,155.9	3,474.1	3,442.8	31.26	111.123	
7,874.0	6,941.3	6,836.9	6,835.3	31.8	1.8	79.92	338.0	4,155.9	3,400.3	3,367.3	32.98	103.104	
7,900.0	6,941.1	6,837.1	6,835.5	32.4	1.8	79.95	338.0	4,156.0	3,374.4	3,340.8	33.58	100.481	
7,972.4	6,940.4	6,837.5	6,835.9	34.2	1.8	80.03	337.9	4,156.0	3,302.2	3,266.9	35.31	93.514	
8,000.0	6,940.2	6,837.6	6,836.0	34.9	1.8	80.06	337.9	4,156.0	3,274.8	3,238.8	35.97	91.037	
8,070.8	6,939.6	6,838.1	6,836.5	36.6	1.8	80.15	337.9	4,156.0	3,204.2	3,166.5	37.70	84.982	
8,100.0	6,939.4	6,838.2	6,836.6	37.3	1.8	80.18	337.9	4,156.0	3,175.2	3,136.7	38.42	82.649	
8,169.3	6,938.8	6,838.7	6,837.1	39.1	1.8	80.27	337.9	4,156.0	3,106.2	3,066.0	40.14	77.376	
8,200.0	6,938.5	6,838.9	6,837.2	39.8	1.8	80.31	337.8	4,156.0	3,075.6	3,034.7	40.91	75.180	
8,267.7	6,938.0	6,839.3	6,837.7	41.6	1.8	80.39	337.8	4,156.0	3,008.2	2,965.5	42.62	70.577	
8,300.0	6,937.7	6,839.5	6,837.9	42.4	1.8	80.43	337.8	4,156.0	2,976.0	2,932.6	43.44	68.509	
8,366.1	6,937.2	6,839.9	6,838.3	44.1	1.8	80.52	337.8	4,156.0	2,910.2	2,865.1	45.13	64.479	
8,400.0	6,936.9	6,840.1	6,838.5	45.0	1.8	80.56	337.8	4,156.0	2,876.5	2,830.5	46.00	62.529	
8,464.5	6,936.3	6,840.5	6,838.9	46.6	1.8	80.64	337.7	4,156.0	2,812.3	2,764.6	47.67	58.990	
8,500.0	6,936.0	6,840.8	6,839.2	47.6	1.8	80.69	337.7	4,156.0	2,777.0	2,728.4	48.59	57.149	
8,563.0	6,935.5	6,841.2	6,839.6	49.2	1.8	80.78	337.7	4,156.0	2,714.3	2,664.1	50.24	54.031	
8,600.0	6,935.2	6,841.4	6,839.8	50.2	1.8	80.83	337.7	4,156.0	2,677.5	2,626.3	51.20	52.291	
8,661.4	6,934.7	6,841.9	6,840.2	51.8	1.8	80.91	337.6	4,156.0	2,616.5	2,563.7	52.82	49.535	
8,700.0	6,934.4	6,842.1	6,840.5	52.8	1.8	80.96	337.6	4,156.0	2,578.1	2,524.3	53.84	47.887	
8,759.8	6,933.9	6,842.5	6,840.9	54.4	1.8	81.05	337.6	4,156.0	2,518.6	2,463.2	55.42	45.444	
8,800.0	6,933.5	6,842.8	6,841.2	55.5	1.8	81.10	337.6	4,156.1	2,478.7	2,422.2	56.49	43.881	
8,858.2	6,933.0	6,843.2	6,841.6	57.1	1.8	81.19	337.5	4,156.1	2,420.9	2,362.8	58.04	41.710	
8,900.0	6,932.7	6,843.5	6,841.9	58.2	1.8	81.25	337.5	4,156.1	2,379.4	2,320.3	59.15	40.224	
8,956.7	6,932.2	6,844.0	6,842.3	59.7	1.8	81.33	337.5	4,156.1	2,323.1	2,262.5	60.67	38.290	
9,000.0	6,931.8	6,844.3	6,842.7	60.9	1.8	81.40	337.5	4,156.1	2,280.1	2,218.3	61.83	36.876	
9,055.1	6,931.4	6,844.7	6,843.1	62.4	1.8	81.48	337.4	4,156.1	2,225.5	2,162.2	63.32	35.148	
9,100.0	6,931.0	6,845.0	6,843.4	63.6	1.8	81.55	337.4	4,156.1	2,181.0	2,116.4	64.53	33.800	
9,153.5	6,930.6	6,845.4	6,843.8	65.0	1.8	81.63	337.4	4,156.1	2,127.9	2,061.9	65.97	32.254	
9,200.0	6,930.2	6,845.8	6,844.2	66.3	1.8	81.71	337.4	4,156.1	2,081.8	2,014.6	67.23	30.967	
9,251.9	6,929.7	6,846.2	6,844.6	67.7	1.8	81.79	337.3	4,156.1	2,030.4	1,961.7	68.64	29.581	
9,300.0	6,929.3	6,846.6	6,845.0	69.0	1.8	81.87	337.3	4,156.1	1,982.8	1,912.9	69.94	28.350	
9,350.4	6,928.9	6,847.0	6,845.4	70.4	1.8	81.95	337.3	4,156.1	1,933.0	1,861.6	71.31	27.106	
9,400.0	6,928.5	6,847.4	6,845.8	71.7	1.8	82.03	337.3	4,156.1	1,883.9	1,811.2	72.66	25.926	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	6,847.8	6,846.2	73.0	1.8	82.11	337.2	4,156.1	1,835.6	1,761.6	74.00	24.808	
9,500.0	6,927.7	6,848.2	6,846.6	74.4	1.8	82.20	337.2	4,156.2	1,785.1	1,709.7	75.39	23.677	
9,547.2	6,927.3	6,848.6	6,847.0	75.7	1.8	82.28	337.2	4,156.2	1,738.5	1,661.8	76.69	22.670	
9,600.0	6,926.8	6,849.1	6,847.5	77.2	1.8	82.37	337.1	4,156.2	1,686.4	1,608.3	78.13	21.584	
9,645.6	6,926.4	6,849.5	6,847.9	78.4	1.8	82.45	337.1	4,156.2	1,641.4	1,562.0	79.38	20.677	
9,700.0	6,926.0	6,850.0	6,848.3	79.9	1.8	82.55	337.1	4,156.2	1,587.9	1,507.0	80.88	19.634	
9,744.1	6,925.6	6,850.4	6,848.7	81.1	1.8	82.63	337.0	4,156.2	1,544.5	1,462.5	82.09	18.815	
9,800.0	6,925.2	6,850.9	6,849.2	82.6	1.8	82.73	337.0	4,156.2	1,489.6	1,406.0	83.63	17.812	
9,842.5	6,924.8	6,851.3	6,849.6	83.8	1.8	82.81	337.0	4,156.2	1,447.9	1,363.1	84.80	17.074	
9,900.0	6,924.3	6,851.8	6,850.2	85.4	1.8	82.92	337.0	4,156.2	1,391.5	1,305.1	86.39	16.108	
9,940.9	6,924.0	6,852.2	6,850.6	86.5	1.8	83.00	336.9	4,156.2	1,351.5	1,264.0	87.52	15.442	
10,000.0	6,923.5	6,852.8	6,851.1	88.1	1.8	83.11	336.9	4,156.2	1,293.8	1,204.6	89.15	14.512	
10,039.3	6,923.2	6,853.1	6,851.5	89.2	1.8	83.19	336.9	4,156.3	1,255.4	1,165.1	90.24	13.911	
10,100.0	6,922.6	6,853.7	6,852.1	90.9	1.8	83.31	336.8	4,156.3	1,196.4	1,104.4	91.92	13.015	
10,137.8	6,922.3	6,854.1	6,852.5	91.9	1.8	83.39	336.8	4,156.3	1,159.7	1,066.7	92.97	12.474	
10,200.0	6,921.8	6,854.7	6,853.1	93.7	1.8	83.52	336.8	4,156.3	1,099.4	1,004.7	94.70	11.610	
10,236.2	6,921.5	6,855.1	6,853.5	94.7	1.8	83.59	336.7	4,156.3	1,064.5	968.8	95.70	11.123	
10,300.0	6,921.0	6,855.8	6,854.1	96.4	1.8	83.73	336.7	4,156.3	1,003.1	905.6	97.48	10.291	
10,334.6	6,920.7	6,856.2	6,854.5	97.4	1.8	83.80	336.7	4,156.3	969.9	871.5	98.44	9.853	
10,400.0	6,920.1	6,856.9	6,855.2	99.2	1.8	83.94	336.6	4,156.3	907.6	807.3	100.26	9.052	
10,433.0	6,919.9	6,857.2	6,855.6	100.1	1.8	84.02	336.6	4,156.3	876.2	775.0	101.18	8.660	
10,500.0	6,919.3	6,857.9	6,856.3	101.9	1.8	84.17	336.5	4,156.3	813.1	710.0	103.05	7.890	
10,531.5	6,919.0	6,858.3	6,856.6	102.8	1.8	84.24	336.5	4,156.4	783.7	679.7	103.93	7.540	
10,600.0	6,918.5	6,859.1	6,857.4	104.7	1.8	84.40	336.5	4,156.4	720.1	614.3	105.84	6.804	
10,629.9	6,918.2	6,859.4	6,857.8	105.5	1.8	84.47	336.4	4,156.4	692.7	586.0	106.68	6.493	
10,700.0	6,917.6	6,860.2	6,858.6	107.5	1.8	84.63	336.4	4,156.4	629.3	520.7	108.64	5.793	
10,728.3	6,917.4	6,860.6	6,858.9	108.3	1.8	84.70	336.4	4,156.4	604.1	494.7	109.43	5.520	
10,800.0	6,916.8	6,861.5	6,859.8	110.3	1.8	84.88	336.3	4,156.4	541.7	430.3	111.44	4.861	
10,826.7	6,916.6	6,861.8	6,860.1	111.0	1.8	84.94	336.3	4,156.4	519.1	406.9	112.19	4.627	
10,900.0	6,916.0	6,862.7	6,861.0	113.0	1.8	85.13	336.2	4,156.4	459.3	345.0	114.25	4.020	
10,925.2	6,915.8	6,863.0	6,861.3	113.7	1.8	85.19	336.2	4,156.5	439.7	324.7	114.95	3.825	
11,000.0	6,915.1	6,864.0	6,862.3	115.8	1.8	85.39	336.1	4,156.5	385.2	268.1	117.06	3.291	
11,023.6	6,914.9	6,864.3	6,862.6	116.5	1.8	85.45	336.1	4,156.5	369.5	251.8	117.72	3.139	
11,100.0	6,914.3	6,865.3	6,863.6	118.6	1.8	85.66	336.0	4,156.5	325.3	205.4	119.87	2.714	
11,122.0	6,914.1	6,865.6	6,863.9	119.2	1.8	85.72	336.0	4,156.5	314.8	194.3	120.49	2.613	
11,200.0	6,913.5	6,866.7	6,865.0	121.4	1.8	85.94	335.9	4,156.5	288.5	165.8	122.68	2.352	
11,220.4	6,913.3	6,866.9	6,865.3	121.9	1.8	86.00	335.9	4,156.5	284.8	161.5	123.26	2.310	
11,262.9	6,912.9	6,867.5	6,865.9	123.1	1.8	86.12	335.9	4,156.6	281.6	157.1	124.45	2.263 CC, ES, SF	
11,300.0	6,912.6	6,868.1	6,866.4	124.1	1.8	86.23	335.8	4,156.6	284.0	158.5	125.50	2.263	
11,318.9	6,912.5	6,868.4	6,866.7	124.7	1.8	86.28	335.8	4,156.6	287.1	161.1	126.03	2.278	
11,400.0	6,911.8	6,869.5	6,867.9	126.9	1.8	86.52	335.7	4,156.6	313.2	184.9	128.31	2.441	
11,417.3	6,911.6	6,869.8	6,868.1	127.4	1.8	86.58	335.7	4,156.6	321.1	192.3	128.80	2.493	
11,500.0	6,911.0	6,871.1	6,869.4	129.7	1.8	86.83	335.6	4,156.6	368.1	237.0	131.13	2.807	
11,515.7	6,910.8	6,871.3	6,869.6	130.2	1.8	86.88	335.6	4,156.6	378.4	246.9	131.58	2.876	
11,600.0	6,910.1	6,872.6	6,870.9	132.5	1.8	87.15	335.5	4,156.7	439.2	305.3	133.95	3.279	
11,614.1	6,910.0	6,872.8	6,871.2	132.9	1.8	87.20	335.5	4,156.7	450.2	315.8	134.35	3.351	
11,700.0	6,909.3	6,874.2	6,872.5	135.3	1.8	87.48	335.4	4,156.7	519.9	383.2	136.78	3.801	
11,712.6	6,909.2	6,874.5	6,872.8	135.6	1.8	87.52	335.4	4,156.7	530.6	393.4	137.13	3.869	
11,800.0	6,908.5	6,875.9	6,874.2	138.1	1.8	87.82	335.3	4,156.7	606.4	466.8	139.60	4.344	
11,811.0	6,908.4	6,876.1	6,874.4	138.4	1.8	87.86	335.3	4,156.8	616.2	476.3	139.91	4.404	
11,900.0	6,907.6	6,877.7	6,876.0	140.9	1.8	88.18	335.2	4,156.8	696.5	554.1	142.42	4.891	
11,909.4	6,907.5	6,877.8	6,876.1	141.1	1.8	88.21	335.2	4,156.8	705.2	562.5	142.69	4.942	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,000.0	6,906.8	6,879.5	6,877.8	143.6	1.8	88.55	335.1	4,156.8	789.0	643.8	145.24	5.432	
12,007.8	6,906.7	6,879.6	6,877.9	143.9	1.8	88.58	335.1	4,156.8	796.4	650.9	145.46	5.475	
12,100.0	6,905.9	6,881.4	6,879.7	146.4	1.8	88.93	334.9	4,156.9	883.1	735.1	148.06	5.965	
12,106.3	6,905.9	6,881.5	6,879.8	146.6	1.8	88.95	334.9	4,156.9	889.1	740.8	148.24	5.998	
12,200.0	6,905.1	6,883.3	6,881.6	149.2	1.8	89.33	334.8	4,156.9	978.4	827.5	150.88	6.485	
12,204.7	6,905.1	6,883.4	6,881.7	149.4	1.8	89.35	334.8	4,156.9	982.9	831.9	151.01	6.509	
12,300.0	6,904.3	6,885.4	6,883.7	152.0	1.8	89.74	334.7	4,157.0	1,074.6	920.9	153.69	6.992	
12,303.1	6,904.3	6,885.4	6,883.7	152.1	1.8	89.75	334.7	4,157.0	1,077.6	923.8	153.78	7.007	
12,400.0	6,903.4	6,887.5	6,885.8	154.8	1.8	90.17	334.5	4,157.0	1,171.4	1,014.9	156.50	7.485	
12,401.5	6,903.4	6,887.5	6,885.8	154.8	1.8	90.18	334.5	4,157.0	1,172.9	1,016.3	156.54	7.492	
12,500.0	6,902.6	6,889.7	6,888.0	157.6	1.8	90.62	334.4	4,157.1	1,268.6	1,109.3	159.30	7.964	
12,598.4	6,901.8	6,892.0	6,890.2	160.3	1.8	91.08	334.2	4,157.2	1,364.7	1,202.7	162.06	8.421	
12,600.0	6,901.8	6,892.0	6,890.3	160.4	1.8	91.09	334.2	4,157.2	1,366.3	1,204.2	162.10	8.429	
12,696.8	6,901.0	6,894.4	6,892.6	163.1	1.8	91.56	334.1	4,157.2	1,461.2	1,296.4	164.80	8.866	
12,700.0	6,900.9	6,894.4	6,892.7	163.2	1.8	91.57	334.1	4,157.2	1,464.3	1,299.4	164.89	8.880	
12,795.2	6,900.1	6,896.8	6,895.1	165.8	1.8	92.06	333.9	4,157.3	1,557.8	1,390.3	167.54	9.299	
12,800.0	6,900.1	6,897.0	6,895.2	166.0	1.8	92.08	333.9	4,157.3	1,562.5	1,394.8	167.67	9.319	
12,893.7	6,899.3	6,899.4	6,897.7	168.6	1.8	92.58	333.7	4,157.4	1,654.7	1,484.5	170.26	9.719	
12,900.0	6,899.3	6,899.6	6,897.8	168.8	1.8	92.61	333.7	4,157.4	1,661.0	1,490.5	170.43	9.745	
12,992.1	6,898.5	6,902.1	6,900.4	171.3	1.8	93.12	333.6	4,157.4	1,751.8	1,578.8	172.97	10.128	
13,000.0	6,898.4	6,902.4	6,900.6	171.6	1.8	93.17	333.6	4,157.4	1,759.6	1,586.4	173.19	10.160	
13,090.5	6,897.7	6,905.0	6,903.2	174.1	1.8	93.69	333.4	4,157.5	1,849.0	1,673.3	175.66	10.526	
13,100.0	6,897.6	6,905.3	6,903.5	174.4	1.8	93.75	333.4	4,157.5	1,858.3	1,682.4	175.92	10.564	
13,188.9	6,896.9	6,908.0	6,906.2	176.8	1.8	94.29	333.2	4,157.6	1,946.3	1,768.0	178.33	10.914	
13,200.0	6,896.8	6,908.3	6,906.5	177.2	1.8	94.36	333.2	4,157.6	1,957.2	1,778.6	178.63	10.957	
13,287.4	6,896.0	6,911.1	6,909.3	179.6	1.8	94.91	333.0	4,157.7	2,043.7	1,862.7	180.98	11.292	
13,300.0	6,895.9	6,911.5	6,909.7	180.0	1.8	94.99	333.0	4,157.7	2,056.2	1,874.9	181.32	11.340	
13,385.8	6,895.2	6,914.4	6,912.6	182.4	1.8	95.56	332.8	4,157.8	2,141.2	1,957.6	183.61	11.662	
13,400.0	6,895.1	6,914.9	6,913.1	182.7	1.8	95.66	332.7	4,157.8	2,155.3	1,971.3	183.98	11.715	
13,484.2	6,894.4	6,917.8	6,916.0	185.1	1.8	96.25	332.5	4,157.9	2,238.8	2,052.6	186.20	12.024	
13,500.0	6,894.3	6,918.4	6,916.6	185.5	1.8	96.36	332.5	4,157.9	2,254.4	2,067.8	186.61	12.081	
13,582.6	6,893.6	13,582.6	6,891.3	187.9	3.3	91.29	334.2	4,157.2	2,336.5	2,145.2	191.26	12.217	
13,600.0	6,893.4	13,600.0	6,891.5	188.3	3.3	91.33	334.2	4,157.2	2,353.7	2,162.0	191.75	12.275	
13,681.1	6,892.8	13,681.1	6,892.4	190.6	3.3	91.51	334.1	4,157.3	2,434.2	2,240.2	194.06	12.543	
13,700.0	6,892.6	13,700.0	6,892.6	191.1	3.4	91.56	334.1	4,157.3	2,453.0	2,258.4	194.60	12.605	
13,779.5	6,891.9	13,779.5	6,893.5	193.4	3.4	91.74	334.0	4,157.3	2,532.0	2,335.1	196.87	12.861	
13,800.0	6,891.8	13,800.0	6,893.7	193.9	3.4	91.78	334.0	4,157.3	2,552.4	2,354.9	197.46	12.926	
13,877.9	6,891.1	13,877.9	6,894.6	196.1	3.4	91.96	334.0	4,157.3	2,629.8	2,430.2	199.68	13.170	
13,900.0	6,890.9	13,900.0	6,894.8	196.7	3.4	92.01	333.9	4,157.3	2,651.8	2,451.5	200.31	13.239	
13,976.3	6,890.3	13,976.3	6,895.7	198.9	3.4	92.18	333.9	4,157.3	2,727.7	2,525.2	202.49	13.471	
14,000.0	6,890.1	14,000.0	6,895.9	199.5	3.4	92.23	333.9	4,157.3	2,751.2	2,548.1	203.16	13.542	
14,074.8	6,889.5	14,074.8	6,896.7	201.6	3.4	92.40	333.8	4,157.3	2,825.6	2,620.3	205.29	13.764	
14,100.0	6,889.3	14,100.0	6,897.0	202.3	3.4	92.45	333.8	4,157.3	2,850.7	2,644.7	206.01	13.838	
14,173.2	6,888.7	14,173.2	6,897.8	204.4	3.5	92.62	333.7	4,157.4	2,923.6	2,715.5	208.10	14.049	
14,200.0	6,888.4	14,200.0	6,898.1	205.1	3.5	92.68	333.7	4,157.4	2,950.2	2,741.4	208.86	14.126	
14,271.6	6,887.8	6,900.0	6,898.2	207.1	1.8	92.70	333.7	4,157.4	3,021.5	2,812.8	208.77	14.473	
14,300.0	6,887.6	6,900.0	6,898.2	207.9	1.8	92.70	333.7	4,157.4	3,049.8	2,840.2	209.57	14.553	
14,370.0	6,887.0	6,900.0	6,898.2	209.9	1.8	92.70	333.7	4,157.4	3,119.6	2,908.0	211.53	14.748	
14,400.0	6,886.8	6,900.0	6,898.2	210.7	1.8	92.70	333.7	4,157.4	3,149.4	2,937.0	212.36	14.830	
14,468.5	6,886.2	6,900.0	6,898.2	212.6	1.8	92.70	333.7	4,157.4	3,217.6	3,003.3	214.28	15.016	
14,500.0	6,885.9	6,900.0	6,898.2	213.5	1.8	92.70	333.7	4,157.4	3,249.0	3,033.8	215.16	15.100	
14,566.9	6,885.4	6,900.0	6,898.2	215.4	1.8	92.70	333.7	4,157.4	3,315.6	3,098.6	217.03	15.277	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,600.0	6,885.1	6,900.0	6,898.2	216.3	1.8	92.70	333.7	4,157.4	3,348.6	3,130.7	217.96	15.363	
14,613.0	6,885.0	6,900.0	6,898.2	216.7	1.8	92.70	333.7	4,157.4	3,361.6	3,143.3	218.32	15.397	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	87.81	259.6	6,799.1	6,804.1				
98.4	98.4	75.4	75.4	0.1	0.4	87.81	259.6	6,799.1	6,804.0	6,803.5	0.52	N/A	
100.0	100.0	77.0	77.0	0.1	0.4	87.81	259.6	6,799.1	6,804.0	6,803.5	0.53	N/A	
196.8	196.8	173.8	173.8	0.3	2.4	87.81	259.6	6,799.1	6,804.0	6,801.4	2.69	2,530.681	
200.0	200.0	177.0	177.0	0.3	2.5	87.81	259.6	6,799.1	6,804.0	6,801.3	2.77	2,453.687	
295.3	295.3	272.3	272.3	0.5	4.5	87.81	259.6	6,799.1	6,804.0	6,799.0	5.05	1,346.027	
300.0	300.0	277.0	277.0	0.5	4.6	87.81	259.6	6,799.1	6,804.0	6,798.9	5.16	1,317.638	
393.7	393.7	370.7	370.7	0.7	6.5	87.81	259.6	6,799.1	6,804.0	6,796.7	7.30	932.620	
400.0	400.0	377.0	377.0	0.8	6.7	87.81	259.6	6,799.1	6,804.0	6,796.6	7.44	914.726	
492.1	492.1	469.1	469.1	1.0	8.5	87.81	259.6	6,799.1	6,804.0	6,794.5	9.52	714.988	
500.0	500.0	477.0	477.0	1.0	8.7	87.81	259.6	6,799.1	6,804.0	6,794.4	9.69	701.906	
590.5	590.5	567.5	567.5	1.2	10.5	87.81	259.6	6,799.1	6,804.0	6,792.3	11.73	580.100	
600.0	600.0	577.0	577.0	1.2	10.7	87.81	259.6	6,799.1	6,804.0	6,792.1	11.94	569.788	
689.0	689.0	666.0	666.0	1.4	12.5	87.81	259.6	6,799.1	6,804.0	6,790.1	13.94	488.169	
700.0	700.0	677.0	677.0	1.4	12.8	87.81	259.6	6,799.1	6,804.0	6,789.9	14.19	479.658	
787.4	787.4	764.4	764.4	1.6	14.5	87.81	259.6	6,799.1	6,804.0	6,787.9	16.14	421.449	
800.0	800.0	777.0	777.0	1.7	14.8	87.81	259.6	6,799.1	6,804.0	6,787.6	16.43	414.205	
885.8	885.8	862.8	862.8	1.9	16.5	87.81	259.6	6,799.1	6,804.0	6,785.7	18.35	370.804	
900.0	900.0	877.0	877.0	1.9	16.8	87.81	259.6	6,799.1	6,804.0	6,785.4	18.67	364.497	
984.2	984.2	961.2	961.2	2.1	18.5	87.81	259.6	6,799.1	6,804.0	6,783.5	20.55	331.041	
1,000.0	1,000.0	977.0	977.0	2.1	18.8	87.81	259.6	6,799.1	6,804.0	6,783.1	20.91	325.457	
1,082.7	1,082.7	1,059.7	1,059.7	2.3	20.5	87.81	259.6	6,799.1	6,804.0	6,781.3	22.76	298.989	
1,100.0	1,100.0	1,077.0	1,077.0	2.3	20.8	87.81	259.6	6,799.1	6,804.0	6,780.9	23.14	293.979	
1,150.0	1,150.0	1,127.0	1,127.0	2.4	21.8	87.81	259.6	6,799.1	6,804.0	6,779.8	24.26	280.421	
1,181.1	1,181.1	1,158.1	1,158.1	2.5	22.4	120.50	259.6	6,799.1	6,804.1	6,779.2	24.96	272.618	
1,200.0	1,200.0	1,177.0	1,177.0	2.6	22.8	120.50	259.6	6,799.1	6,804.3	6,778.9	25.38	268.092	
1,279.5	1,279.5	1,256.5	1,256.5	2.7	24.4	120.50	259.6	6,799.1	6,805.5	6,778.4	27.15	250.672	
1,300.0	1,299.9	1,276.9	1,276.9	2.8	24.8	120.50	259.6	6,799.1	6,806.0	6,778.4	27.60	246.567	
1,377.9	1,377.7	1,354.7	1,354.7	3.0	26.4	120.49	259.6	6,799.1	6,808.7	6,779.3	29.33	232.153	
1,400.0	1,399.7	1,376.7	1,376.7	3.0	26.8	120.49	259.6	6,799.1	6,809.6	6,779.8	29.81	228.400	
1,476.4	1,475.7	1,452.7	1,452.7	3.2	28.4	120.47	259.6	6,799.1	6,813.5	6,782.0	31.50	216.324	
1,500.0	1,499.1	1,476.1	1,476.1	3.2	28.8	120.47	259.6	6,799.1	6,814.9	6,782.9	32.01	212.869	
1,574.8	1,573.2	1,550.2	1,550.2	3.4	30.3	120.45	259.6	6,799.1	6,820.1	6,786.4	33.66	202.637	
1,600.0	1,598.2	1,575.2	1,575.2	3.5	30.8	120.45	259.6	6,799.1	6,822.0	6,787.8	34.21	199.436	
1,673.2	1,670.3	1,647.3	1,647.3	3.7	32.3	120.42	259.6	6,799.1	6,828.4	6,792.5	35.81	190.677	
1,700.0	1,696.6	1,673.6	1,673.6	3.8	32.8	120.42	259.6	6,799.1	6,830.9	6,794.5	36.39	187.693	
1,749.9	1,745.5	1,722.5	1,722.5	3.9	33.8	120.40	259.6	6,799.1	6,836.0	6,798.5	37.48	182.370	
1,771.6	1,766.8	1,743.8	1,743.8	4.0	34.2	120.43	259.6	6,799.1	6,838.3	6,800.4	37.98	180.070	
1,800.0	1,794.5	1,771.5	1,771.5	4.1	34.8	120.47	259.6	6,799.1	6,841.4	6,802.8	38.62	177.167	
1,870.1	1,863.1	1,840.1	1,840.1	4.3	36.2	120.58	259.6	6,799.1	6,848.9	6,808.7	40.21	170.348	
1,900.0	1,892.3	1,869.3	1,869.3	4.4	36.8	120.62	259.6	6,799.1	6,852.1	6,811.2	40.88	167.599	
1,968.5	1,959.4	1,936.4	1,936.4	4.7	38.1	120.72	259.6	6,799.1	6,859.5	6,817.1	42.45	161.597	
2,000.0	1,990.2	1,967.2	1,967.2	4.8	38.7	120.77	259.6	6,799.1	6,862.9	6,819.7	43.17	158.986	
2,066.9	2,055.6	2,032.6	2,032.6	5.1	40.0	120.86	259.6	6,799.1	6,870.1	6,825.4	44.70	153.690	
2,100.0	2,088.0	2,065.0	2,065.0	5.2	40.7	120.91	259.6	6,799.1	6,873.7	6,828.3	45.46	151.202	
2,165.3	2,151.9	2,128.9	2,128.9	5.4	42.0	121.01	259.6	6,799.1	6,880.8	6,833.9	46.97	146.509	
2,200.0	2,185.8	2,162.8	2,162.8	5.6	42.7	121.06	259.6	6,799.1	6,884.6	6,836.8	47.76	144.140	
2,263.8	2,248.2	2,225.2	2,225.2	5.8	43.9	121.15	259.6	6,799.1	6,891.6	6,842.3	49.24	139.969	
2,300.0	2,283.6	2,260.6	2,260.6	6.0	44.6	121.20	259.6	6,799.1	6,895.5	6,845.5	50.07	137.710	
2,362.2	2,344.5	2,321.5	2,321.5	6.2	45.8	121.30	259.6	6,799.1	6,902.3	6,850.8	51.51	133.992	
2,400.0	2,381.4	2,358.4	2,358.4	6.4	46.6	121.35	259.6	6,799.1	6,906.5	6,854.1	52.39	131.834	
2,460.6	2,440.7	2,417.7	2,417.7	6.6	47.8	121.44	259.6	6,799.1	6,913.2	6,859.4	53.79	128.511	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,456.2	2,456.2	6.8	48.6	121.49	259.6	6,799.1	6,917.5	6,862.8	54.71	126.445	
2,559.0	2,537.0	2,514.0	2,514.0	7.0	49.7	121.58	259.6	6,799.1	6,924.0	6,868.0	56.08	123.468	
2,600.0	2,577.1	2,554.1	2,554.1	7.2	50.5	121.64	259.6	6,799.1	6,928.6	6,871.5	57.03	121.488	
2,657.5	2,633.3	2,610.3	2,610.3	7.4	51.7	121.72	259.6	6,799.1	6,934.9	6,876.6	58.37	118.815	
2,700.0	2,674.9	2,651.9	2,651.9	7.6	52.5	121.78	259.6	6,799.1	6,939.7	6,880.3	59.36	116.914	
2,755.9	2,729.6	2,706.6	2,706.6	7.9	53.6	121.86	259.6	6,799.1	6,945.9	6,885.2	60.66	114.508	
2,800.0	2,772.7	2,749.7	2,749.7	8.0	54.5	121.93	259.6	6,799.1	6,950.8	6,889.1	61.69	112.682	
2,854.3	2,825.8	2,802.8	2,802.8	8.3	55.5	122.00	259.6	6,799.1	6,956.9	6,893.9	62.95	110.513	
2,900.0	2,870.5	2,847.5	2,847.5	8.5	56.4	122.07	259.6	6,799.1	6,962.0	6,898.0	64.02	108.755	
2,952.7	2,922.1	2,899.1	2,899.1	8.7	57.5	122.14	259.6	6,799.1	6,967.9	6,902.7	65.25	106.796	
3,000.0	2,968.3	2,945.3	2,945.3	8.9	58.4	122.21	259.6	6,799.1	6,973.2	6,906.9	66.35	105.103	
3,051.2	3,018.4	2,995.4	2,995.4	9.1	59.4	122.28	259.6	6,799.1	6,979.0	6,911.5	67.54	103.330	
3,100.0	3,066.1	3,043.1	3,043.1	9.3	60.4	122.35	259.6	6,799.1	6,984.5	6,915.8	68.68	101.697	
3,149.6	3,114.7	3,091.7	3,091.7	9.5	61.3	122.42	259.6	6,799.1	6,990.1	6,920.3	69.84	100.092	
3,200.0	3,164.0	3,141.0	3,141.0	9.8	62.3	122.50	259.6	6,799.1	6,995.8	6,924.8	71.01	98.515	
3,248.0	3,210.9	3,187.9	3,187.9	10.0	63.3	122.56	259.6	6,799.1	7,001.3	6,929.2	72.13	97.059	
3,300.0	3,261.8	3,238.8	3,238.8	10.2	64.3	122.64	259.6	6,799.1	7,007.2	6,933.9	73.35	95.534	
3,346.4	3,307.2	3,284.2	3,284.2	10.4	65.2	122.70	259.6	6,799.1	7,012.5	6,938.1	74.43	94.213	
3,400.0	3,359.6	3,336.6	3,336.6	10.6	66.3	122.78	259.6	6,799.1	7,018.6	6,942.9	75.68	92.738	
3,444.9	3,403.5	3,380.5	3,380.5	10.8	67.1	122.84	259.6	6,799.1	7,023.7	6,947.0	76.73	91.538	
3,500.0	3,457.4	3,434.4	3,434.4	11.1	68.2	122.92	259.6	6,799.1	7,030.1	6,952.0	78.02	90.109	
3,543.3	3,499.8	3,476.8	3,476.8	11.3	69.1	122.98	259.6	6,799.1	7,035.0	6,956.0	79.03	89.019	
3,600.0	3,555.2	3,532.2	3,532.2	11.5	70.2	123.06	259.6	6,799.1	7,041.5	6,961.2	80.35	87.634	
3,641.7	3,596.0	3,573.0	3,573.0	11.7	71.0	123.12	259.6	6,799.1	7,046.4	6,965.0	81.33	86.643	
3,700.0	3,653.0	3,630.0	3,630.0	11.9	72.2	123.20	259.6	6,799.1	7,053.1	6,970.4	82.69	85.298	
3,740.1	3,692.3	3,669.3	3,669.3	12.1	73.0	123.25	259.6	6,799.1	7,057.7	6,974.1	83.63	84.397	
3,800.0	3,750.8	3,727.8	3,727.8	12.4	74.1	123.34	259.6	6,799.1	7,064.7	6,979.6	85.02	83.092	
3,838.6	3,788.6	3,765.6	3,765.6	12.6	74.9	123.39	259.6	6,799.1	7,069.1	6,983.2	85.92	82.273	
3,900.0	3,848.7	3,825.7	3,825.7	12.8	76.1	123.47	259.6	6,799.1	7,076.3	6,988.9	87.36	81.004	
3,937.0	3,884.9	3,861.9	3,861.9	13.0	76.8	123.53	259.6	6,799.1	7,080.6	6,992.4	88.22	80.259	
4,000.0	3,946.5	3,923.5	3,923.5	13.3	78.1	123.61	259.6	6,799.1	7,087.9	6,998.3	89.69	79.025	
4,035.4	3,981.1	3,958.1	3,958.1	13.4	78.8	123.66	259.6	6,799.1	7,092.1	7,001.6	90.52	78.349	
4,100.0	4,044.3	4,021.3	4,021.3	13.7	80.0	123.75	259.6	6,799.1	7,099.6	7,007.6	92.03	77.148	
4,133.8	4,077.4	4,054.4	4,054.4	13.9	80.7	123.80	259.6	6,799.1	7,103.6	7,010.8	92.82	76.534	
4,200.0	4,142.1	4,119.1	4,119.1	14.2	82.0	123.89	259.6	6,799.1	7,111.4	7,017.0	94.36	75.364	
4,232.3	4,173.7	4,150.7	4,150.7	14.3	82.6	123.93	259.6	6,799.1	7,115.2	7,020.1	95.11	74.807	
4,300.0	4,239.9	4,216.9	4,216.9	14.6	84.0	124.02	259.6	6,799.1	7,123.2	7,026.5	96.69	73.667	
4,330.7	4,270.0	4,247.0	4,247.0	14.7	84.6	124.07	259.6	6,799.1	7,126.8	7,029.4	97.41	73.162	
4,400.0	4,337.7	4,314.7	4,314.7	15.0	85.9	124.16	259.6	6,799.1	7,135.0	7,036.0	99.03	72.050	
4,429.1	4,366.2	4,343.2	4,343.2	15.2	86.5	124.20	259.6	6,799.1	7,138.5	7,038.8	99.71	71.594	
4,500.0	4,435.6	4,412.6	4,412.6	15.5	87.9	124.30	259.6	6,799.1	7,146.9	7,045.5	101.36	70.509	
4,527.5	4,462.5	4,439.5	4,439.5	15.6	88.4	124.33	259.6	6,799.1	7,150.2	7,048.1	102.00	70.097	
4,600.0	4,533.4	4,510.4	4,510.4	15.9	89.9	124.43	259.6	6,799.1	7,158.8	7,055.1	103.69	69.038	
4,626.0	4,558.8	4,535.8	4,535.8	16.0	90.4	124.47	259.6	6,799.1	7,161.9	7,057.6	104.30	68.667	
4,673.6	4,605.3	4,582.3	4,582.3	16.3	91.3	124.53	259.6	6,799.1	7,167.6	7,062.2	105.41	67.998	
4,700.0	4,631.2	4,608.2	4,608.2	16.4	91.8	124.62	259.6	6,799.1	7,170.7	7,064.6	106.07	67.606	
4,724.4	4,655.1	4,632.1	4,632.1	16.4	92.3	124.69	259.6	6,799.1	7,173.4	7,066.7	106.66	67.257	
4,800.0	4,729.5	4,706.5	4,706.5	16.7	93.8	124.91	259.6	6,799.1	7,181.1	7,072.7	108.49	66.193	
4,822.8	4,752.1	4,729.1	4,729.1	16.7	94.3	124.97	259.6	6,799.1	7,183.3	7,074.2	109.03	65.882	
4,900.0	4,828.4	4,805.4	4,805.4	17.0	95.8	125.14	259.6	6,799.1	7,189.7	7,078.8	110.87	64.848	
4,921.2	4,849.5	4,826.5	4,826.5	17.0	96.2	125.19	259.6	6,799.1	7,191.2	7,079.8	111.37	64.573	
5,000.0	4,927.8	4,904.8	4,904.8	17.2	97.8	125.32	259.6	6,799.1	7,196.2	7,083.0	113.20	63.570	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,924.4	4,924.4	17.2	98.2	125.35	259.6	6,799.1	7,197.2	7,083.6	113.65	63.328	
5,100.0	5,027.5	5,004.5	5,004.5	17.4	99.8	125.45	259.6	6,799.1	7,200.7	7,085.2	115.48	62.357	
5,118.1	5,045.6	5,022.6	5,022.6	17.4	100.2	125.46	259.6	6,799.1	7,201.3	7,085.4	115.88	62.146	
5,200.0	5,127.4	5,104.4	5,104.4	17.6	101.8	125.52	259.6	6,799.1	7,203.2	7,085.5	117.69	61.207	
5,216.5	5,143.9	5,120.9	5,120.9	17.6	102.2	125.52	259.6	6,799.1	7,203.4	7,085.4	118.04	61.023	
5,273.4	5,200.8	5,177.8	5,177.8	17.7	103.3	92.84	259.6	6,799.1	7,203.8	7,086.0	117.74	61.182	
5,300.0	5,227.4	5,204.4	5,204.4	17.7	103.8	92.84	259.6	6,799.1	7,203.8	7,085.4	118.32	60.884	
5,314.9	5,242.3	5,219.3	5,219.3	17.7	104.1	92.84	259.6	6,799.1	7,203.8	7,085.1	118.65	60.716	
5,400.0	5,327.4	5,304.4	5,304.4	17.8	105.8	92.84	259.6	6,799.1	7,203.8	7,083.2	120.50	59.780	
5,413.4	5,340.8	5,317.8	5,317.8	17.9	106.1	92.84	259.6	6,799.1	7,203.8	7,083.0	120.80	59.635	
5,500.0	5,427.4	5,404.4	5,404.4	18.0	107.9	92.84	259.6	6,799.1	7,203.8	7,081.1	122.69	58.715	
5,511.8	5,439.2	5,416.2	5,416.2	18.0	108.1	92.84	259.6	6,799.1	7,203.8	7,080.8	122.95	58.591	
5,600.0	5,527.4	5,504.4	5,504.4	18.1	109.9	92.84	259.6	6,799.1	7,203.8	7,078.9	124.88	57.686	
5,610.2	5,537.6	5,514.6	5,514.6	18.1	110.1	92.84	259.6	6,799.1	7,203.8	7,078.7	125.10	57.583	
5,700.0	5,627.4	5,604.4	5,604.4	18.3	111.9	92.84	259.6	6,799.1	7,203.8	7,076.7	127.07	56.692	
5,708.6	5,636.0	5,613.0	5,613.0	18.3	112.0	92.84	259.6	6,799.1	7,203.8	7,076.5	127.26	56.608	
5,800.0	5,727.4	5,704.4	5,704.4	18.4	113.9	92.84	259.6	6,799.1	7,203.8	7,074.5	129.26	55.732	
5,807.1	5,734.5	5,711.5	5,711.5	18.4	114.0	92.84	259.6	6,799.1	7,203.8	7,074.3	129.41	55.665	
5,900.0	5,827.4	5,804.4	5,804.4	18.6	115.9	92.84	259.6	6,799.1	7,203.8	7,072.3	131.45	54.803	
5,905.5	5,832.9	5,809.9	5,809.9	18.6	116.0	92.84	259.6	6,799.1	7,203.8	7,072.2	131.57	54.752	
6,000.0	5,927.4	5,904.4	5,904.4	18.7	117.9	92.84	259.6	6,799.1	7,203.8	7,070.1	133.64	53.904	
6,003.9	5,931.3	5,908.3	5,908.3	18.7	118.0	92.84	259.6	6,799.1	7,203.8	7,070.0	133.73	53.869	
6,100.0	6,027.4	6,004.4	6,004.4	18.9	119.9	92.84	259.6	6,799.1	7,203.8	7,067.9	135.83	53.033	
6,102.3	6,029.7	6,006.7	6,006.7	18.9	120.0	92.84	259.6	6,799.1	7,203.8	7,067.9	135.89	53.013	
6,200.0	6,127.4	6,104.4	6,104.4	19.0	121.9	92.84	259.6	6,799.1	7,203.8	7,065.7	138.03	52.190	
6,200.8	6,128.2	6,105.2	6,105.2	19.0	121.9	92.84	259.6	6,799.1	7,203.8	7,065.7	138.05	52.184	
6,299.2	6,226.6	6,203.6	6,203.6	19.2	123.9	92.84	259.6	6,799.1	7,203.8	7,063.5	140.21	51.379	
6,301.4	6,228.8	6,205.8	6,205.8	19.2	124.0	92.84	259.6	6,799.1	7,203.8	7,063.5	140.26	51.361	
6,350.0	6,277.4	6,254.4	6,254.4	19.3	124.9	2.85	259.6	6,799.1	7,202.1	7,059.8	142.26	50.627	
6,397.6	6,324.7	6,301.7	6,301.7	19.3	125.9	2.87	259.6	6,799.1	7,197.3	7,055.0	142.28	50.584	
6,400.0	6,327.1	6,304.1	6,304.1	19.3	125.9	2.87	259.6	6,799.1	7,197.0	7,054.7	142.27	50.587	
6,450.0	6,376.3	6,353.3	6,353.3	19.3	126.9	2.91	259.6	6,799.1	7,188.4	7,046.8	141.57	50.777	
6,496.0	6,421.1	6,398.1	6,398.1	19.3	127.8	2.96	259.6	6,799.1	7,177.5	7,037.2	140.29	51.163	
6,500.0	6,424.9	6,401.9	6,401.9	19.3	127.9	2.97	259.6	6,799.1	7,176.4	7,036.3	140.15	51.206	
6,550.0	6,472.4	6,449.4	6,449.4	19.3	128.9	3.04	259.6	6,799.1	7,161.1	7,023.1	138.01	51.890	
6,594.5	6,513.8	6,490.8	6,490.8	19.3	129.7	3.12	259.6	6,799.1	7,144.7	7,009.2	135.49	52.731	
6,600.0	6,518.8	6,495.8	6,495.8	19.3	129.8	3.13	259.6	6,799.1	7,142.5	7,007.3	135.14	52.852	
6,650.0	6,563.8	6,540.8	6,540.8	19.3	130.7	3.25	259.6	6,799.1	7,120.7	6,989.1	131.56	54.124	
6,692.9	6,601.1	6,578.1	6,578.1	19.2	131.5	3.37	259.6	6,799.1	7,099.5	6,971.6	127.93	55.495	
6,700.0	6,607.1	6,584.1	6,584.1	19.2	131.6	3.40	259.6	6,799.1	7,095.8	6,968.5	127.28	55.749	
6,750.0	6,648.6	6,625.6	6,625.6	19.2	132.4	3.57	259.6	6,799.1	7,068.0	6,945.6	122.32	57.783	
6,791.3	6,681.4	6,658.4	6,658.4	19.1	133.1	3.75	259.6	6,799.1	7,042.8	6,925.1	117.73	59.824	
6,800.0	6,688.1	6,665.1	6,665.1	19.1	133.2	3.79	259.6	6,799.1	7,037.3	6,920.6	116.71	60.300	
6,850.0	6,725.3	6,702.3	6,702.3	19.1	134.0	4.05	259.6	6,799.1	7,004.0	6,893.5	110.48	63.398	
6,889.7	6,753.2	6,730.2	6,730.2	19.0	134.5	4.30	259.6	6,799.1	6,975.7	6,870.6	105.12	66.362	
6,900.0	6,760.1	6,737.1	6,737.1	19.0	134.7	4.38	259.6	6,799.1	6,968.1	6,864.5	103.68	67.209	
6,950.0	6,792.3	6,769.3	6,769.3	19.0	135.3	4.78	259.6	6,799.1	6,929.9	6,833.6	96.38	71.904	
6,988.2	6,815.1	6,792.1	6,792.1	18.9	135.8	5.16	259.6	6,799.1	6,899.3	6,808.8	90.52	76.222	
7,000.0	6,821.8	6,798.8	6,798.8	18.9	135.9	5.29	259.6	6,799.1	6,889.6	6,801.0	88.66	77.710	
7,050.0	6,848.3	6,825.3	6,825.3	18.9	136.4	5.94	259.6	6,799.1	6,847.3	6,766.7	80.64	84.907	
7,086.6	6,865.9	6,842.9	6,842.9	18.9	136.8	6.55	259.6	6,799.1	6,815.3	6,740.6	74.70	91.230	
7,100.0	6,871.9	6,848.9	6,848.9	18.9	136.9	6.81	259.6	6,799.1	6,803.3	6,730.8	72.54	93.791	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOSKI 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,150.0	6,892.3	6,869.3	6,869.3	18.8	137.3	8.00	259.6	6,799.1	6,757.7	6,693.0	64.70	104.454		
7,185.0	6,904.7	6,881.7	6,881.7	18.8	137.6	9.14	259.6	6,799.1	6,725.0	6,665.3	59.74	112.575		
7,200.0	6,909.5	6,886.5	6,886.5	18.9	137.7	9.73	259.6	6,799.1	6,710.9	6,653.0	57.87	115.958		
7,250.0	6,923.4	6,900.4	6,900.4	19.3	137.9	12.42	259.6	6,799.1	6,662.9	6,609.1	53.81	123.822		
7,283.4	6,930.8	6,907.8	6,907.8	19.8	138.1	15.22	259.6	6,799.1	6,630.3	6,575.8	54.50	121.658		
7,300.0	6,933.9	6,910.9	6,910.9	20.0	138.1	17.12	259.6	6,799.1	6,614.1	6,557.5	56.60	116.853		
7,350.0	6,940.9	6,917.9	6,917.9	20.8	138.3	27.10	259.6	6,799.1	6,564.7	6,489.0	75.65	86.779		
7,381.9	6,943.6	6,920.6	6,920.6	21.4	138.3	41.39	259.6	6,799.1	6,533.0	6,426.8	106.13	61.555		
7,400.0	6,944.5	6,921.5	6,921.5	21.7	138.4	56.13	259.6	6,799.1	6,514.9	6,382.3	132.59	49.137		
7,432.4	6,945.0	6,922.0	6,922.0	22.3	138.4	98.63	259.6	6,799.1	6,482.5	6,323.5	159.09	40.748		
7,480.3	6,944.6	6,921.6	6,921.6	23.2	138.4	98.57	259.6	6,799.1	6,434.7	6,274.7	159.99	40.220		
7,500.0	6,944.4	6,921.4	6,921.4	23.6	138.4	98.54	259.6	6,799.1	6,415.1	6,254.7	160.36	40.005		
7,578.7	6,943.7	6,920.7	6,920.7	25.2	138.3	98.44	259.6	6,799.1	6,336.5	6,174.5	161.95	39.126		
7,600.0	6,943.6	6,920.6	6,920.6	25.6	138.3	98.41	259.6	6,799.1	6,315.2	6,152.8	162.38	38.891		
7,677.1	6,942.9	6,919.9	6,919.9	27.3	138.3	98.31	259.6	6,799.1	6,238.2	6,074.1	164.05	38.026		
7,700.0	6,942.7	6,919.7	6,919.7	27.8	138.3	98.28	259.6	6,799.1	6,215.4	6,050.8	164.54	37.774		
7,775.6	6,942.1	6,919.1	6,919.1	29.5	138.3	98.18	259.6	6,799.1	6,139.9	5,973.7	166.26	36.931		
7,800.0	6,941.9	6,918.9	6,918.9	30.1	138.3	98.15	259.6	6,799.1	6,115.6	5,948.7	166.81	36.662		
7,874.0	6,941.3	6,918.3	6,918.3	31.8	138.3	98.05	259.6	6,799.1	6,041.7	5,873.1	168.55	35.845		
7,900.0	6,941.1	6,918.1	6,918.1	32.4	138.3	98.01	259.6	6,799.1	6,015.7	5,846.6	169.16	35.562		
7,972.4	6,940.4	6,917.4	6,917.4	34.2	138.3	97.92	259.6	6,799.1	5,943.4	5,772.5	170.92	34.774		
8,000.0	6,940.2	6,917.2	6,917.2	34.9	138.3	97.88	259.6	6,799.1	5,915.9	5,744.3	171.58	34.478		
8,070.8	6,939.6	6,916.6	6,916.6	36.6	138.3	97.79	259.6	6,799.1	5,845.2	5,671.9	173.34	33.721		
8,100.0	6,939.4	6,916.4	6,916.4	37.3	138.3	97.75	259.6	6,799.1	5,816.1	5,642.0	174.06	33.414		
8,169.3	6,938.8	6,915.8	6,915.8	39.1	138.2	97.66	259.6	6,799.1	5,747.0	5,571.2	175.81	32.689		
8,200.0	6,938.5	6,915.5	6,915.5	39.8	138.2	97.62	259.6	6,799.1	5,716.3	5,539.7	176.58	32.371		
8,267.7	6,938.0	6,915.0	6,915.0	41.6	138.2	97.53	259.6	6,799.1	5,648.7	5,470.4	178.32	31.678		
8,300.0	6,937.7	6,914.7	6,914.7	42.4	138.2	97.48	259.6	6,799.1	5,616.5	5,437.4	179.15	31.351		
8,366.1	6,937.2	6,914.2	6,914.2	44.1	138.2	97.40	259.6	6,799.1	5,550.5	5,369.7	180.86	30.689		
8,400.0	6,936.9	6,913.9	6,913.9	45.0	138.2	97.35	259.6	6,799.1	5,516.7	5,335.0	181.74	30.355		
8,464.5	6,936.3	6,913.3	6,913.3	46.6	138.2	97.27	259.6	6,799.1	5,452.3	5,268.9	183.43	29.724		
8,500.0	6,936.0	6,913.0	6,913.0	47.6	138.2	97.22	259.6	6,799.1	5,416.9	5,232.6	184.36	29.383		
8,563.0	6,935.5	6,912.5	6,912.5	49.2	138.2	97.13	259.6	6,799.1	5,354.1	5,168.1	186.02	28.782		
8,600.0	6,935.2	6,912.2	6,912.2	50.2	138.2	97.09	259.6	6,799.1	5,317.2	5,130.2	187.00	28.434		
8,661.4	6,934.7	6,911.7	6,911.7	51.8	138.2	97.00	259.6	6,799.1	5,255.9	5,067.3	188.63	27.863		
8,700.0	6,934.4	6,911.4	6,911.4	52.8	138.2	96.95	259.6	6,799.1	5,217.4	5,027.7	189.66	27.509		
8,759.8	6,933.9	6,910.9	6,910.9	54.4	138.1	96.87	259.6	6,799.1	5,157.7	4,966.4	191.26	26.967		
8,800.0	6,933.5	6,910.5	6,910.5	55.5	138.1	96.82	259.6	6,799.1	5,117.6	4,925.3	192.34	26.607		
8,858.2	6,933.0	6,910.0	6,910.0	57.1	138.1	96.74	259.6	6,799.1	5,059.5	4,865.6	193.91	26.093		
8,900.0	6,932.7	6,909.7	6,909.7	58.2	138.1	96.69	259.6	6,799.1	5,017.9	4,822.9	195.03	25.729		
8,956.7	6,932.2	6,909.2	6,909.2	59.7	138.1	96.61	259.6	6,799.1	4,961.4	4,764.8	196.56	25.241		
9,000.0	6,931.8	6,908.8	6,908.8	60.9	138.1	96.55	259.6	6,799.1	4,918.1	4,720.4	197.73	24.873		
9,055.1	6,931.4	6,908.4	6,908.4	62.4	138.1	96.48	259.6	6,799.1	4,863.2	4,664.0	199.23	24.410		
9,100.0	6,931.0	6,908.0	6,908.0	63.6	138.1	96.42	259.6	6,799.1	4,818.4	4,618.0	200.45	24.038		
9,153.5	6,930.6	6,907.6	6,907.6	65.0	138.1	96.35	259.6	6,799.1	4,765.0	4,563.1	201.90	23.600		
9,200.0	6,930.2	6,907.2	6,907.2	66.3	138.1	96.29	259.6	6,799.1	4,718.7	4,515.5	203.17	23.225		
9,251.9	6,929.7	6,906.7	6,906.7	67.7	138.1	96.22	259.6	6,799.1	4,666.9	4,462.3	204.59	22.811		
9,300.0	6,929.3	6,906.3	6,906.3	69.0	138.1	96.15	259.6	6,799.1	4,619.0	4,413.1	205.90	22.433		
9,350.4	6,928.9	6,905.9	6,905.9	70.4	138.0	96.09	259.6	6,799.1	4,568.8	4,361.5	207.28	22.041		
9,400.0	6,928.5	6,905.5	6,905.5	71.7	138.0	96.02	259.6	6,799.1	4,519.3	4,310.7	208.64	21.661		
9,448.8	6,928.1	6,905.1	6,905.1	73.0	138.0	95.96	259.6	6,799.1	4,470.7	4,260.7	209.98	21.291		
9,500.0	6,927.7	6,904.7	6,904.7	74.4	138.0	95.89	259.6	6,799.1	4,419.6	4,208.2	211.39	20.908		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOSKI 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,904.3	6,904.3	75.7	138.0	95.83	259.6	6,799.1	4,372.6	4,159.9	212.69	20.559	
9,600.0	6,926.8	6,903.8	6,903.8	77.2	138.0	95.75	259.6	6,799.1	4,320.0	4,105.8	214.14	20.174	
9,645.6	6,926.4	6,903.4	6,903.4	78.4	138.0	95.69	259.6	6,799.1	4,274.5	4,059.1	215.40	19.845	
9,700.0	6,926.0	6,903.0	6,903.0	79.9	138.0	95.62	259.6	6,799.1	4,220.3	4,003.4	216.90	19.458	
9,744.1	6,925.6	6,902.6	6,902.6	81.1	138.0	95.56	259.6	6,799.1	4,176.4	3,958.3	218.11	19.148	
9,800.0	6,925.2	6,902.2	6,902.2	82.6	138.0	95.49	259.6	6,799.1	4,120.7	3,901.0	219.66	18.760	
9,842.5	6,924.8	6,901.8	6,901.8	83.8	138.0	95.43	259.6	6,799.1	4,078.4	3,857.5	220.83	18.468	
9,900.0	6,924.3	6,901.3	6,901.3	85.4	138.0	95.35	259.6	6,799.1	4,021.1	3,798.7	222.42	18.078	
9,940.9	6,924.0	6,901.0	6,901.0	86.5	137.9	95.30	259.6	6,799.1	3,980.3	3,756.8	223.56	17.804	
10,000.0	6,923.5	6,900.5	6,900.5	88.1	137.9	95.22	259.6	6,799.1	3,921.5	3,696.3	225.19	17.414	
10,039.3	6,923.2	6,900.2	6,900.2	89.2	137.9	95.17	259.6	6,799.1	3,882.3	3,656.0	226.29	17.157	
10,100.0	6,922.6	6,899.6	6,899.6	90.9	137.9	95.09	259.6	6,799.1	3,821.9	3,594.0	227.97	16.765	
10,137.8	6,922.3	6,899.3	6,899.3	91.9	137.9	95.04	259.6	6,799.1	3,784.3	3,555.3	229.02	16.524	
10,200.0	6,921.8	6,898.8	6,898.8	93.7	137.9	94.95	259.6	6,799.1	3,722.4	3,491.6	230.74	16.132	
10,236.2	6,921.5	6,898.5	6,898.5	94.7	137.9	94.91	259.6	6,799.1	3,686.3	3,454.6	231.75	15.907	
10,300.0	6,921.0	6,898.0	6,898.0	96.4	137.9	94.82	259.6	6,799.1	3,622.9	3,389.3	233.52	15.514	
10,334.6	6,920.7	6,897.7	6,897.7	97.4	137.9	94.77	259.6	6,799.1	3,588.4	3,353.9	234.48	15.303	
10,400.0	6,920.1	6,897.1	6,897.1	99.2	137.9	94.69	259.6	6,799.1	3,523.4	3,287.1	236.30	14.910	
10,433.0	6,919.9	6,896.9	6,896.9	100.1	137.9	94.64	259.6	6,799.1	3,490.5	3,253.3	237.22	14.714	
10,500.0	6,919.3	6,896.3	6,896.3	101.9	137.9	94.55	259.6	6,799.1	3,423.9	3,184.8	239.09	14.321	
10,531.5	6,919.0	6,896.0	6,896.0	102.8	137.8	94.51	259.6	6,799.1	3,392.6	3,152.6	239.96	14.138	
10,600.0	6,918.5	6,895.5	6,895.5	104.7	137.8	94.42	259.6	6,799.1	3,324.5	3,082.6	241.87	13.745	
10,629.9	6,918.2	6,895.2	6,895.2	105.5	137.8	94.38	259.6	6,799.1	3,294.7	3,052.0	242.70	13.575	
10,700.0	6,917.6	6,894.6	6,894.6	107.5	137.8	94.29	259.6	6,799.1	3,225.1	2,980.4	244.66	13.182	
10,728.3	6,917.4	6,894.4	6,894.4	108.3	137.8	94.25	259.6	6,799.1	3,196.9	2,951.5	245.45	13.025	
10,800.0	6,916.8	6,893.8	6,893.8	110.3	137.8	94.15	259.6	6,799.1	3,125.7	2,878.3	247.45	12.632	
10,826.7	6,916.6	6,893.6	6,893.6	111.0	137.8	94.12	259.6	6,799.1	3,099.1	2,850.9	248.19	12.487	
10,900.0	6,916.0	6,893.0	6,893.0	113.0	137.8	94.02	259.6	6,799.1	3,026.4	2,776.1	250.23	12.094	
10,925.2	6,915.8	6,892.8	6,892.8	113.7	137.8	93.99	259.6	6,799.1	3,001.4	2,750.4	250.94	11.961	
11,000.0	6,915.1	6,892.1	6,892.1	115.8	137.8	93.89	259.6	6,799.1	2,927.1	2,674.1	253.03	11.568	
11,023.6	6,914.9	6,891.9	6,891.9	116.5	137.8	93.85	259.6	6,799.1	2,903.7	2,650.0	253.68	11.446	
11,100.0	6,914.3	6,891.3	6,891.3	118.6	137.8	93.75	259.6	6,799.1	2,827.9	2,572.1	255.82	11.054	
11,122.0	6,914.1	6,891.1	6,891.1	119.2	137.8	93.72	259.6	6,799.1	2,806.0	2,549.6	256.43	10.943	
11,200.0	6,913.5	6,890.5	6,890.5	121.4	137.7	93.62	259.6	6,799.1	2,728.7	2,470.1	258.61	10.551	
11,220.4	6,913.3	6,890.3	6,890.3	121.9	137.7	93.59	259.6	6,799.1	2,708.4	2,449.3	259.18	10.450	
11,300.0	6,912.6	6,889.6	6,889.6	124.1	137.7	93.48	259.6	6,799.1	2,629.6	2,368.2	261.40	10.060	
11,318.9	6,912.5	6,889.5	6,889.5	124.7	137.7	93.46	259.6	6,799.1	2,610.9	2,349.0	261.93	9.968	
11,400.0	6,911.8	6,888.8	6,888.8	126.9	137.7	93.35	259.6	6,799.1	2,530.6	2,266.4	264.20	9.578	
11,417.3	6,911.6	6,888.6	6,888.6	127.4	137.7	93.33	259.6	6,799.1	2,513.5	2,248.8	264.68	9.496	
11,500.0	6,911.0	6,888.0	6,888.0	129.7	137.7	93.22	259.6	6,799.1	2,431.6	2,164.6	266.99	9.108	
11,515.7	6,910.8	6,887.8	6,887.8	130.2	137.7	93.20	259.6	6,799.1	2,416.1	2,148.6	267.43	9.034	
11,600.0	6,910.1	6,887.1	6,887.1	132.5	137.7	93.08	259.6	6,799.1	2,332.8	2,063.0	269.79	8.647	
11,614.1	6,910.0	6,887.0	6,887.0	132.9	137.7	93.06	259.6	6,799.1	2,318.8	2,048.6	270.18	8.582	
11,700.0	6,909.3	6,886.3	6,886.3	135.3	137.7	92.95	259.6	6,799.1	2,234.0	1,961.4	272.58	8.196	
11,712.6	6,909.2	6,886.2	6,886.2	135.6	137.7	92.93	259.6	6,799.1	2,221.6	1,948.7	272.93	8.140	
11,800.0	6,908.5	6,885.5	6,885.5	138.1	137.6	92.82	259.6	6,799.1	2,135.3	1,860.0	275.38	7.754	
11,811.0	6,908.4	6,885.4	6,885.4	138.4	137.6	92.80	259.6	6,799.1	2,124.5	1,848.8	275.68	7.706	
11,900.0	6,907.6	6,884.6	6,884.6	140.9	137.6	92.68	259.6	6,799.1	2,036.8	1,758.7	278.17	7.322	
11,909.4	6,907.5	6,884.5	6,884.5	141.1	137.6	92.67	259.6	6,799.1	2,027.5	1,749.1	278.43	7.282	
12,000.0	6,906.8	6,883.8	6,883.8	143.6	137.6	92.55	259.6	6,799.1	1,938.5	1,657.5	280.97	6.899	
12,007.8	6,906.7	6,883.7	6,883.7	143.9	137.6	92.54	259.6	6,799.1	1,930.7	1,649.6	281.18	6.866	
12,100.0	6,905.9	6,882.9	6,882.9	146.4	137.6	92.41	259.6	6,799.1	1,840.3	1,556.5	283.76	6.485	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOSKI 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,106.3	6,905.9	6,882.9	6,882.9	146.6	137.6	92.41	259.6	6,799.1	1,834.1	1,550.2	283.94	6.460		
12,200.0	6,905.1	6,882.1	6,882.1	149.2	137.6	92.28	259.6	6,799.1	1,742.3	1,455.7	286.55	6.080		
12,204.7	6,905.1	6,882.1	6,882.1	149.4	137.6	92.27	259.6	6,799.1	1,737.7	1,451.0	286.69	6.061		
12,300.0	6,904.3	6,881.3	6,881.3	152.0	137.6	92.15	259.6	6,799.1	1,644.5	1,355.2	289.35	5.684		
12,303.1	6,904.3	6,881.3	6,881.3	152.1	137.6	92.14	259.6	6,799.1	1,641.5	1,352.1	289.44	5.671		
12,400.0	6,903.4	6,880.4	6,880.4	154.8	137.5	92.01	259.6	6,799.1	1,547.1	1,254.9	292.14	5.296		
12,401.5	6,903.4	6,880.4	6,880.4	154.8	137.5	92.01	259.6	6,799.1	1,545.6	1,253.4	292.19	5.290		
12,500.0	6,902.6	6,879.6	6,879.6	157.6	137.5	91.88	259.6	6,799.1	1,450.0	1,155.0	294.94	4.916		
12,598.4	6,901.8	6,878.8	6,878.8	160.3	137.5	91.75	259.6	6,799.1	1,354.8	1,057.1	297.68	4.551		
12,600.0	6,901.8	6,878.8	6,878.8	160.4	137.5	91.75	259.6	6,799.1	1,353.3	1,055.6	297.73	4.545		
12,696.8	6,901.0	6,878.0	6,878.0	163.1	137.5	91.62	259.6	6,799.1	1,260.2	959.7	300.43	4.194		
12,700.0	6,900.9	6,877.9	6,877.9	163.2	137.5	91.61	259.6	6,799.1	1,257.1	956.6	300.52	4.183		
12,795.2	6,900.1	6,877.1	6,877.1	165.8	137.5	91.48	259.6	6,799.1	1,166.1	862.9	303.18	3.846		
12,800.0	6,900.1	6,877.1	6,877.1	166.0	137.5	91.48	259.6	6,799.1	1,161.6	858.3	303.31	3.830		
12,893.7	6,899.3	6,876.3	6,876.3	168.6	137.5	91.35	259.6	6,799.1	1,072.8	766.9	305.93	3.507		
12,900.0	6,899.3	6,876.3	6,876.3	168.8	137.5	91.34	259.6	6,799.1	1,066.9	760.8	306.10	3.485		
12,992.1	6,898.5	6,875.5	6,875.5	171.3	137.4	91.22	259.6	6,799.1	980.6	671.9	308.67	3.177		
13,000.0	6,898.4	6,875.4	6,875.4	171.6	137.4	91.21	259.6	6,799.1	973.2	664.3	308.89	3.151		
13,090.5	6,897.7	6,874.7	6,874.7	174.1	137.4	91.09	259.6	6,799.1	889.6	578.2	311.42	2.857		
13,100.0	6,897.6	6,874.6	6,874.6	174.4	137.4	91.08	259.6	6,799.1	881.0	569.3	311.68	2.827		
13,188.9	6,896.9	6,873.9	6,873.9	176.8	137.4	90.96	259.6	6,799.1	800.5	486.3	314.16	2.548		
13,200.0	6,896.8	6,873.8	6,873.8	177.2	137.4	90.94	259.6	6,799.1	790.6	476.1	314.47	2.514		
13,287.4	6,896.0	6,873.0	6,873.0	179.6	137.4	90.83	259.6	6,799.1	713.8	396.9	316.90	2.252		
13,300.0	6,895.9	6,872.9	6,872.9	180.0	137.4	90.81	259.6	6,799.1	702.9	385.6	317.26	2.215		
13,385.8	6,895.2	6,872.2	6,872.2	182.4	137.4	90.69	259.6	6,799.1	630.5	310.8	319.65	1.972		
13,400.0	6,895.1	6,872.1	6,872.1	182.7	137.4	90.68	259.6	6,799.1	618.8	298.8	320.04	1.934		
13,484.2	6,894.4	6,871.4	6,871.4	185.1	137.4	90.56	259.6	6,799.1	552.2	229.8	322.39	1.713		
13,500.0	6,894.3	6,871.3	6,871.3	185.5	137.4	90.54	259.6	6,799.1	540.3	217.4	322.83	1.674		
13,582.6	6,893.6	6,870.6	6,870.6	187.9	137.3	90.43	259.6	6,799.1	481.4	156.3	325.13	1.481 Level 3		
13,600.0	6,893.4	6,870.4	6,870.4	188.3	137.3	90.41	259.6	6,799.1	469.9	144.3	325.61	1.443 Level 3		
13,681.1	6,892.8	6,869.8	6,869.8	190.6	137.3	90.30	259.6	6,799.1	421.8	93.9	327.86	1.286 Level 3		
13,700.0	6,892.6	6,869.6	6,869.6	191.1	137.3	90.27	259.6	6,799.1	412.0	83.6	328.39	1.255 Level 3		
13,779.5	6,891.9	6,868.9	6,868.9	193.4	137.3	90.17	259.6	6,799.1	378.7	48.1	330.60	1.146 Level 2		
13,800.0	6,891.8	6,868.8	6,868.8	193.9	137.3	90.14	259.6	6,799.1	372.4	41.3	331.17	1.125 Level 2		
13,877.9	6,891.1	6,868.1	6,868.1	196.1	137.3	90.04	259.6	6,799.1	358.3	24.9	333.34	1.075 Level 2		
13,900.0	6,890.9	6,867.9	6,867.9	196.7	137.3	90.01	259.6	6,799.1	357.3	23.3	333.95	1.070 Level 2		
13,905.3	6,890.9	6,867.9	6,867.9	196.9	137.3	90.00	259.6	6,799.1	357.2	23.1	334.10	1.069 Level 2, CC, ES, SF		
13,976.3	6,890.3	6,867.3	6,867.3	198.9	137.3	89.91	259.6	6,799.1	364.2	28.2	336.07	1.084 Level 2		
14,000.0	6,890.1	6,867.1	6,867.1	199.5	137.3	89.87	259.6	6,799.1	369.6	32.8	336.73	1.098 Level 2		
14,074.8	6,889.5	6,866.5	6,866.5	201.6	137.3	89.77	259.6	6,799.1	395.4	56.6	338.81	1.167 Level 2		
14,100.0	6,889.3	6,866.3	6,866.3	202.3	137.3	89.74	259.6	6,799.1	406.8	67.3	339.51	1.198 Level 2		
14,173.2	6,888.7	6,865.7	6,865.7	204.4	137.2	89.64	259.6	6,799.1	446.5	105.0	341.54	1.307 Level 3		
14,200.0	6,888.4	6,865.4	6,865.4	205.1	137.2	89.61	259.6	6,799.1	463.1	120.8	342.28	1.353 Level 3		
14,271.6	6,887.8	6,864.8	6,864.8	207.1	137.2	89.51	259.6	6,799.1	511.6	167.4	344.27	1.486 Level 3		
14,300.0	6,887.6	6,864.6	6,864.6	207.9	137.2	89.47	259.6	6,799.1	532.3	187.3	345.05	1.543		
14,370.0	6,887.0	6,864.0	6,864.0	209.9	137.2	89.38	259.6	6,799.1	586.1	239.2	347.00	1.689		
14,400.0	6,886.8	6,863.8	6,863.8	210.7	137.2	89.34	259.6	6,799.1	610.2	262.3	347.82	1.754		
14,468.5	6,886.2	6,863.2	6,863.2	212.6	137.2	89.25	259.6	6,799.1	666.9	317.2	349.72	1.907		
14,500.0	6,885.9	6,862.9	6,862.9	213.5	137.2	89.21	259.6	6,799.1	693.7	343.1	350.59	1.979		
14,566.9	6,885.4	6,862.4	6,862.4	215.4	137.2	89.12	259.6	6,799.1	751.8	399.4	352.45	2.133		
14,600.0	6,885.1	6,862.1	6,862.1	216.3	137.2	89.07	259.6	6,799.1	781.1	427.8	353.36	2.211		
14,613.0	6,885.0	6,862.0	6,862.0	216.7	137.2	89.06	259.6	6,799.1	792.7	439.0	353.72	2.241		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLEKOWSKI 1 - 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 +N/-S (usft)	+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	100.92	-1,066.8	5,531.5	5,633.5				
98.4	98.4	77.4	77.4	0.1	0.4	100.92	-1,066.8	5,531.5	5,633.5	5,633.0	0.51	N/A	
100.0	100.0	79.0	79.0	0.1	0.4	100.92	-1,066.8	5,531.5	5,633.5	5,632.9	0.52	N/A	
196.8	196.8	175.8	175.8	0.3	2.4	100.92	-1,066.8	5,531.5	5,633.5	5,630.7	2.72	2,073.142	
200.0	200.0	179.0	179.0	0.3	2.5	100.92	-1,066.8	5,531.5	5,633.5	5,630.7	2.80	2,010.528	
295.3	295.3	274.3	274.3	0.5	4.6	100.92	-1,066.8	5,531.5	5,633.5	5,628.4	5.08	1,109.420	
300.0	300.0	279.0	279.0	0.5	4.7	100.92	-1,066.8	5,531.5	5,633.5	5,628.3	5.19	1,086.129	
393.7	393.7	372.7	372.7	0.7	6.6	100.92	-1,066.8	5,531.5	5,633.5	5,626.1	7.32	769.868	
400.0	400.0	379.0	379.0	0.8	6.7	100.92	-1,066.8	5,531.5	5,633.5	5,626.0	7.46	755.142	
492.1	492.1	471.1	471.1	1.0	8.6	100.92	-1,066.8	5,531.5	5,633.5	5,623.9	9.54	590.656	
500.0	500.0	479.0	479.0	1.0	8.7	100.92	-1,066.8	5,531.5	5,633.5	5,623.7	9.71	579.873	
590.5	590.5	569.5	569.5	1.2	10.6	100.92	-1,066.8	5,531.5	5,633.5	5,621.7	11.75	479.437	
600.0	600.0	579.0	579.0	1.2	10.8	100.92	-1,066.8	5,531.5	5,633.5	5,621.5	11.96	470.930	
689.0	689.0	668.0	668.0	1.4	12.5	100.92	-1,066.8	5,531.5	5,633.5	5,619.5	13.96	403.578	
700.0	700.0	679.0	679.0	1.4	12.8	100.92	-1,066.8	5,531.5	5,633.5	5,619.3	14.21	396.553	
787.4	787.4	766.4	766.4	1.6	14.5	100.92	-1,066.8	5,531.5	5,633.5	5,617.3	16.17	348.494	
800.0	800.0	779.0	779.0	1.7	14.8	100.92	-1,066.8	5,531.5	5,633.5	5,617.0	16.45	342.511	
885.8	885.8	864.8	864.8	1.9	16.5	100.92	-1,066.8	5,531.5	5,633.5	5,615.1	18.37	306.664	
900.0	900.0	879.0	879.0	1.9	16.8	100.92	-1,066.8	5,531.5	5,633.5	5,614.8	18.69	301.454	
984.2	984.2	963.2	963.2	2.1	18.5	100.92	-1,066.8	5,531.5	5,633.5	5,612.9	20.57	273.813	
1,000.0	1,000.0	979.0	979.0	2.1	18.8	100.92	-1,066.8	5,531.5	5,633.5	5,612.5	20.93	269.199	
1,082.7	1,082.7	1,061.7	1,061.7	2.3	20.5	100.92	-1,066.8	5,531.5	5,633.5	5,610.7	22.78	247.327	
1,100.0	1,100.0	1,079.0	1,079.0	2.3	20.8	100.92	-1,066.8	5,531.5	5,633.5	5,610.3	23.17	243.186	
1,150.0	1,150.0	1,129.0	1,129.0	2.4	21.8	100.92	-1,066.8	5,531.5	5,633.5	5,609.2	24.28	231.980	
1,181.1	1,181.1	1,160.1	1,160.1	2.5	22.5	133.60	-1,066.8	5,531.5	5,633.6	5,608.6	24.98	225.535	
1,200.0	1,200.0	1,179.0	1,179.0	2.6	22.8	133.60	-1,066.8	5,531.5	5,633.8	5,608.4	25.40	221.801	
1,279.5	1,279.5	1,258.5	1,258.5	2.7	24.4	133.60	-1,066.8	5,531.5	5,635.5	5,608.3	27.16	207.463	
1,300.0	1,299.9	1,278.9	1,278.9	2.8	24.9	133.59	-1,066.8	5,531.5	5,636.2	5,608.6	27.62	204.093	
1,377.9	1,377.7	1,356.7	1,356.7	3.0	26.4	133.58	-1,066.8	5,531.5	5,639.7	5,610.4	29.33	192.295	
1,400.0	1,399.7	1,378.7	1,378.7	3.0	26.9	133.58	-1,066.8	5,531.5	5,641.0	5,611.2	29.81	189.232	
1,476.4	1,475.7	1,454.7	1,454.7	3.2	28.4	133.55	-1,066.8	5,531.5	5,646.3	5,614.8	31.47	179.412	
1,500.0	1,499.1	1,478.1	1,478.1	3.2	28.9	133.55	-1,066.8	5,531.5	5,648.2	5,616.2	31.98	176.613	
1,574.8	1,573.2	1,552.2	1,552.2	3.4	30.4	133.52	-1,066.8	5,531.5	5,655.2	5,621.6	33.59	168.357	
1,600.0	1,598.2	1,577.2	1,577.2	3.5	30.9	133.51	-1,066.8	5,531.5	5,657.8	5,623.7	34.13	165.785	
1,673.2	1,670.3	1,649.3	1,649.3	3.7	32.3	133.47	-1,066.8	5,531.5	5,666.4	5,630.7	35.69	158.780	
1,700.0	1,696.6	1,675.6	1,675.6	3.8	32.8	133.46	-1,066.8	5,531.5	5,669.9	5,633.6	36.25	156.405	
1,749.9	1,745.5	1,724.5	1,724.5	3.9	33.8	133.43	-1,066.8	5,531.5	5,676.8	5,639.5	37.30	152.186	
1,771.6	1,766.8	1,745.8	1,745.8	4.0	34.3	133.46	-1,066.8	5,531.5	5,679.9	5,642.2	37.79	150.315	
1,800.0	1,794.5	1,773.5	1,773.5	4.1	34.8	133.50	-1,066.8	5,531.5	5,684.0	5,645.6	38.42	147.954	
1,870.1	1,863.1	1,842.1	1,842.1	4.3	36.2	133.61	-1,066.8	5,531.5	5,694.2	5,654.2	39.98	142.408	
1,900.0	1,892.3	1,871.3	1,871.3	4.4	36.8	133.65	-1,066.8	5,531.5	5,698.5	5,657.9	40.65	140.174	
1,968.5	1,959.4	1,938.4	1,938.4	4.7	38.1	133.76	-1,066.8	5,531.5	5,708.5	5,666.3	42.19	135.294	
2,000.0	1,990.2	1,969.2	1,969.2	4.8	38.7	133.80	-1,066.8	5,531.5	5,713.1	5,670.2	42.90	133.172	
2,066.9	2,055.6	2,034.6	2,034.6	5.1	40.1	133.90	-1,066.8	5,531.5	5,722.8	5,678.4	44.41	128.868	
2,100.0	2,088.0	2,067.0	2,067.0	5.2	40.7	133.95	-1,066.8	5,531.5	5,727.6	5,682.5	45.16	126.843	
2,165.3	2,151.9	2,130.9	2,130.9	5.4	42.0	134.05	-1,066.8	5,531.5	5,737.2	5,690.6	46.63	123.026	
2,200.0	2,185.8	2,164.8	2,164.8	5.6	42.7	134.10	-1,066.8	5,531.5	5,742.3	5,694.8	47.42	121.099	
2,263.8	2,248.2	2,227.2	2,227.2	5.8	43.9	134.19	-1,066.8	5,531.5	5,751.6	5,702.7	48.86	117.705	
2,300.0	2,283.6	2,262.6	2,262.6	6.0	44.6	134.25	-1,066.8	5,531.5	5,756.9	5,707.2	49.69	115.866	
2,362.2	2,344.5	2,323.5	2,323.5	6.2	45.9	134.34	-1,066.8	5,531.5	5,766.0	5,714.9	51.10	112.839	
2,400.0	2,381.4	2,360.4	2,360.4	6.4	46.6	134.39	-1,066.8	5,531.5	5,771.6	5,719.6	51.96	111.081	
2,460.6	2,440.7	2,419.7	2,419.7	6.6	47.8	134.48	-1,066.8	5,531.5	5,780.5	5,727.2	53.34	108.374	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,458.2	2,458.2	6.8	48.6	134.54	-1,066.8	5,531.5	5,786.3	5,732.1	54.23	106.691	
2,559.0	2,537.0	2,516.0	2,516.0	7.0	49.7	134.62	-1,066.8	5,531.5	5,795.0	5,739.4	55.58	104.264	
2,600.0	2,577.1	2,556.1	2,556.1	7.2	50.5	134.68	-1,066.8	5,531.5	5,801.1	5,744.6	56.51	102.650	
2,657.5	2,633.3	2,612.3	2,612.3	7.4	51.7	134.77	-1,066.8	5,531.5	5,809.6	5,751.8	57.82	100.469	
2,700.0	2,674.9	2,653.9	2,653.9	7.6	52.5	134.83	-1,066.8	5,531.5	5,815.9	5,757.1	58.79	98.919	
2,755.9	2,729.6	2,708.6	2,708.6	7.9	53.6	134.91	-1,066.8	5,531.5	5,824.2	5,764.1	60.07	96.956	
2,800.0	2,772.7	2,751.7	2,751.7	8.0	54.5	134.97	-1,066.8	5,531.5	5,830.7	5,769.6	61.08	95.465	
2,854.3	2,825.8	2,804.8	2,804.8	8.3	55.6	135.05	-1,066.8	5,531.5	5,838.8	5,776.5	62.32	93.693	
2,900.0	2,870.5	2,849.5	2,849.5	8.5	56.5	135.11	-1,066.8	5,531.5	5,845.6	5,782.2	63.36	92.258	
2,952.7	2,922.1	2,901.1	2,901.1	8.7	57.5	135.19	-1,066.8	5,531.5	5,853.4	5,788.9	64.57	90.657	
3,000.0	2,968.3	2,947.3	2,947.3	8.9	58.4	135.25	-1,066.8	5,531.5	5,860.5	5,794.8	65.65	89.274	
3,051.2	3,018.4	2,997.4	2,997.4	9.1	59.4	135.33	-1,066.8	5,531.5	5,868.1	5,801.3	66.82	87.825	
3,100.0	3,066.1	3,045.1	3,045.1	9.3	60.4	135.40	-1,066.8	5,531.5	5,875.4	5,807.5	67.93	86.489	
3,149.6	3,114.7	3,093.7	3,093.7	9.5	61.4	135.47	-1,066.8	5,531.5	5,882.8	5,813.8	69.07	85.176	
3,200.0	3,164.0	3,143.0	3,143.0	9.8	62.4	135.54	-1,066.8	5,531.5	5,890.4	5,820.2	70.22	83.886	
3,248.0	3,210.9	3,189.9	3,189.9	10.0	63.3	135.60	-1,066.8	5,531.5	5,897.6	5,826.3	71.32	82.695	
3,300.0	3,261.8	3,240.8	3,240.8	10.2	64.3	135.68	-1,066.8	5,531.5	5,905.4	5,832.9	72.51	81.447	
3,346.4	3,307.2	3,286.2	3,286.2	10.4	65.2	135.74	-1,066.8	5,531.5	5,912.4	5,838.8	73.57	80.366	
3,400.0	3,359.6	3,338.6	3,338.6	10.6	66.3	135.82	-1,066.8	5,531.5	5,920.5	5,845.7	74.79	79.158	
3,444.9	3,403.5	3,382.5	3,382.5	10.8	67.2	135.88	-1,066.8	5,531.5	5,927.2	5,851.4	75.82	78.175	
3,500.0	3,457.4	3,436.4	3,436.4	11.1	68.3	135.95	-1,066.8	5,531.5	5,935.5	5,858.5	77.08	77.005	
3,543.3	3,499.8	3,478.8	3,478.8	11.3	69.1	136.01	-1,066.8	5,531.5	5,942.1	5,864.0	78.07	76.112	
3,600.0	3,555.2	3,534.2	3,534.2	11.5	70.2	136.09	-1,066.8	5,531.5	5,950.7	5,871.3	79.37	74.976	
3,641.7	3,596.0	3,575.0	3,575.0	11.7	71.0	136.15	-1,066.8	5,531.5	5,957.0	5,876.7	80.32	74.164	
3,700.0	3,653.0	3,632.0	3,632.0	11.9	72.2	136.23	-1,066.8	5,531.5	5,965.8	5,884.2	81.65	73.062	
3,740.1	3,692.3	3,671.3	3,671.3	12.1	73.0	136.28	-1,066.8	5,531.5	5,971.9	5,889.3	82.57	72.323	
3,800.0	3,750.8	3,729.8	3,729.8	12.4	74.2	136.36	-1,066.8	5,531.5	5,981.0	5,897.1	83.94	71.252	
3,838.6	3,788.6	3,767.6	3,767.6	12.6	74.9	136.42	-1,066.8	5,531.5	5,986.9	5,902.0	84.82	70.580	
3,900.0	3,848.7	3,827.7	3,827.7	12.8	76.1	136.50	-1,066.8	5,531.5	5,996.2	5,910.0	86.23	69.539	
3,937.0	3,884.9	3,863.9	3,863.9	13.0	76.9	136.55	-1,066.8	5,531.5	6,001.9	5,914.8	87.07	68.928	
4,000.0	3,946.5	3,925.5	3,925.5	13.3	78.1	136.64	-1,066.8	5,531.5	6,011.5	5,922.9	88.51	67.915	
4,035.4	3,981.1	3,960.1	3,960.1	13.4	78.8	136.68	-1,066.8	5,531.5	6,016.9	5,927.5	89.32	67.360	
4,100.0	4,044.3	4,023.3	4,023.3	13.7	80.1	136.77	-1,066.8	5,531.5	6,026.7	5,935.9	90.80	66.374	
4,133.8	4,077.4	4,056.4	4,056.4	13.9	80.7	136.82	-1,066.8	5,531.5	6,031.9	5,940.4	91.57	65.869	
4,200.0	4,142.1	4,121.1	4,121.1	14.2	82.0	136.90	-1,066.8	5,531.5	6,042.1	5,949.0	93.09	64.909	
4,232.3	4,173.7	4,152.7	4,152.7	14.3	82.7	136.95	-1,066.8	5,531.5	6,047.0	5,953.2	93.82	64.451	
4,300.0	4,239.9	4,218.9	4,218.9	14.6	84.0	137.04	-1,066.8	5,531.5	6,057.4	5,962.0	95.37	63.514	
4,330.7	4,270.0	4,249.0	4,249.0	14.7	84.6	137.08	-1,066.8	5,531.5	6,062.1	5,966.1	96.07	63.100	
4,400.0	4,337.7	4,316.7	4,316.7	15.0	86.0	137.17	-1,066.8	5,531.5	6,072.8	5,975.1	97.66	62.186	
4,429.1	4,366.2	4,345.2	4,345.2	15.2	86.5	137.21	-1,066.8	5,531.5	6,077.3	5,979.0	98.32	61.811	
4,500.0	4,435.6	4,414.6	4,414.6	15.5	87.9	137.30	-1,066.8	5,531.5	6,088.2	5,988.3	99.94	60.919	
4,527.5	4,462.5	4,441.5	4,441.5	15.6	88.5	137.34	-1,066.8	5,531.5	6,092.5	5,991.9	100.57	60.580	
4,600.0	4,533.4	4,512.4	4,512.4	15.9	89.9	137.43	-1,066.8	5,531.5	6,103.7	6,001.4	102.22	59.709	
4,626.0	4,558.8	4,537.8	4,537.8	16.0	90.4	137.47	-1,066.8	5,531.5	6,107.7	6,004.9	102.82	59.404	
4,673.6	4,605.3	4,584.3	4,584.3	16.3	91.3	137.53	-1,066.8	5,531.5	6,115.0	6,011.1	103.90	58.854	
4,700.0	4,631.2	4,610.2	4,610.2	16.4	91.9	137.62	-1,066.8	5,531.5	6,119.0	6,014.5	104.59	58.508	
4,724.4	4,655.1	4,634.1	4,634.1	16.4	92.3	137.69	-1,066.8	5,531.5	6,122.6	6,017.4	105.20	58.198	
4,800.0	4,729.5	4,708.5	4,708.5	16.7	93.8	137.91	-1,066.8	5,531.5	6,132.6	6,025.5	107.11	57.257	
4,822.8	4,752.1	4,731.1	4,731.1	16.7	94.3	137.97	-1,066.8	5,531.5	6,135.3	6,027.7	107.67	56.982	
4,900.0	4,828.4	4,807.4	4,807.4	17.0	95.8	138.15	-1,066.8	5,531.5	6,143.6	6,034.0	109.57	56.070	
4,921.2	4,849.5	4,828.5	4,828.5	17.0	96.3	138.20	-1,066.8	5,531.5	6,145.6	6,035.5	110.08	55.826	
5,000.0	4,927.8	4,906.8	4,906.8	17.2	97.8	138.33	-1,066.8	5,531.5	6,152.0	6,040.1	111.97	54.944	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,019.7	4,947.4	4,926.4	4,926.4	17.2	98.2	138.36	-1,066.8	5,531.5	6,153.4	6,041.0	112.43	54.731		
5,100.0	5,027.5	5,006.5	5,006.5	17.4	99.8	138.46	-1,066.8	5,531.5	6,157.9	6,043.6	114.29	53.879		
5,118.1	5,045.6	5,024.6	5,024.6	17.4	100.2	138.48	-1,066.8	5,531.5	6,158.6	6,043.9	114.70	53.694		
5,200.0	5,127.4	5,106.4	5,106.4	17.6	101.8	138.53	-1,066.8	5,531.5	6,161.1	6,044.6	116.53	52.873		
5,216.5	5,143.9	5,122.9	5,122.9	17.6	102.2	138.54	-1,066.8	5,531.5	6,161.4	6,044.5	116.89	52.712		
5,273.4	5,200.8	5,179.8	5,179.8	17.7	103.3	105.86	-1,066.8	5,531.5	6,161.8	6,042.8	118.97	51.795		
5,300.0	5,227.4	5,206.4	5,206.4	17.7	103.9	105.86	-1,066.8	5,531.5	6,161.8	6,042.3	119.54	51.547		
5,314.9	5,242.3	5,221.3	5,221.3	17.7	104.2	105.86	-1,066.8	5,531.5	6,161.8	6,041.9	119.86	51.407		
5,400.0	5,327.4	5,306.4	5,306.4	17.8	105.9	105.86	-1,066.8	5,531.5	6,161.8	6,040.1	121.71	50.627		
5,413.4	5,340.8	5,319.8	5,319.8	17.9	106.1	105.86	-1,066.8	5,531.5	6,161.8	6,039.8	122.00	50.506		
5,500.0	5,427.4	5,406.4	5,406.4	18.0	107.9	105.86	-1,066.8	5,531.5	6,161.8	6,037.9	123.88	49.738		
5,511.8	5,439.2	5,418.2	5,418.2	18.0	108.1	105.86	-1,066.8	5,531.5	6,161.8	6,037.7	124.14	49.636		
5,600.0	5,527.4	5,506.4	5,506.4	18.1	109.9	105.86	-1,066.8	5,531.5	6,161.8	6,035.7	126.06	48.880		
5,610.2	5,537.6	5,516.6	5,516.6	18.1	110.1	105.86	-1,066.8	5,531.5	6,161.8	6,035.5	126.28	48.794		
5,700.0	5,627.4	5,606.4	5,606.4	18.3	111.9	105.86	-1,066.8	5,531.5	6,161.8	6,033.6	128.24	48.051		
5,708.6	5,636.0	5,615.0	5,615.0	18.3	112.1	105.86	-1,066.8	5,531.5	6,161.8	6,033.4	128.42	47.980		
5,800.0	5,727.4	5,706.4	5,706.4	18.4	113.9	105.86	-1,066.8	5,531.5	6,161.8	6,031.4	130.41	47.248		
5,807.1	5,734.5	5,713.5	5,713.5	18.4	114.0	105.86	-1,066.8	5,531.5	6,161.8	6,031.2	130.57	47.192		
5,900.0	5,827.4	5,806.4	5,806.4	18.6	115.9	105.86	-1,066.8	5,531.5	6,161.8	6,029.2	132.59	46.472		
5,905.5	5,832.9	5,811.9	5,811.9	18.6	116.0	105.86	-1,066.8	5,531.5	6,161.8	6,029.1	132.71	46.430		
6,000.0	5,927.4	5,906.4	5,906.4	18.7	117.9	105.86	-1,066.8	5,531.5	6,161.8	6,027.0	134.77	45.720		
6,003.9	5,931.3	5,910.3	5,910.3	18.7	118.0	105.86	-1,066.8	5,531.5	6,161.8	6,026.9	134.86	45.691		
6,100.0	6,027.4	6,006.4	6,006.4	18.9	119.9	105.86	-1,066.8	5,531.5	6,161.8	6,024.8	136.95	44.991		
6,102.3	6,029.7	6,008.7	6,008.7	18.9	120.0	105.86	-1,066.8	5,531.5	6,161.8	6,024.8	137.01	44.975		
6,200.0	6,127.4	6,106.4	6,106.4	19.0	122.0	105.86	-1,066.8	5,531.5	6,161.8	6,022.7	139.14	44.286		
6,200.8	6,128.2	6,107.2	6,107.2	19.0	122.0	105.86	-1,066.8	5,531.5	6,161.8	6,022.6	139.15	44.280		
6,299.2	6,226.6	6,205.6	6,205.6	19.2	123.9	105.86	-1,066.8	5,531.5	6,161.8	6,020.5	141.30	43.606		
6,301.4	6,228.8	6,207.8	6,207.8	19.2	124.0	105.86	-1,066.8	5,531.5	6,161.8	6,020.4	141.35	43.592		
6,350.0	6,277.4	6,256.4	6,256.4	19.3	125.0	15.90	-1,066.8	5,531.5	6,160.2	6,019.0	141.23	43.619		
6,397.6	6,324.7	6,303.7	6,303.7	19.3	125.9	16.01	-1,066.8	5,531.5	6,155.6	6,014.3	141.31	43.561		
6,400.0	6,327.1	6,306.1	6,306.1	19.3	126.0	16.02	-1,066.8	5,531.5	6,155.3	6,014.0	141.30	43.562		
6,450.0	6,376.3	6,355.3	6,355.3	19.3	127.0	16.23	-1,066.8	5,531.5	6,147.0	6,006.3	140.72	43.684		
6,496.0	6,421.1	6,400.1	6,400.1	19.3	127.9	16.50	-1,066.8	5,531.5	6,136.5	5,996.9	139.60	43.957		
6,500.0	6,424.9	6,403.9	6,403.9	19.3	127.9	16.53	-1,066.8	5,531.5	6,135.5	5,996.0	139.48	43.988		
6,550.0	6,472.4	6,451.4	6,451.4	19.3	128.9	16.92	-1,066.8	5,531.5	6,120.7	5,983.1	137.60	44.480		
6,594.5	6,513.8	6,492.8	6,492.8	19.3	129.7	17.37	-1,066.8	5,531.5	6,104.9	5,969.5	135.42	45.083		
6,600.0	6,518.8	6,497.8	6,497.8	19.3	129.8	17.43	-1,066.8	5,531.5	6,102.8	5,967.7	135.11	45.169		
6,650.0	6,563.8	6,542.8	6,542.8	19.3	130.7	18.05	-1,066.8	5,531.5	6,081.8	5,949.8	132.04	46.060		
6,692.9	6,601.1	6,580.1	6,580.1	19.2	131.5	18.70	-1,066.8	5,531.5	6,061.5	5,932.5	129.00	46.990		
6,700.0	6,607.1	6,586.1	6,586.1	19.2	131.6	18.82	-1,066.8	5,531.5	6,057.9	5,929.4	128.46	47.159		
6,750.0	6,648.6	6,627.6	6,627.6	19.2	132.4	19.74	-1,066.8	5,531.5	6,031.1	5,906.7	124.45	48.463		
6,791.3	6,681.4	6,660.4	6,660.4	19.1	133.1	20.64	-1,066.8	5,531.5	6,007.0	5,886.1	120.90	49.686		
6,800.0	6,688.1	6,667.1	6,667.1	19.1	133.2	20.85	-1,066.8	5,531.5	6,001.7	5,881.5	120.14	49.957		
6,850.0	6,725.3	6,704.3	6,704.3	19.1	134.0	22.19	-1,066.8	5,531.5	5,969.6	5,853.9	115.70	51.595		
6,889.7	6,753.2	6,732.2	6,732.2	19.0	134.5	23.45	-1,066.8	5,531.5	5,942.4	5,830.2	112.26	52.936		
6,900.0	6,760.1	6,739.1	6,739.1	19.0	134.7	23.80	-1,066.8	5,531.5	5,935.2	5,823.8	111.40	53.279		
6,950.0	6,792.3	6,771.3	6,771.3	19.0	135.3	25.76	-1,066.8	5,531.5	5,898.5	5,791.0	107.57	54.834		
6,988.2	6,815.1	6,794.1	6,794.1	18.9	135.8	27.53	-1,066.8	5,531.5	5,869.2	5,763.9	105.26	55.758		
7,000.0	6,821.8	6,800.8	6,800.8	18.9	135.9	28.14	-1,066.8	5,531.5	5,859.9	5,755.2	104.69	55.972		
7,050.0	6,848.3	6,827.3	6,827.3	18.9	136.4	31.07	-1,066.8	5,531.5	5,819.3	5,715.9	103.37	56.298		
7,086.6	6,865.9	6,844.9	6,844.9	18.9	136.8	33.64	-1,066.8	5,531.5	5,788.6	5,684.8	103.79	55.772		
7,100.0	6,871.9	6,850.9	6,850.9	18.9	136.9	34.69	-1,066.8	5,531.5	5,777.1	5,672.8	104.30	55.392		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FOLKOWSKI 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,871.3	6,871.3	18.8	137.3	39.22	-1,066.8	5,531.5	5,733.5	5,625.3	108.17	53.006	
7,185.0	6,904.7	6,883.7	6,883.7	18.8	137.6	43.06	-1,066.8	5,531.5	5,702.2	5,589.3	112.89	50.510	
7,200.0	6,909.5	6,888.5	6,888.5	18.9	137.7	44.90	-1,066.8	5,531.5	5,688.6	5,573.2	115.42	49.288	
7,250.0	6,923.4	6,902.4	6,902.4	19.3	138.0	52.05	-1,066.8	5,531.5	5,642.8	5,516.9	125.90	44.819	
7,283.4	6,930.8	6,909.8	6,909.8	19.8	138.1	57.77	-1,066.8	5,531.5	5,611.6	5,477.4	134.21	41.814	
7,300.0	6,933.9	6,912.9	6,912.9	20.0	138.2	60.90	-1,066.8	5,531.5	5,596.1	5,457.7	138.47	40.414	
7,350.0	6,940.9	6,919.9	6,919.9	20.8	138.3	71.51	-1,066.8	5,531.5	5,549.0	5,398.4	150.60	36.846	
7,381.9	6,943.6	6,922.6	6,922.6	21.4	138.4	79.02	-1,066.8	5,531.5	5,518.7	5,362.2	156.50	35.264	
7,400.0	6,944.5	6,923.5	6,923.5	21.7	138.4	83.46	-1,066.8	5,531.5	5,501.5	5,342.7	158.79	34.647	
7,432.4	6,945.0	6,924.0	6,924.0	22.3	138.4	91.48	-1,066.8	5,531.5	5,470.6	5,310.0	160.59	34.065	
7,480.3	6,944.6	6,923.6	6,923.6	23.2	138.4	91.47	-1,066.8	5,531.5	5,425.1	5,263.6	161.48	33.596	
7,500.0	6,944.4	6,923.4	6,923.4	23.6	138.4	91.46	-1,066.8	5,531.5	5,406.4	5,244.5	161.84	33.405	
7,578.7	6,943.7	6,922.7	6,922.7	25.2	138.4	91.44	-1,066.8	5,531.5	5,331.6	5,168.2	163.41	32.626	
7,600.0	6,943.6	6,922.6	6,922.6	25.6	138.4	91.44	-1,066.8	5,531.5	5,311.4	5,147.6	163.84	32.418	
7,677.1	6,942.9	6,921.9	6,921.9	27.3	138.4	91.41	-1,066.8	5,531.5	5,238.3	5,072.8	165.49	31.654	
7,700.0	6,942.7	6,921.7	6,921.7	27.8	138.3	91.41	-1,066.8	5,531.5	5,216.7	5,050.7	165.98	31.431	
7,775.6	6,942.1	6,921.1	6,921.1	29.5	138.3	91.39	-1,066.8	5,531.5	5,145.2	4,977.6	167.67	30.687	
7,800.0	6,941.9	6,920.9	6,920.9	30.1	138.3	91.38	-1,066.8	5,531.5	5,122.1	4,953.9	168.22	30.450	
7,874.0	6,941.3	6,920.3	6,920.3	31.8	138.3	91.36	-1,066.8	5,531.5	5,052.3	4,882.4	169.94	29.730	
7,900.0	6,941.1	6,920.1	6,920.1	32.4	138.3	91.35	-1,066.8	5,531.5	5,027.8	4,857.3	170.54	29.481	
7,972.4	6,940.4	6,919.4	6,919.4	34.2	138.3	91.33	-1,066.8	5,531.5	4,959.6	4,787.4	172.28	28.788	
8,000.0	6,940.2	6,919.2	6,919.2	34.9	138.3	91.32	-1,066.8	5,531.5	4,933.7	4,760.8	172.94	28.528	
8,070.8	6,939.6	6,918.6	6,918.6	36.6	138.3	91.30	-1,066.8	5,531.5	4,867.2	4,692.5	174.68	27.863	
8,100.0	6,939.4	6,918.4	6,918.4	37.3	138.3	91.29	-1,066.8	5,531.5	4,839.8	4,664.4	175.39	27.594	
8,169.3	6,938.8	6,917.8	6,917.8	39.1	138.3	91.27	-1,066.8	5,531.5	4,774.9	4,597.8	177.13	26.958	
8,200.0	6,938.5	6,917.5	6,917.5	39.8	138.3	91.26	-1,066.8	5,531.5	4,746.2	4,568.3	177.89	26.680	
8,267.7	6,938.0	6,917.0	6,917.0	41.6	138.3	91.24	-1,066.8	5,531.5	4,683.0	4,503.4	179.61	26.073	
8,300.0	6,937.7	6,916.7	6,916.7	42.4	138.2	91.24	-1,066.8	5,531.5	4,652.8	4,472.4	180.43	25.788	
8,366.1	6,937.2	6,916.2	6,916.2	44.1	138.2	91.22	-1,066.8	5,531.5	4,591.3	4,409.1	182.13	25.209	
8,400.0	6,936.9	6,915.9	6,915.9	45.0	138.2	91.21	-1,066.8	5,531.5	4,559.8	4,376.8	183.00	24.917	
8,464.5	6,936.3	6,915.3	6,915.3	46.6	138.2	91.19	-1,066.8	5,531.5	4,499.8	4,315.2	184.67	24.367	
8,500.0	6,936.0	6,915.0	6,915.0	47.6	138.2	91.18	-1,066.8	5,531.5	4,467.0	4,281.4	185.59	24.069	
8,563.0	6,935.5	6,914.5	6,914.5	49.2	138.2	91.16	-1,066.8	5,531.5	4,408.7	4,221.5	187.23	23.547	
8,600.0	6,935.2	6,914.2	6,914.2	50.2	138.2	91.15	-1,066.8	5,531.5	4,374.5	4,186.3	188.20	23.244	
8,661.4	6,934.7	6,913.7	6,913.7	51.8	138.2	91.13	-1,066.8	5,531.5	4,317.9	4,128.1	189.82	22.748	
8,700.0	6,934.4	6,913.4	6,913.4	52.8	138.2	91.12	-1,066.8	5,531.5	4,282.4	4,091.6	190.83	22.440	
8,759.8	6,933.9	6,912.9	6,912.9	54.4	138.2	91.10	-1,066.8	5,531.5	4,227.5	4,035.1	192.42	21.970	
8,800.0	6,933.5	6,912.5	6,912.5	55.5	138.2	91.09	-1,066.8	5,531.5	4,190.7	3,997.2	193.48	21.659	
8,858.2	6,933.0	6,912.0	6,912.0	57.1	138.2	91.08	-1,066.8	5,531.5	4,137.4	3,942.3	195.03	21.214	
8,900.0	6,932.7	6,911.7	6,911.7	58.2	138.1	91.06	-1,066.8	5,531.5	4,099.3	3,903.1	196.15	20.899	
8,956.7	6,932.2	6,911.2	6,911.2	59.7	138.1	91.05	-1,066.8	5,531.5	4,047.7	3,850.0	197.66	20.478	
9,000.0	6,931.8	6,910.8	6,910.8	60.9	138.1	91.04	-1,066.8	5,531.5	4,008.3	3,809.5	198.82	20.161	
9,055.1	6,931.4	6,910.4	6,910.4	62.4	138.1	91.02	-1,066.8	5,531.5	3,958.4	3,758.1	200.30	19.762	
9,100.0	6,931.0	6,910.0	6,910.0	63.6	138.1	91.01	-1,066.8	5,531.5	3,917.8	3,716.3	201.50	19.443	
9,153.5	6,930.6	6,909.6	6,909.6	65.0	138.1	90.99	-1,066.8	5,531.5	3,869.5	3,666.6	202.95	19.067	
9,200.0	6,930.2	6,909.2	6,909.2	66.3	138.1	90.98	-1,066.8	5,531.5	3,827.7	3,623.5	204.20	18.745	
9,251.9	6,929.7	6,908.7	6,908.7	67.7	138.1	90.96	-1,066.8	5,531.5	3,781.2	3,575.6	205.60	18.391	
9,300.0	6,929.3	6,908.3	6,908.3	69.0	138.1	90.95	-1,066.8	5,531.5	3,738.2	3,531.3	206.90	18.068	
9,350.4	6,928.9	6,907.9	6,907.9	70.4	138.1	90.94	-1,066.8	5,531.5	3,693.3	3,485.0	208.26	17.734	
9,400.0	6,928.5	6,907.5	6,907.5	71.7	138.1	90.92	-1,066.8	5,531.5	3,649.2	3,439.6	209.61	17.410	
9,448.8	6,928.1	6,907.1	6,907.1	73.0	138.1	90.91	-1,066.8	5,531.5	3,606.0	3,395.0	210.93	17.095	
9,500.0	6,927.7	6,906.7	6,906.7	74.4	138.0	90.89	-1,066.8	5,531.5	3,560.8	3,348.5	212.32	16.770	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,547.2	6,927.3	6,906.3	6,906.3	75.7	138.0	90.88	-1,066.8	5,531.5	3,519.2	3,305.6	213.61	16.475		
9,600.0	6,926.8	6,905.8	6,905.8	77.2	138.0	90.86	-1,066.8	5,531.5	3,473.0	3,257.9	215.04	16.150		
9,645.6	6,926.4	6,905.4	6,905.4	78.4	138.0	90.85	-1,066.8	5,531.5	3,433.1	3,216.8	216.29	15.873		
9,700.0	6,926.0	6,905.0	6,905.0	79.9	138.0	90.84	-1,066.8	5,531.5	3,385.9	3,168.1	217.77	15.548		
9,744.1	6,925.6	6,904.6	6,904.6	81.1	138.0	90.82	-1,066.8	5,531.5	3,347.7	3,128.7	218.97	15.288		
9,800.0	6,925.2	6,904.2	6,904.2	82.6	138.0	90.81	-1,066.8	5,531.5	3,299.5	3,079.0	220.50	14.964		
9,842.5	6,924.8	6,903.8	6,903.8	83.8	138.0	90.80	-1,066.8	5,531.5	3,263.0	3,041.3	221.66	14.721		
9,900.0	6,924.3	6,903.3	6,903.3	85.4	138.0	90.78	-1,066.8	5,531.5	3,213.9	2,990.7	223.24	14.397		
9,940.9	6,924.0	6,903.0	6,903.0	86.5	138.0	90.77	-1,066.8	5,531.5	3,179.1	2,954.8	224.36	14.170		
10,000.0	6,923.5	6,902.5	6,902.5	88.1	138.0	90.75	-1,066.8	5,531.5	3,129.2	2,903.2	225.97	13.847		
10,039.3	6,923.2	6,902.2	6,902.2	89.2	138.0	90.74	-1,066.8	5,531.5	3,096.1	2,869.0	227.05	13.636		
10,100.0	6,922.6	6,901.6	6,901.6	90.9	137.9	90.72	-1,066.8	5,531.5	3,045.3	2,816.6	228.72	13.315		
10,137.8	6,922.3	6,901.3	6,901.3	91.9	137.9	90.71	-1,066.8	5,531.5	3,013.9	2,784.2	229.75	13.118		
10,200.0	6,921.8	6,900.8	6,900.8	93.7	137.9	90.69	-1,066.8	5,531.5	2,962.5	2,731.1	231.46	12.799		
10,236.2	6,921.5	6,900.5	6,900.5	94.7	137.9	90.68	-1,066.8	5,531.5	2,932.8	2,700.4	232.45	12.617		
10,300.0	6,921.0	6,900.0	6,900.0	96.4	137.9	90.66	-1,066.8	5,531.5	2,880.8	2,646.6	234.21	12.300		
10,334.6	6,920.7	6,899.7	6,899.7	97.4	137.9	90.65	-1,066.8	5,531.5	2,852.8	2,617.6	235.16	12.131		
10,400.0	6,920.1	6,899.1	6,899.1	99.2	137.9	90.64	-1,066.8	5,531.5	2,800.3	2,563.3	236.96	11.818		
10,433.0	6,919.9	6,898.9	6,898.9	100.1	137.9	90.63	-1,066.8	5,531.5	2,773.9	2,536.1	237.87	11.662		
10,500.0	6,919.3	6,898.3	6,898.3	101.9	137.9	90.61	-1,066.8	5,531.5	2,721.0	2,481.3	239.71	11.351		
10,531.5	6,919.0	6,898.0	6,898.0	102.8	137.9	90.60	-1,066.8	5,531.5	2,696.4	2,455.8	240.58	11.208		
10,600.0	6,918.5	6,897.5	6,897.5	104.7	137.9	90.58	-1,066.8	5,531.5	2,643.2	2,400.7	242.46	10.901		
10,629.9	6,918.2	6,897.2	6,897.2	105.5	137.9	90.57	-1,066.8	5,531.5	2,620.2	2,376.9	243.29	10.770		
10,700.0	6,917.6	6,896.6	6,896.6	107.5	137.8	90.55	-1,066.8	5,531.5	2,566.9	2,321.7	245.22	10.468		
10,728.3	6,917.4	6,896.4	6,896.4	108.3	137.8	90.54	-1,066.8	5,531.5	2,545.6	2,299.6	246.00	10.348		
10,800.0	6,916.8	6,895.8	6,895.8	110.3	137.8	90.52	-1,066.8	5,531.5	2,492.3	2,244.3	247.98	10.050		
10,826.7	6,916.6	6,895.6	6,895.6	111.0	137.8	90.51	-1,066.8	5,531.5	2,472.6	2,223.9	248.72	9.942		
10,900.0	6,916.0	6,895.0	6,895.0	113.0	137.8	90.49	-1,066.8	5,531.5	2,419.5	2,168.8	250.74	9.649		
10,925.2	6,915.8	6,894.8	6,894.8	113.7	137.8	90.49	-1,066.8	5,531.5	2,401.5	2,150.1	251.43	9.551		
11,000.0	6,915.1	6,894.1	6,894.1	115.8	137.8	90.47	-1,066.8	5,531.5	2,348.7	2,095.2	253.50	9.265		
11,023.6	6,914.9	6,893.9	6,893.9	116.5	137.8	90.46	-1,066.8	5,531.5	2,332.3	2,078.2	254.15	9.177		
11,100.0	6,914.3	6,893.3	6,893.3	118.6	137.8	90.44	-1,066.8	5,531.5	2,280.1	2,023.9	256.26	8.898		
11,122.0	6,914.1	6,893.1	6,893.1	119.2	137.8	90.43	-1,066.8	5,531.5	2,265.3	2,008.5	256.87	8.819		
11,200.0	6,913.5	6,892.5	6,892.5	121.4	137.8	90.41	-1,066.8	5,531.5	2,213.9	1,954.9	259.03	8.547		
11,220.4	6,913.3	6,892.3	6,892.3	121.9	137.8	90.40	-1,066.8	5,531.5	2,200.7	1,941.1	259.59	8.477		
11,300.0	6,912.6	6,891.6	6,891.6	124.1	137.7	90.38	-1,066.8	5,531.5	2,150.3	1,888.5	261.79	8.214		
11,318.9	6,912.5	6,891.5	6,891.5	124.7	137.7	90.37	-1,066.8	5,531.5	2,138.6	1,876.3	262.32	8.153		
11,400.0	6,911.8	6,890.8	6,890.8	126.9	137.7	90.35	-1,066.8	5,531.5	2,089.6	1,825.0	264.56	7.898		
11,417.3	6,911.6	6,890.6	6,890.6	127.4	137.7	90.35	-1,066.8	5,531.5	2,079.4	1,814.4	265.04	7.846		
11,500.0	6,911.0	6,890.0	6,890.0	129.7	137.7	90.32	-1,066.8	5,531.5	2,032.0	1,764.6	267.33	7.601		
11,515.7	6,910.8	6,889.8	6,889.8	130.2	137.7	90.32	-1,066.8	5,531.5	2,023.2	1,755.4	267.76	7.556		
11,600.0	6,910.1	6,889.1	6,889.1	132.5	137.7	90.29	-1,066.8	5,531.5	1,977.7	1,707.6	270.10	7.322		
11,614.1	6,910.0	6,889.0	6,889.0	132.9	137.7	90.29	-1,066.8	5,531.5	1,970.3	1,699.8	270.49	7.284		
11,700.0	6,909.3	6,888.3	6,888.3	135.3	137.7	90.27	-1,066.8	5,531.5	1,927.1	1,654.3	272.87	7.063		
11,712.6	6,909.2	6,888.2	6,888.2	135.6	137.7	90.26	-1,066.8	5,531.5	1,921.0	1,647.8	273.22	7.031		
11,800.0	6,908.5	6,887.5	6,887.5	138.1	137.7	90.24	-1,066.8	5,531.5	1,880.5	1,604.9	275.64	6.822		
11,811.0	6,908.4	6,887.4	6,887.4	138.4	137.7	90.23	-1,066.8	5,531.5	1,875.6	1,599.7	275.94	6.797		
11,900.0	6,907.6	6,886.6	6,886.6	140.9	137.6	90.21	-1,066.8	5,531.5	1,838.1	1,559.7	278.41	6.602		
11,909.4	6,907.5	6,886.5	6,886.5	141.1	137.6	90.21	-1,066.8	5,531.5	1,834.4	1,555.7	278.67	6.583		
12,000.0	6,906.8	6,885.8	6,885.8	143.6	137.6	90.18	-1,066.8	5,531.5	1,800.3	1,519.2	281.18	6.403		
12,007.8	6,906.7	6,885.7	6,885.7	143.9	137.6	90.18	-1,066.8	5,531.5	1,797.6	1,516.2	281.40	6.388		
12,100.0	6,905.9	6,884.9	6,884.9	146.4	137.6	90.15	-1,066.8	5,531.5	1,767.4	1,483.4	283.96	6.224		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,884.9	6,884.9	146.6	137.6	90.15	-1,066.8	5,531.5	1,765.5	1,481.4	284.13	6.214	
12,200.0	6,905.1	6,884.1	6,884.1	149.2	137.6	90.12	-1,066.8	5,531.5	1,739.6	1,452.9	286.73	6.067	
12,204.7	6,905.1	6,884.1	6,884.1	149.4	137.6	90.12	-1,066.8	5,531.5	1,738.4	1,451.6	286.86	6.060	
12,300.0	6,904.3	6,883.3	6,883.3	152.0	137.6	90.10	-1,066.8	5,531.5	1,717.2	1,427.7	289.50	5.931	
12,303.1	6,904.3	6,883.3	6,883.3	152.1	137.6	90.09	-1,066.8	5,531.5	1,716.5	1,427.0	289.59	5.927	
12,400.0	6,903.4	6,882.4	6,882.4	154.8	137.6	90.07	-1,066.8	5,531.5	1,700.3	1,408.0	292.28	5.817	
12,401.5	6,903.4	6,882.4	6,882.4	154.8	137.6	90.07	-1,066.8	5,531.5	1,700.1	1,407.8	292.32	5.816	
12,500.0	6,902.6	6,881.6	6,881.6	157.6	137.5	90.04	-1,066.8	5,531.5	1,689.2	1,394.2	295.05	5.725	
12,598.4	6,901.8	6,880.8	6,880.8	160.3	137.5	90.01	-1,066.8	5,531.5	1,684.1	1,386.3	297.79	5.655	
12,600.0	6,901.8	6,880.8	6,880.8	160.4	137.5	90.01	-1,066.8	5,531.5	1,684.0	1,386.2	297.83	5.654	
12,637.7	6,901.5	6,880.5	6,880.5	161.4	137.5	90.00	-1,066.8	5,531.5	1,683.6	1,384.7	298.88	5.633	CC
12,696.8	6,901.0	6,880.0	6,880.0	163.1	137.5	89.98	-1,066.8	5,531.5	1,684.7	1,384.1	300.52	5.606	ES
12,700.0	6,900.9	6,879.9	6,879.9	163.2	137.5	89.98	-1,066.8	5,531.5	1,684.8	1,384.2	300.61	5.605	
12,795.2	6,900.1	6,879.1	6,879.1	165.8	137.5	89.96	-1,066.8	5,531.5	1,691.0	1,387.7	303.25	5.576	
12,800.0	6,900.1	6,879.1	6,879.1	166.0	137.5	89.95	-1,066.8	5,531.5	1,691.4	1,388.0	303.38	5.575	
12,893.7	6,899.3	6,878.3	6,878.3	168.6	137.5	89.93	-1,066.8	5,531.5	1,703.0	1,397.0	305.99	5.566	
12,900.0	6,899.3	6,878.3	6,878.3	168.8	137.5	89.93	-1,066.8	5,531.5	1,703.9	1,397.8	306.16	5.565	SF
12,992.1	6,898.5	6,877.5	6,877.5	171.3	137.5	89.90	-1,066.8	5,531.5	1,720.5	1,411.8	308.72	5.573	
13,000.0	6,898.4	6,877.4	6,877.4	171.6	137.5	89.90	-1,066.8	5,531.5	1,722.2	1,413.2	308.94	5.574	
13,090.5	6,897.7	6,876.7	6,876.7	174.1	137.4	89.87	-1,066.8	5,531.5	1,743.5	1,432.0	311.45	5.598	
13,100.0	6,897.6	6,876.6	6,876.6	174.4	137.4	89.87	-1,066.8	5,531.5	1,745.9	1,434.2	311.72	5.601	
13,188.9	6,896.9	6,875.9	6,875.9	176.8	137.4	89.84	-1,066.8	5,531.5	1,771.6	1,457.4	314.19	5.639	
13,200.0	6,896.8	6,875.8	6,875.8	177.2	137.4	89.84	-1,066.8	5,531.5	1,775.0	1,460.5	314.50	5.644	
13,287.4	6,896.0	6,875.0	6,875.0	179.6	137.4	89.82	-1,066.8	5,531.5	1,804.6	1,487.7	316.92	5.694	
13,300.0	6,895.9	6,874.9	6,874.9	180.0	137.4	89.81	-1,066.8	5,531.5	1,809.2	1,491.9	317.27	5.702	
13,385.8	6,895.2	6,874.2	6,874.2	182.4	137.4	89.79	-1,066.8	5,531.5	1,842.3	1,522.7	319.66	5.763	
13,400.0	6,895.1	6,874.1	6,874.1	182.7	137.4	89.78	-1,066.8	5,531.5	1,848.1	1,528.1	320.05	5.774	
13,484.2	6,894.4	6,873.4	6,873.4	185.1	137.4	89.76	-1,066.8	5,531.5	1,884.4	1,562.1	322.39	5.845	
13,500.0	6,894.3	6,873.3	6,873.3	185.5	137.4	89.76	-1,066.8	5,531.5	1,891.6	1,568.8	322.83	5.859	
13,582.6	6,893.6	6,872.6	6,872.6	187.9	137.4	89.73	-1,066.8	5,531.5	1,930.7	1,605.5	325.13	5.938	
13,600.0	6,893.4	6,872.4	6,872.4	188.3	137.4	89.73	-1,066.8	5,531.5	1,939.2	1,613.6	325.61	5.956	
13,681.1	6,892.8	6,871.8	6,871.8	190.6	137.3	89.70	-1,066.8	5,531.5	1,980.7	1,652.8	327.87	6.041	
13,700.0	6,892.6	6,871.6	6,871.6	191.1	137.3	89.70	-1,066.8	5,531.5	1,990.7	1,662.3	328.39	6.062	
13,779.5	6,891.9	6,870.9	6,870.9	193.4	137.3	89.68	-1,066.8	5,531.5	2,034.3	1,703.7	330.60	6.153	
13,800.0	6,891.8	6,870.8	6,870.8	193.9	137.3	89.67	-1,066.8	5,531.5	2,045.8	1,714.7	331.17	6.178	
13,877.9	6,891.1	6,870.1	6,870.1	196.1	137.3	89.65	-1,066.8	5,531.5	2,091.1	1,757.7	333.34	6.273	
13,900.0	6,890.9	6,869.9	6,869.9	196.7	137.3	89.64	-1,066.8	5,531.5	2,104.2	1,770.3	333.95	6.301	
13,976.3	6,890.3	6,869.3	6,869.3	198.9	137.3	89.62	-1,066.8	5,531.5	2,150.9	1,814.8	336.08	6.400	
14,000.0	6,890.1	6,869.1	6,869.1	199.5	137.3	89.61	-1,066.8	5,531.5	2,165.7	1,829.0	336.73	6.432	
14,074.8	6,889.5	6,868.5	6,868.5	201.6	137.3	89.59	-1,066.8	5,531.5	2,213.5	1,874.7	338.81	6.533	
14,100.0	6,889.3	6,868.3	6,868.3	202.3	137.3	89.59	-1,066.8	5,531.5	2,230.0	1,890.5	339.52	6.568	
14,173.2	6,888.7	6,867.7	6,867.7	204.4	137.3	89.56	-1,066.8	5,531.5	2,278.6	1,937.1	341.55	6.671	
14,200.0	6,888.4	6,867.4	6,867.4	205.1	137.3	89.56	-1,066.8	5,531.5	2,296.8	1,954.5	342.30	6.710	
14,271.6	6,887.8	6,866.8	6,866.8	207.1	137.2	89.54	-1,066.8	5,531.5	2,346.1	2,001.8	344.29	6.814	
14,300.0	6,887.6	6,866.6	6,866.6	207.9	137.2	89.53	-1,066.8	5,531.5	2,365.9	2,020.9	345.08	6.856	
14,370.0	6,887.0	6,866.0	6,866.0	209.9	137.2	89.51	-1,066.8	5,531.5	2,415.7	2,068.6	347.03	6.961	
14,400.0	6,886.8	6,865.8	6,865.8	210.7	137.2	89.50	-1,066.8	5,531.5	2,437.2	2,089.4	347.86	7.006	
14,468.5	6,886.2	6,865.2	6,865.2	212.6	137.2	89.48	-1,066.8	5,531.5	2,487.2	2,137.4	349.76	7.111	
14,500.0	6,885.9	6,864.9	6,864.9	213.5	137.2	89.47	-1,066.8	5,531.5	2,510.5	2,159.8	350.64	7.160	
14,566.9	6,885.4	6,864.4	6,864.4	215.4	137.2	89.45	-1,066.8	5,531.5	2,560.5	2,208.0	352.50	7.264	
14,600.0	6,885.1	6,864.1	6,864.1	216.3	137.2	89.44	-1,066.8	5,531.5	2,585.5	2,232.1	353.42	7.316	
14,613.0	6,885.0	6,864.0	6,864.0	216.7	137.2	89.44	-1,066.8	5,531.5	2,595.4	2,241.6	353.78	7.336	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	97.42	-877.1	6,738.1	6,795.0				
98.4	98.4	75.4	75.4	0.1	0.4	97.42	-877.1	6,738.1	6,794.9	6,794.4	0.52	N/A	
100.0	100.0	77.0	77.0	0.1	0.4	97.42	-877.1	6,738.1	6,794.9	6,794.4	0.53	N/A	
196.8	196.8	173.8	173.8	0.3	2.4	97.42	-877.1	6,738.1	6,794.9	6,792.3	2.69	2,527.294	
200.0	200.0	177.0	177.0	0.3	2.5	97.42	-877.1	6,738.1	6,794.9	6,792.2	2.77	2,450.403	
295.3	295.3	272.3	272.3	0.5	4.5	97.42	-877.1	6,738.1	6,794.9	6,789.9	5.05	1,344.226	
300.0	300.0	277.0	277.0	0.5	4.6	97.42	-877.1	6,738.1	6,794.9	6,789.8	5.16	1,315.875	
393.7	393.7	370.7	370.7	0.7	6.5	97.42	-877.1	6,738.1	6,794.9	6,787.6	7.30	931.372	
400.0	400.0	377.0	377.0	0.8	6.7	97.42	-877.1	6,738.1	6,794.9	6,787.5	7.44	913.502	
492.1	492.1	469.1	469.1	1.0	8.5	97.42	-877.1	6,738.1	6,794.9	6,785.4	9.52	714.032	
500.0	500.0	477.0	477.0	1.0	8.7	97.42	-877.1	6,738.1	6,794.9	6,785.2	9.69	700.967	
590.5	590.5	567.5	567.5	1.2	10.5	97.42	-877.1	6,738.1	6,794.9	6,783.2	11.73	579.324	
600.0	600.0	577.0	577.0	1.2	10.7	97.42	-877.1	6,738.1	6,794.9	6,783.0	11.94	569.025	
689.0	689.0	666.0	666.0	1.4	12.5	97.42	-877.1	6,738.1	6,794.9	6,781.0	13.94	487.515	
700.0	700.0	677.0	677.0	1.4	12.8	97.42	-877.1	6,738.1	6,794.9	6,780.8	14.19	479.016	
787.4	787.4	764.4	764.4	1.6	14.5	97.42	-877.1	6,738.1	6,794.9	6,778.8	16.14	420.885	
800.0	800.0	777.0	777.0	1.7	14.8	97.42	-877.1	6,738.1	6,794.9	6,778.5	16.43	413.650	
885.8	885.8	862.8	862.8	1.9	16.5	97.42	-877.1	6,738.1	6,794.9	6,776.6	18.35	370.308	
900.0	900.0	877.0	877.0	1.9	16.8	97.42	-877.1	6,738.1	6,794.9	6,776.3	18.67	364.010	
984.2	984.2	961.2	961.2	2.1	18.5	97.42	-877.1	6,738.1	6,794.9	6,774.4	20.55	330.598	
1,000.0	1,000.0	977.0	977.0	2.1	18.8	97.42	-877.1	6,738.1	6,794.9	6,774.0	20.91	325.022	
1,082.7	1,082.7	1,059.7	1,059.7	2.3	20.5	97.42	-877.1	6,738.1	6,794.9	6,772.2	22.76	298.589	
1,100.0	1,100.0	1,077.0	1,077.0	2.3	20.8	97.42	-877.1	6,738.1	6,794.9	6,771.8	23.14	293.586	
1,150.0	1,150.0	1,127.0	1,127.0	2.4	21.8	97.42	-877.1	6,738.1	6,794.9	6,770.7	24.26	280.046	
1,181.1	1,181.1	1,158.1	1,158.1	2.5	22.4	130.10	-877.1	6,738.1	6,795.0	6,770.1	24.96	272.256	
1,200.0	1,200.0	1,177.0	1,177.0	2.6	22.8	130.10	-877.1	6,738.1	6,795.2	6,769.8	25.38	267.742	
1,279.5	1,279.5	1,256.5	1,256.5	2.7	24.4	130.09	-877.1	6,738.1	6,796.8	6,769.7	27.14	250.391	
1,300.0	1,299.9	1,276.9	1,276.9	2.8	24.8	130.09	-877.1	6,738.1	6,797.5	6,769.9	27.60	246.308	
1,377.9	1,377.7	1,354.7	1,354.7	3.0	26.4	130.07	-877.1	6,738.1	6,800.8	6,771.5	29.31	232.001	
1,400.0	1,399.7	1,376.7	1,376.7	3.0	26.8	130.07	-877.1	6,738.1	6,802.0	6,772.2	29.80	228.282	
1,476.4	1,475.7	1,452.7	1,452.7	3.2	28.4	130.04	-877.1	6,738.1	6,806.9	6,775.5	31.46	216.344	
1,500.0	1,499.1	1,476.1	1,476.1	3.2	28.8	130.03	-877.1	6,738.1	6,808.7	6,776.7	31.98	212.936	
1,574.8	1,573.2	1,550.2	1,550.2	3.4	30.3	130.00	-877.1	6,738.1	6,815.2	6,781.6	33.59	202.869	
1,600.0	1,598.2	1,575.2	1,575.2	3.5	30.8	129.98	-877.1	6,738.1	6,817.7	6,783.6	34.14	199.728	
1,673.2	1,670.3	1,647.3	1,647.3	3.7	32.3	129.94	-877.1	6,738.1	6,825.7	6,790.0	35.71	191.157	
1,700.0	1,696.6	1,673.6	1,673.6	3.8	32.8	129.92	-877.1	6,738.1	6,829.0	6,792.7	36.28	188.245	
1,749.9	1,745.5	1,722.5	1,722.5	3.9	33.8	129.88	-877.1	6,738.1	6,835.4	6,798.1	37.34	183.065	
1,771.6	1,766.8	1,743.8	1,743.8	4.0	34.2	129.91	-877.1	6,738.1	6,838.4	6,800.5	37.83	180.785	
1,800.0	1,794.5	1,771.5	1,771.5	4.1	34.8	129.95	-877.1	6,738.1	6,842.2	6,803.7	38.46	177.908	
1,870.1	1,863.1	1,840.1	1,840.1	4.3	36.2	130.04	-877.1	6,738.1	6,851.7	6,811.6	40.03	171.150	
1,900.0	1,892.3	1,869.3	1,869.3	4.4	36.8	130.08	-877.1	6,738.1	6,855.7	6,815.0	40.70	168.427	
1,968.5	1,959.4	1,936.4	1,936.4	4.7	38.1	130.17	-877.1	6,738.1	6,865.0	6,822.8	42.25	162.480	
2,000.0	1,990.2	1,967.2	1,967.2	4.8	38.7	130.21	-877.1	6,738.1	6,869.3	6,826.3	42.96	159.893	
2,066.9	2,055.6	2,032.6	2,032.6	5.1	40.0	130.30	-877.1	6,738.1	6,878.4	6,833.9	44.48	154.647	
2,100.0	2,088.0	2,065.0	2,065.0	5.2	40.7	130.34	-877.1	6,738.1	6,882.9	6,837.7	45.23	152.180	
2,165.3	2,151.9	2,128.9	2,128.9	5.4	42.0	130.43	-877.1	6,738.1	6,891.8	6,845.1	46.72	147.529	
2,200.0	2,185.8	2,162.8	2,162.8	5.6	42.7	130.47	-877.1	6,738.1	6,896.6	6,849.1	47.50	145.181	
2,263.8	2,248.2	2,225.2	2,225.2	5.8	43.9	130.55	-877.1	6,738.1	6,905.3	6,856.3	48.96	141.046	
2,300.0	2,283.6	2,260.6	2,260.6	6.0	44.6	130.60	-877.1	6,738.1	6,910.2	6,860.5	49.78	138.805	
2,362.2	2,344.5	2,321.5	2,321.5	6.2	45.8	130.68	-877.1	6,738.1	6,918.8	6,867.6	51.21	135.118	
2,400.0	2,381.4	2,358.4	2,358.4	6.4	46.6	130.73	-877.1	6,738.1	6,924.0	6,871.9	52.07	132.976	
2,460.6	2,440.7	2,417.7	2,417.7	6.6	47.8	130.81	-877.1	6,738.1	6,932.3	6,878.8	53.46	129.679	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 24-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,456.2	2,456.2	6.8	48.6	130.86	-877.1	6,738.1	6,937.7	6,883.3	54.36	127.629	
2,559.0	2,537.0	2,514.0	2,514.0	7.0	49.7	130.93	-877.1	6,738.1	6,945.8	6,890.1	55.71	124.673	
2,600.0	2,577.1	2,554.1	2,554.1	7.2	50.5	130.99	-877.1	6,738.1	6,951.5	6,894.8	56.65	122.707	
2,657.5	2,633.3	2,610.3	2,610.3	7.4	51.7	131.06	-877.1	6,738.1	6,959.4	6,901.5	57.97	120.052	
2,700.0	2,674.9	2,651.9	2,651.9	7.6	52.5	131.11	-877.1	6,738.1	6,965.3	6,906.4	58.95	118.164	
2,755.9	2,729.6	2,706.6	2,706.6	7.9	53.6	131.18	-877.1	6,738.1	6,973.1	6,912.8	60.23	115.773	
2,800.0	2,772.7	2,749.7	2,749.7	8.0	54.5	131.24	-877.1	6,738.1	6,979.2	6,917.9	61.24	113.959	
2,854.3	2,825.8	2,802.8	2,802.8	8.3	55.5	131.31	-877.1	6,738.1	6,986.7	6,924.2	62.49	111.802	
2,900.0	2,870.5	2,847.5	2,847.5	8.5	56.4	131.37	-877.1	6,738.1	6,993.1	6,929.5	63.54	110.055	
2,952.7	2,922.1	2,899.1	2,899.1	8.7	57.5	131.43	-877.1	6,738.1	7,000.4	6,935.6	64.76	108.106	
3,000.0	2,968.3	2,945.3	2,945.3	8.9	58.4	131.49	-877.1	6,738.1	7,007.0	6,941.1	65.84	106.422	
3,051.2	3,018.4	2,995.4	2,995.4	9.1	59.4	131.56	-877.1	6,738.1	7,014.1	6,947.1	67.02	104.658	
3,100.0	3,066.1	3,043.1	3,043.1	9.3	60.4	131.62	-877.1	6,738.1	7,020.9	6,952.8	68.14	103.033	
3,149.6	3,114.7	3,091.7	3,091.7	9.5	61.3	131.68	-877.1	6,738.1	7,027.9	6,958.6	69.28	101.435	
3,200.0	3,164.0	3,141.0	3,141.0	9.8	62.3	131.74	-877.1	6,738.1	7,034.9	6,964.5	70.44	99.865	
3,248.0	3,210.9	3,187.9	3,187.9	10.0	63.3	131.80	-877.1	6,738.1	7,041.7	6,970.1	71.55	98.416	
3,300.0	3,261.8	3,238.8	3,238.8	10.2	64.3	131.87	-877.1	6,738.1	7,049.0	6,976.2	72.75	96.898	
3,346.4	3,307.2	3,284.2	3,284.2	10.4	65.2	131.93	-877.1	6,738.1	7,055.5	6,981.7	73.82	95.582	
3,400.0	3,359.6	3,336.6	3,336.6	10.6	66.3	131.99	-877.1	6,738.1	7,063.0	6,988.0	75.05	94.112	
3,444.9	3,403.5	3,380.5	3,380.5	10.8	67.1	132.05	-877.1	6,738.1	7,069.3	6,993.3	76.08	92.917	
3,500.0	3,457.4	3,434.4	3,434.4	11.1	68.2	132.12	-877.1	6,738.1	7,077.1	6,999.8	77.35	91.492	
3,543.3	3,499.8	3,476.8	3,476.8	11.3	69.1	132.17	-877.1	6,738.1	7,083.2	7,004.9	78.35	90.406	
3,600.0	3,555.2	3,532.2	3,532.2	11.5	70.2	132.24	-877.1	6,738.1	7,091.2	7,011.6	79.65	89.025	
3,641.7	3,596.0	3,573.0	3,573.0	11.7	71.0	132.29	-877.1	6,738.1	7,097.1	7,016.5	80.62	88.037	
3,700.0	3,653.0	3,630.0	3,630.0	11.9	72.2	132.36	-877.1	6,738.1	7,105.4	7,023.4	81.96	86.696	
3,740.1	3,692.3	3,669.3	3,669.3	12.1	73.0	132.41	-877.1	6,738.1	7,111.1	7,028.2	82.88	85.797	
3,800.0	3,750.8	3,727.8	3,727.8	12.4	74.1	132.48	-877.1	6,738.1	7,119.6	7,035.3	84.26	84.495	
3,838.6	3,788.6	3,765.6	3,765.6	12.6	74.9	132.53	-877.1	6,738.1	7,125.1	7,039.9	85.15	83.678	
3,900.0	3,848.7	3,825.7	3,825.7	12.8	76.1	132.61	-877.1	6,738.1	7,133.8	7,047.2	86.56	82.411	
3,937.0	3,884.9	3,861.9	3,861.9	13.0	76.8	132.65	-877.1	6,738.1	7,139.1	7,051.7	87.42	81.668	
4,000.0	3,946.5	3,923.5	3,923.5	13.3	78.1	132.73	-877.1	6,738.1	7,148.1	7,059.2	88.87	80.436	
4,035.4	3,981.1	3,958.1	3,958.1	13.4	78.8	132.77	-877.1	6,738.1	7,153.1	7,063.4	89.68	79.761	
4,100.0	4,044.3	4,021.3	4,021.3	13.7	80.0	132.85	-877.1	6,738.1	7,162.3	7,071.2	91.17	78.562	
4,133.8	4,077.4	4,054.4	4,054.4	13.9	80.7	132.89	-877.1	6,738.1	7,167.2	7,075.2	91.95	77.949	
4,200.0	4,142.1	4,119.1	4,119.1	14.2	82.0	132.97	-877.1	6,738.1	7,176.7	7,083.2	93.47	76.780	
4,232.3	4,173.7	4,150.7	4,150.7	14.3	82.6	133.01	-877.1	6,738.1	7,181.3	7,087.1	94.21	76.224	
4,300.0	4,239.9	4,216.9	4,216.9	14.6	84.0	133.09	-877.1	6,738.1	7,191.0	7,095.2	95.77	75.085	
4,330.7	4,270.0	4,247.0	4,247.0	14.7	84.6	133.12	-877.1	6,738.1	7,195.4	7,099.0	96.48	74.581	
4,400.0	4,337.7	4,314.7	4,314.7	15.0	85.9	133.21	-877.1	6,738.1	7,205.4	7,107.3	98.07	73.470	
4,429.1	4,366.2	4,343.2	4,343.2	15.2	86.5	133.24	-877.1	6,738.1	7,209.6	7,110.9	98.74	73.013	
4,500.0	4,435.6	4,412.6	4,412.6	15.5	87.9	133.33	-877.1	6,738.1	7,219.8	7,119.4	100.37	71.929	
4,527.5	4,462.5	4,439.5	4,439.5	15.6	88.4	133.36	-877.1	6,738.1	7,223.8	7,122.8	101.01	71.517	
4,600.0	4,533.4	4,510.4	4,510.4	15.9	89.9	133.44	-877.1	6,738.1	7,234.3	7,131.6	102.67	70.458	
4,626.0	4,558.8	4,535.8	4,535.8	16.0	90.4	133.47	-877.1	6,738.1	7,238.0	7,134.7	103.27	70.887	
4,673.6	4,605.3	4,582.3	4,582.3	16.3	91.3	133.53	-877.1	6,738.1	7,244.9	7,140.5	104.37	69.418	
4,700.0	4,631.2	4,608.2	4,608.2	16.4	91.8	133.62	-877.1	6,738.1	7,248.6	7,143.6	105.04	69.008	
4,724.4	4,655.1	4,632.1	4,632.1	16.4	92.3	133.69	-877.1	6,738.1	7,252.0	7,146.3	105.65	68.641	
4,800.0	4,729.5	4,706.5	4,706.5	16.7	93.8	133.90	-877.1	6,738.1	7,261.3	7,153.8	107.53	67.527	
4,822.8	4,752.1	4,729.1	4,729.1	16.7	94.3	133.96	-877.1	6,738.1	7,263.9	7,155.8	108.09	67.202	
4,900.0	4,828.4	4,805.4	4,805.4	17.0	95.8	134.13	-877.1	6,738.1	7,271.6	7,161.6	109.97	66.123	
4,921.2	4,849.5	4,826.5	4,826.5	17.0	96.2	134.18	-877.1	6,738.1	7,273.5	7,163.0	110.48	65.836	
5,000.0	4,927.8	4,904.8	4,904.8	17.2	97.8	134.31	-877.1	6,738.1	7,279.5	7,167.1	112.35	64.794	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 24-26 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,019.7	4,947.4	4,924.4	4,924.4	17.2	98.2	134.34	-877.1	6,738.1	7,280.8	7,168.0	112.81	64.543	
5,100.0	5,027.5	5,004.5	5,004.5	17.4	99.8	134.43	-877.1	6,738.1	7,285.0	7,170.3	114.65	63.538	
5,118.1	5,045.6	5,022.6	5,022.6	17.4	100.2	134.45	-877.1	6,738.1	7,285.7	7,170.6	115.06	63.320	
5,200.0	5,127.4	5,104.4	5,104.4	17.6	101.8	134.50	-877.1	6,738.1	7,288.0	7,171.1	116.88	62.352	
5,216.5	5,143.9	5,120.9	5,120.9	17.6	102.2	134.51	-877.1	6,738.1	7,288.2	7,171.0	117.24	62.163	
5,273.4	5,200.8	5,177.8	5,177.8	17.7	103.3	101.83	-877.1	6,738.1	7,288.6	7,170.0	118.58	61.465	
5,300.0	5,227.4	5,204.4	5,204.4	17.7	103.8	101.83	-877.1	6,738.1	7,288.6	7,169.5	119.16	61.169	
5,314.9	5,242.3	5,219.3	5,219.3	17.7	104.1	101.83	-877.1	6,738.1	7,288.6	7,169.2	119.48	61.003	
5,400.0	5,327.4	5,304.4	5,304.4	17.8	105.8	101.83	-877.1	6,738.1	7,288.6	7,167.3	121.33	60.072	
5,413.4	5,340.8	5,317.8	5,317.8	17.9	106.1	101.83	-877.1	6,738.1	7,288.6	7,167.0	121.62	59.929	
5,500.0	5,427.4	5,404.4	5,404.4	18.0	107.9	101.83	-877.1	6,738.1	7,288.6	7,165.1	123.51	59.013	
5,511.8	5,439.2	5,416.2	5,416.2	18.0	108.1	101.83	-877.1	6,738.1	7,288.6	7,164.9	123.77	58.891	
5,600.0	5,527.4	5,504.4	5,504.4	18.1	109.9	101.83	-877.1	6,738.1	7,288.6	7,162.9	125.69	57.990	
5,610.2	5,537.6	5,514.6	5,514.6	18.1	110.1	101.83	-877.1	6,738.1	7,288.6	7,162.7	125.91	57.888	
5,700.0	5,627.4	5,604.4	5,604.4	18.3	111.9	101.83	-877.1	6,738.1	7,288.6	7,160.8	127.87	57.002	
5,708.6	5,636.0	5,613.0	5,613.0	18.3	112.0	101.83	-877.1	6,738.1	7,288.6	7,160.6	128.06	56.918	
5,800.0	5,727.4	5,704.4	5,704.4	18.4	113.9	101.83	-877.1	6,738.1	7,288.6	7,158.6	130.05	56.046	
5,807.1	5,734.5	5,711.5	5,711.5	18.4	114.0	101.83	-877.1	6,738.1	7,288.6	7,158.4	130.20	55.979	
5,900.0	5,827.4	5,804.4	5,804.4	18.6	115.9	101.83	-877.1	6,738.1	7,288.6	7,156.4	132.23	55.120	
5,905.5	5,832.9	5,809.9	5,809.9	18.6	116.0	101.83	-877.1	6,738.1	7,288.6	7,156.3	132.35	55.070	
6,000.0	5,927.4	5,904.4	5,904.4	18.7	117.9	101.83	-877.1	6,738.1	7,288.6	7,154.2	134.42	54.225	
6,003.9	5,931.3	5,908.3	5,908.3	18.7	118.0	101.83	-877.1	6,738.1	7,288.6	7,154.1	134.50	54.190	
6,100.0	6,027.4	6,004.4	6,004.4	18.9	119.9	101.83	-877.1	6,738.1	7,288.6	7,152.0	136.60	53.357	
6,102.3	6,029.7	6,006.7	6,006.7	18.9	120.0	101.83	-877.1	6,738.1	7,288.6	7,152.0	136.65	53.337	
6,200.0	6,127.4	6,104.4	6,104.4	19.0	121.9	101.83	-877.1	6,738.1	7,288.6	7,149.8	138.79	52.517	
6,200.8	6,128.2	6,105.2	6,105.2	19.0	121.9	101.83	-877.1	6,738.1	7,288.6	7,149.8	138.80	52.510	
6,299.2	6,226.6	6,203.6	6,203.6	19.2	123.9	101.83	-877.1	6,738.1	7,288.6	7,147.7	140.96	51.708	
6,301.4	6,228.8	6,205.8	6,205.8	19.2	124.0	101.83	-877.1	6,738.1	7,288.6	7,147.6	141.01	51.690	
6,350.0	6,277.4	6,254.4	6,254.4	19.3	124.9	11.86	-877.1	6,738.1	7,287.0	7,145.5	141.54	51.485	
6,397.6	6,324.7	6,301.7	6,301.7	19.3	125.9	11.94	-877.1	6,738.1	7,282.3	7,140.7	141.59	51.432	
6,400.0	6,327.1	6,304.1	6,304.1	19.3	125.9	11.95	-877.1	6,738.1	7,282.0	7,140.4	141.58	51.434	
6,450.0	6,376.3	6,353.3	6,353.3	19.3	126.9	12.10	-877.1	6,738.1	7,273.6	7,132.7	140.94	51.607	
6,496.0	6,421.1	6,398.1	6,398.1	19.3	127.8	12.31	-877.1	6,738.1	7,262.9	7,123.2	139.75	51.971	
6,500.0	6,424.9	6,401.9	6,401.9	19.3	127.9	12.33	-877.1	6,738.1	7,261.9	7,122.2	139.62	52.012	
6,550.0	6,472.4	6,449.4	6,449.4	19.3	128.9	12.63	-877.1	6,738.1	7,246.8	7,109.2	137.62	52.658	
6,594.5	6,513.8	6,490.8	6,490.8	19.3	129.7	12.96	-877.1	6,738.1	7,230.8	7,095.5	135.28	53.449	
6,600.0	6,518.8	6,495.8	6,495.8	19.3	129.8	13.01	-877.1	6,738.1	7,228.6	7,093.6	134.96	53.562	
6,650.0	6,563.8	6,540.8	6,540.8	19.3	130.7	13.48	-877.1	6,738.1	7,207.2	7,075.6	131.66	54.742	
6,692.9	6,601.1	6,578.1	6,578.1	19.2	131.5	13.97	-877.1	6,738.1	7,186.5	7,058.2	128.35	55.992	
6,700.0	6,607.1	6,584.1	6,584.1	19.2	131.6	14.06	-877.1	6,738.1	7,182.9	7,055.1	127.76	56.221	
6,750.0	6,648.6	6,625.6	6,625.6	19.2	132.4	14.76	-877.1	6,738.1	7,155.6	7,032.3	123.33	58.021	
6,791.3	6,681.4	6,658.4	6,658.4	19.1	133.1	15.45	-877.1	6,738.1	7,131.0	7,011.7	119.32	59.762	
6,800.0	6,688.1	6,665.1	6,665.1	19.1	133.2	15.61	-877.1	6,738.1	7,125.6	7,007.1	118.45	60.158	
6,850.0	6,725.3	6,702.3	6,702.3	19.1	134.0	16.64	-877.1	6,738.1	7,093.0	6,979.7	113.25	62.631	
6,889.7	6,753.2	6,730.2	6,730.2	19.0	134.5	17.62	-877.1	6,738.1	7,065.3	6,956.3	109.01	64.812	
6,900.0	6,760.1	6,737.1	6,737.1	19.0	134.7	17.90	-877.1	6,738.1	7,057.9	6,950.0	107.92	65.401	
6,950.0	6,792.3	6,769.3	6,769.3	19.0	135.3	19.43	-877.1	6,738.1	7,020.5	6,917.8	102.72	68.344	
6,988.2	6,815.1	6,792.1	6,792.1	18.9	135.8	20.85	-877.1	6,738.1	6,990.6	6,891.5	99.10	70.543	
7,000.0	6,821.8	6,798.8	6,798.8	18.9	135.9	21.34	-877.1	6,738.1	6,981.1	6,883.0	98.07	71.184	
7,050.0	6,848.3	6,825.3	6,825.3	18.9	136.4	23.72	-877.1	6,738.1	6,939.7	6,845.2	94.54	73.401	
7,086.6	6,865.9	6,842.9	6,842.9	18.9	136.8	25.86	-877.1	6,738.1	6,908.4	6,815.2	93.15	74.164	
7,100.0	6,871.9	6,848.9	6,848.9	18.9	136.9	26.75	-877.1	6,738.1	6,896.7	6,803.7	92.97	74.181	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLEKOWSKI 24-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,869.3	6,869.3	18.8	137.3	30.69	-877.1	6,738.1	6,852.1	6,757.7	94.41	72.580	
7,185.0	6,904.7	6,881.7	6,881.7	18.8	137.6	34.17	-877.1	6,738.1	6,820.2	6,722.3	97.84	69.707	
7,200.0	6,909.5	6,886.5	6,886.5	18.9	137.7	35.89	-877.1	6,738.1	6,806.3	6,706.3	100.01	68.055	
7,250.0	6,923.4	6,900.4	6,900.4	19.3	137.9	42.90	-877.1	6,738.1	6,759.5	6,648.8	110.67	61.077	
7,283.4	6,930.8	6,907.8	6,907.8	19.8	138.1	48.95	-877.1	6,738.1	6,727.7	6,607.0	120.64	55.768	
7,300.0	6,933.9	6,910.9	6,910.9	20.0	138.1	52.44	-877.1	6,738.1	6,711.8	6,585.6	126.25	53.163	
7,350.0	6,940.9	6,917.9	6,917.9	20.8	138.3	65.16	-877.1	6,738.1	6,663.6	6,519.4	144.14	46.230	
7,381.9	6,943.6	6,920.6	6,920.6	21.4	138.3	74.95	-877.1	6,738.1	6,632.6	6,478.8	153.87	43.105	
7,400.0	6,944.5	6,921.5	6,921.5	21.7	138.4	80.96	-877.1	6,738.1	6,615.0	6,457.2	157.77	41.929	
7,432.4	6,945.0	6,922.0	6,922.0	22.3	138.4	92.06	-877.1	6,738.1	6,583.4	6,422.9	160.54	41.007	
7,480.3	6,944.6	6,921.6	6,921.6	23.2	138.4	92.04	-877.1	6,738.1	6,536.8	6,375.4	161.43	40.493	
7,500.0	6,944.4	6,921.4	6,921.4	23.6	138.4	92.04	-877.1	6,738.1	6,517.6	6,355.8	161.79	40.284	
7,578.7	6,943.7	6,920.7	6,920.7	25.2	138.3	92.01	-877.1	6,738.1	6,441.0	6,277.7	163.37	39.427	
7,600.0	6,943.6	6,920.6	6,920.6	25.6	138.3	92.01	-877.1	6,738.1	6,420.3	6,256.5	163.79	39.198	
7,677.1	6,942.9	6,919.9	6,919.9	27.3	138.3	91.98	-877.1	6,738.1	6,345.3	6,179.9	165.44	38.355	
7,700.0	6,942.7	6,919.7	6,919.7	27.8	138.3	91.97	-877.1	6,738.1	6,323.1	6,157.2	165.93	38.108	
7,775.6	6,942.1	6,919.1	6,919.1	29.5	138.3	91.95	-877.1	6,738.1	6,249.7	6,082.1	167.62	37.285	
7,800.0	6,941.9	6,918.9	6,918.9	30.1	138.3	91.94	-877.1	6,738.1	6,226.0	6,057.8	168.17	37.022	
7,874.0	6,941.3	6,918.3	6,918.3	31.8	138.3	91.92	-877.1	6,738.1	6,154.2	5,984.3	169.89	36.224	
7,900.0	6,941.1	6,918.1	6,918.1	32.4	138.3	91.91	-877.1	6,738.1	6,129.0	5,958.5	170.50	35.948	
7,972.4	6,940.4	6,917.4	6,917.4	34.2	138.3	91.89	-877.1	6,738.1	6,058.8	5,886.5	172.23	35.178	
8,000.0	6,940.2	6,917.2	6,917.2	34.9	138.3	91.88	-877.1	6,738.1	6,032.0	5,859.1	172.89	34.889	
8,070.8	6,939.6	6,916.6	6,916.6	36.6	138.3	91.85	-877.1	6,738.1	5,963.4	5,788.8	174.63	34.149	
8,100.0	6,939.4	6,916.4	6,916.4	37.3	138.3	91.84	-877.1	6,738.1	5,935.2	5,759.9	175.35	33.848	
8,169.3	6,938.8	6,915.8	6,915.8	39.1	138.2	91.82	-877.1	6,738.1	5,868.2	5,691.1	177.08	33.139	
8,200.0	6,938.5	6,915.5	6,915.5	39.8	138.2	91.81	-877.1	6,738.1	5,838.5	5,660.6	177.85	32.829	
8,267.7	6,938.0	6,915.0	6,915.0	41.6	138.2	91.79	-877.1	6,738.1	5,773.1	5,593.5	179.56	32.151	
8,300.0	6,937.7	6,914.7	6,914.7	42.4	138.2	91.78	-877.1	6,738.1	5,741.9	5,561.5	180.38	31.832	
8,366.1	6,937.2	6,914.2	6,914.2	44.1	138.2	91.76	-877.1	6,738.1	5,678.1	5,496.0	182.08	31.185	
8,400.0	6,936.9	6,913.9	6,913.9	45.0	138.2	91.75	-877.1	6,738.1	5,645.4	5,462.4	182.95	30.858	
8,464.5	6,936.3	6,913.3	6,913.3	46.6	138.2	91.73	-877.1	6,738.1	5,583.2	5,398.5	184.62	30.241	
8,500.0	6,936.0	6,913.0	6,913.0	47.6	138.2	91.72	-877.1	6,738.1	5,549.0	5,363.5	185.54	29.907	
8,563.0	6,935.5	6,912.5	6,912.5	49.2	138.2	91.69	-877.1	6,738.1	5,488.4	5,301.2	187.19	29.320	
8,600.0	6,935.2	6,912.2	6,912.2	50.2	138.2	91.68	-877.1	6,738.1	5,452.8	5,264.6	188.16	28.980	
8,661.4	6,934.7	6,911.7	6,911.7	51.8	138.2	91.66	-877.1	6,738.1	5,393.8	5,204.0	189.77	28.422	
8,700.0	6,934.4	6,911.4	6,911.4	52.8	138.2	91.65	-877.1	6,738.1	5,356.7	5,165.9	190.79	28.076	
8,759.8	6,933.9	6,910.9	6,910.9	54.4	138.1	91.63	-877.1	6,738.1	5,299.2	5,106.9	192.37	27.547	
8,800.0	6,933.5	6,910.5	6,910.5	55.5	138.1	91.62	-877.1	6,738.1	5,260.7	5,067.3	193.44	27.196	
8,858.2	6,933.0	6,910.0	6,910.0	57.1	138.1	91.60	-877.1	6,738.1	5,204.9	5,009.9	194.99	26.693	
8,900.0	6,932.7	6,909.7	6,909.7	58.2	138.1	91.59	-877.1	6,738.1	5,164.9	4,968.8	196.10	26.338	
8,956.7	6,932.2	6,909.2	6,909.2	59.7	138.1	91.57	-877.1	6,738.1	5,110.7	4,913.1	197.62	25.862	
9,000.0	6,931.8	6,908.8	6,908.8	60.9	138.1	91.55	-877.1	6,738.1	5,069.3	4,870.5	198.78	25.502	
9,055.1	6,931.4	6,908.4	6,908.4	62.4	138.1	91.54	-877.1	6,738.1	5,016.7	4,816.4	200.26	25.051	
9,100.0	6,931.0	6,908.0	6,908.0	63.6	138.1	91.52	-877.1	6,738.1	4,973.8	4,772.3	201.46	24.689	
9,153.5	6,930.6	6,907.6	6,907.6	65.0	138.1	91.50	-877.1	6,738.1	4,922.8	4,719.9	202.90	24.262	
9,200.0	6,930.2	6,907.2	6,907.2	66.3	138.1	91.49	-877.1	6,738.1	4,878.5	4,674.4	204.16	23.896	
9,251.9	6,929.7	6,906.7	6,906.7	67.7	138.1	91.47	-877.1	6,738.1	4,829.1	4,623.5	205.56	23.493	
9,300.0	6,929.3	6,906.3	6,906.3	69.0	138.1	91.46	-877.1	6,738.1	4,783.4	4,576.6	206.86	23.124	
9,350.4	6,928.9	6,905.9	6,905.9	70.4	138.0	91.44	-877.1	6,738.1	4,735.6	4,527.4	208.22	22.743	
9,400.0	6,928.5	6,905.5	6,905.5	71.7	138.0	91.43	-877.1	6,738.1	4,688.5	4,479.0	209.57	22.373	
9,448.8	6,928.1	6,905.1	6,905.1	73.0	138.0	91.41	-877.1	6,738.1	4,642.3	4,431.4	210.89	22.013	
9,500.0	6,927.7	6,904.7	6,904.7	74.4	138.0	91.39	-877.1	6,738.1	4,593.9	4,381.6	212.28	21.640	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 24-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,904.3	6,904.3	75.7	138.0	91.38	-877.1	6,738.1	4,549.2	4,335.7	213.57	21.301	
9,600.0	6,926.8	6,903.8	6,903.8	77.2	138.0	91.36	-877.1	6,738.1	4,499.4	4,284.4	215.00	20.927	
9,645.6	6,926.4	6,903.4	6,903.4	78.4	138.0	91.35	-877.1	6,738.1	4,456.4	4,240.1	216.25	20.608	
9,700.0	6,926.0	6,903.0	6,903.0	79.9	138.0	91.33	-877.1	6,738.1	4,405.2	4,187.5	217.73	20.232	
9,744.1	6,925.6	6,902.6	6,902.6	81.1	138.0	91.31	-877.1	6,738.1	4,363.8	4,144.8	218.93	19.932	
9,800.0	6,925.2	6,902.2	6,902.2	82.6	138.0	91.30	-877.1	6,738.1	4,311.3	4,090.8	220.46	19.556	
9,842.5	6,924.8	6,901.8	6,901.8	83.8	138.0	91.28	-877.1	6,738.1	4,271.4	4,049.8	221.62	19.273	
9,900.0	6,924.3	6,901.3	6,901.3	85.4	138.0	91.26	-877.1	6,738.1	4,217.6	3,994.4	223.20	18.896	
9,940.9	6,924.0	6,901.0	6,901.0	86.5	137.9	91.25	-877.1	6,738.1	4,179.4	3,955.1	224.32	18.632	
10,000.0	6,923.5	6,900.5	6,900.5	88.1	137.9	91.23	-877.1	6,738.1	4,124.3	3,898.3	225.94	18.254	
10,039.3	6,923.2	6,900.2	6,900.2	89.2	137.9	91.22	-877.1	6,738.1	4,087.6	3,860.6	227.01	18.006	
10,100.0	6,922.6	6,899.6	6,899.6	90.9	137.9	91.20	-877.1	6,738.1	4,031.2	3,802.5	228.68	17.628	
10,137.8	6,922.3	6,899.3	6,899.3	91.9	137.9	91.19	-877.1	6,738.1	3,996.2	3,766.4	229.71	17.396	
10,200.0	6,921.8	6,898.8	6,898.8	93.7	137.9	91.17	-877.1	6,738.1	3,938.5	3,707.1	231.42	17.019	
10,236.2	6,921.5	6,898.5	6,898.5	94.7	137.9	91.16	-877.1	6,738.1	3,905.0	3,672.6	232.42	16.802	
10,300.0	6,921.0	6,898.0	6,898.0	96.4	137.9	91.14	-877.1	6,738.1	3,846.2	3,612.0	234.17	16.425	
10,334.6	6,920.7	6,897.7	6,897.7	97.4	137.9	91.12	-877.1	6,738.1	3,814.3	3,579.2	235.12	16.222	
10,400.0	6,920.1	6,897.1	6,897.1	99.2	137.9	91.10	-877.1	6,738.1	3,754.2	3,517.3	236.92	15.846	
10,433.0	6,919.9	6,896.9	6,896.9	100.1	137.9	91.09	-877.1	6,738.1	3,723.9	3,486.1	237.83	15.658	
10,500.0	6,919.3	6,896.3	6,896.3	101.9	137.9	91.07	-877.1	6,738.1	3,662.7	3,423.0	239.68	15.282	
10,531.5	6,919.0	6,896.0	6,896.0	102.8	137.8	91.06	-877.1	6,738.1	3,634.0	3,393.5	240.54	15.107	
10,600.0	6,918.5	6,895.5	6,895.5	104.7	137.8	91.04	-877.1	6,738.1	3,571.6	3,329.2	242.43	14.733	
10,629.9	6,918.2	6,895.2	6,895.2	105.5	137.8	91.03	-877.1	6,738.1	3,544.5	3,301.2	243.26	14.571	
10,700.0	6,917.6	6,894.6	6,894.6	107.5	137.8	91.01	-877.1	6,738.1	3,481.1	3,235.9	245.19	14.198	
10,728.3	6,917.4	6,894.4	6,894.4	108.3	137.8	91.00	-877.1	6,738.1	3,455.5	3,209.5	245.97	14.048	
10,800.0	6,916.8	6,893.8	6,893.8	110.3	137.8	90.98	-877.1	6,738.1	3,391.0	3,143.1	247.95	13.676	
10,826.7	6,916.6	6,893.6	6,893.6	111.0	137.8	90.97	-877.1	6,738.1	3,367.0	3,118.3	248.69	13.539	
10,900.0	6,916.0	6,893.0	6,893.0	113.0	137.8	90.94	-877.1	6,738.1	3,301.5	3,050.8	250.71	13.169	
10,925.2	6,915.8	6,892.8	6,892.8	113.7	137.8	90.94	-877.1	6,738.1	3,279.1	3,027.7	251.40	13.043	
11,000.0	6,915.1	6,892.1	6,892.1	115.8	137.8	90.91	-877.1	6,738.1	3,212.7	2,959.2	253.47	12.675	
11,023.6	6,914.9	6,891.9	6,891.9	116.5	137.8	90.90	-877.1	6,738.1	3,191.8	2,937.7	254.12	12.560	
11,100.0	6,914.3	6,891.3	6,891.3	118.6	137.8	90.88	-877.1	6,738.1	3,124.5	2,868.3	256.23	12.194	
11,122.0	6,914.1	6,891.1	6,891.1	119.2	137.8	90.87	-877.1	6,738.1	3,105.2	2,848.3	256.84	12.090	
11,200.0	6,913.5	6,890.5	6,890.5	121.4	137.7	90.85	-877.1	6,738.1	3,037.0	2,778.0	259.00	11.726	
11,220.4	6,913.3	6,890.3	6,890.3	121.9	137.7	90.84	-877.1	6,738.1	3,019.3	2,759.7	259.57	11.632	
11,300.0	6,912.6	6,889.6	6,889.6	124.1	137.7	90.81	-877.1	6,738.1	2,950.4	2,688.6	261.77	11.271	
11,318.9	6,912.5	6,889.5	6,889.5	124.7	137.7	90.81	-877.1	6,738.1	2,934.1	2,671.8	262.29	11.187	
11,400.0	6,911.8	6,888.8	6,888.8	126.9	137.7	90.78	-877.1	6,738.1	2,864.6	2,600.1	264.53	10.829	
11,417.3	6,911.6	6,888.6	6,888.6	127.4	137.7	90.78	-877.1	6,738.1	2,849.9	2,584.9	265.01	10.754	
11,500.0	6,911.0	6,888.0	6,888.0	129.7	137.7	90.75	-877.1	6,738.1	2,779.8	2,512.5	267.30	10.399	
11,515.7	6,910.8	6,887.8	6,887.8	130.2	137.7	90.75	-877.1	6,738.1	2,766.5	2,498.8	267.74	10.333	
11,600.0	6,910.1	6,887.1	6,887.1	132.5	137.7	90.72	-877.1	6,738.1	2,696.0	2,425.9	270.07	9.982	
11,614.1	6,910.0	6,887.0	6,887.0	132.9	137.7	90.71	-877.1	6,738.1	2,684.2	2,413.8	270.46	9.924	
11,700.0	6,909.3	6,886.3	6,886.3	135.3	137.7	90.69	-877.1	6,738.1	2,613.3	2,340.5	272.84	9.578	
11,712.6	6,909.2	6,886.2	6,886.2	135.6	137.7	90.68	-877.1	6,738.1	2,603.0	2,329.8	273.19	9.528	
11,800.0	6,908.5	6,885.5	6,885.5	138.1	137.6	90.65	-877.1	6,738.1	2,531.9	2,256.3	275.62	9.186	
11,811.0	6,908.4	6,885.4	6,885.4	138.4	137.6	90.65	-877.1	6,738.1	2,523.1	2,247.1	275.92	9.144	
11,900.0	6,907.6	6,884.6	6,884.6	140.9	137.6	90.62	-877.1	6,738.1	2,451.9	2,173.5	278.39	8.808	
11,909.4	6,907.5	6,884.5	6,884.5	141.1	137.6	90.62	-877.1	6,738.1	2,444.4	2,165.8	278.65	8.772	
12,000.0	6,906.8	6,883.8	6,883.8	143.6	137.6	90.59	-877.1	6,738.1	2,373.4	2,092.2	281.16	8.441	
12,007.8	6,906.7	6,883.7	6,883.7	143.9	137.6	90.59	-877.1	6,738.1	2,367.3	2,085.9	281.38	8.413	
12,100.0	6,905.9	6,882.9	6,882.9	146.4	137.6	90.56	-877.1	6,738.1	2,296.6	2,012.6	283.93	8.088	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FIOLOKOWSKI 24-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,882.9	6,882.9	146.6	137.6	90.56	-877.1	6,738.1	2,291.8	2,007.7	284.11	8.067	
12,200.0	6,905.1	6,882.1	6,882.1	149.2	137.6	90.53	-877.1	6,738.1	2,221.6	1,934.8	286.71	7.748	
12,204.7	6,905.1	6,882.1	6,882.1	149.4	137.6	90.52	-877.1	6,738.1	2,218.1	1,931.2	286.84	7.733	
12,300.0	6,904.3	6,881.3	6,881.3	152.0	137.6	90.49	-877.1	6,738.1	2,148.6	1,859.1	289.48	7.422	
12,303.1	6,904.3	6,881.3	6,881.3	152.1	137.6	90.49	-877.1	6,738.1	2,146.4	1,856.8	289.57	7.412	
12,400.0	6,903.4	6,880.4	6,880.4	154.8	137.5	90.46	-877.1	6,738.1	2,077.9	1,785.6	292.26	7.110	
12,401.5	6,903.4	6,880.4	6,880.4	154.8	137.5	90.46	-877.1	6,738.1	2,076.8	1,784.5	292.30	7.105	
12,500.0	6,902.6	6,879.6	6,879.6	157.6	137.5	90.43	-877.1	6,738.1	2,009.7	1,714.6	295.04	6.812	
12,598.4	6,901.8	6,878.8	6,878.8	160.3	137.5	90.40	-877.1	6,738.1	1,945.2	1,647.5	297.77	6.533	
12,600.0	6,901.8	6,878.8	6,878.8	160.4	137.5	90.40	-877.1	6,738.1	1,944.2	1,646.4	297.81	6.528	
12,696.8	6,901.0	6,878.0	6,878.0	163.1	137.5	90.37	-877.1	6,738.1	1,883.7	1,583.2	300.50	6.269	
12,700.0	6,900.9	6,877.9	6,877.9	163.2	137.5	90.37	-877.1	6,738.1	1,881.8	1,581.2	300.59	6.260	
12,795.2	6,900.1	6,877.1	6,877.1	165.8	137.5	90.34	-877.1	6,738.1	1,825.4	1,522.2	303.24	6.020	
12,800.0	6,900.1	6,877.1	6,877.1	166.0	137.5	90.33	-877.1	6,738.1	1,822.7	1,519.3	303.37	6.008	
12,893.7	6,899.3	6,876.3	6,876.3	168.6	137.5	90.30	-877.1	6,738.1	1,770.7	1,464.7	305.97	5.787	
12,900.0	6,899.3	6,876.3	6,876.3	168.8	137.5	90.30	-877.1	6,738.1	1,767.3	1,461.2	306.15	5.773	
12,992.1	6,898.5	6,875.5	6,875.5	171.3	137.4	90.27	-877.1	6,738.1	1,719.9	1,411.2	308.71	5.571	
13,000.0	6,898.4	6,875.4	6,875.4	171.6	137.4	90.27	-877.1	6,738.1	1,716.0	1,407.0	308.93	5.555	
13,090.5	6,897.7	6,874.7	6,874.7	174.1	137.4	90.24	-877.1	6,738.1	1,673.3	1,361.8	311.44	5.373	
13,100.0	6,897.6	6,874.6	6,874.6	174.4	137.4	90.24	-877.1	6,738.1	1,669.0	1,357.3	311.71	5.355	
13,188.9	6,896.9	6,873.9	6,873.9	176.8	137.4	90.21	-877.1	6,738.1	1,631.3	1,317.1	314.18	5.192	
13,200.0	6,896.8	6,873.8	6,873.8	177.2	137.4	90.21	-877.1	6,738.1	1,626.9	1,312.4	314.49	5.173	
13,287.4	6,896.0	6,873.0	6,873.0	179.6	137.4	90.18	-877.1	6,738.1	1,594.3	1,277.4	316.91	5.031	
13,300.0	6,895.9	6,872.9	6,872.9	180.0	137.4	90.17	-877.1	6,738.1	1,590.0	1,272.7	317.27	5.011	
13,385.8	6,895.2	6,872.2	6,872.2	182.4	137.4	90.15	-877.1	6,738.1	1,562.7	1,243.0	319.65	4.889	
13,400.0	6,895.1	6,872.1	6,872.1	182.7	137.4	90.14	-877.1	6,738.1	1,558.6	1,238.5	320.05	4.870	
13,484.2	6,894.4	6,871.4	6,871.4	185.1	137.4	90.12	-877.1	6,738.1	1,536.7	1,214.3	322.39	4.767	
13,500.0	6,894.3	6,871.3	6,871.3	185.5	137.4	90.11	-877.1	6,738.1	1,533.1	1,210.2	322.83	4.749	
13,582.6	6,893.6	6,870.6	6,870.6	187.9	137.3	90.08	-877.1	6,738.1	1,516.6	1,191.5	325.12	4.665	
13,600.0	6,893.4	6,870.4	6,870.4	188.3	137.3	90.08	-877.1	6,738.1	1,513.7	1,188.1	325.61	4.649	
13,681.1	6,892.8	6,869.8	6,869.8	190.6	137.3	90.05	-877.1	6,738.1	1,502.8	1,174.9	327.86	4.584	
13,700.0	6,892.6	6,869.6	6,869.6	191.1	137.3	90.05	-877.1	6,738.1	1,500.8	1,172.5	328.39	4.570	
13,779.5	6,891.9	6,868.9	6,868.9	193.4	137.3	90.02	-877.1	6,738.1	1,495.3	1,164.7	330.60	4.523	
13,800.0	6,891.8	6,868.8	6,868.8	193.9	137.3	90.01	-877.1	6,738.1	1,494.5	1,163.4	331.17	4.513	
13,844.3	6,891.4	6,868.4	6,868.4	195.2	137.3	90.00	-877.1	6,738.1	1,493.9	1,161.5	332.40	4.494 CC	
13,877.9	6,891.1	6,868.1	6,868.1	196.1	137.3	89.99	-877.1	6,738.1	1,494.3	1,160.9	333.34	4.483 ES	
13,900.0	6,890.9	6,867.9	6,867.9	196.7	137.3	89.98	-877.1	6,738.1	1,494.9	1,161.0	333.95	4.477	
13,976.3	6,890.3	6,867.3	6,867.3	198.9	137.3	89.96	-877.1	6,738.1	1,499.7	1,163.6	336.07	4.462	
14,000.0	6,890.1	6,867.1	6,867.1	199.5	137.3	89.95	-877.1	6,738.1	1,502.0	1,165.2	336.73	4.460 SF	
14,074.8	6,889.5	6,866.5	6,866.5	201.6	137.3	89.93	-877.1	6,738.1	1,511.6	1,172.7	338.81	4.461	
14,100.0	6,889.3	6,866.3	6,866.3	202.3	137.3	89.92	-877.1	6,738.1	1,515.6	1,176.1	339.51	4.464	
14,173.2	6,888.7	6,865.7	6,865.7	204.4	137.2	89.89	-877.1	6,738.1	1,529.7	1,188.1	341.55	4.479	
14,200.0	6,888.4	6,865.4	6,865.4	205.1	137.2	89.89	-877.1	6,738.1	1,535.6	1,193.4	342.30	4.486	
14,271.6	6,887.8	6,864.8	6,864.8	207.1	137.2	89.86	-877.1	6,738.1	1,553.8	1,209.5	344.29	4.513	
14,300.0	6,887.6	6,864.6	6,864.6	207.9	137.2	89.85	-877.1	6,738.1	1,561.8	1,216.8	345.08	4.526	
14,370.0	6,887.0	6,864.0	6,864.0	209.9	137.2	89.83	-877.1	6,738.1	1,583.7	1,236.7	347.03	4.564	
14,400.0	6,886.8	6,863.8	6,863.8	210.7	137.2	89.82	-877.1	6,738.1	1,593.9	1,246.0	347.86	4.582	
14,468.5	6,886.2	6,863.2	6,863.2	212.6	137.2	89.80	-877.1	6,738.1	1,619.0	1,269.3	349.77	4.629	
14,500.0	6,885.9	6,862.9	6,862.9	213.5	137.2	89.79	-877.1	6,738.1	1,631.4	1,280.8	350.64	4.653	
14,566.9	6,885.4	6,862.4	6,862.4	215.4	137.2	89.77	-877.1	6,738.1	1,659.5	1,307.0	352.50	4.708	
14,600.0	6,885.1	6,862.1	6,862.1	216.3	137.2	89.76	-877.1	6,738.1	1,674.1	1,320.7	353.42	4.737	
14,613.0	6,885.0	6,862.0	6,862.0	216.7	137.2	89.75	-877.1	6,738.1	1,680.0	1,326.3	353.79	4.749	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	97.67	-1,286.0	9,547.5	9,633.7				
98.4	98.4	84.4	84.4	0.1	0.4	97.67	-1,286.0	9,547.5	9,633.7	9,633.2	0.47	N/A	
100.0	100.0	86.0	86.0	0.1	0.4	97.67	-1,286.0	9,547.5	9,633.7	9,633.2	0.48	N/A	
196.8	196.8	182.8	182.8	0.3	2.5	97.67	-1,286.0	9,547.5	9,633.7	9,630.9	2.82	3,414.579	
200.0	200.0	186.0	186.0	0.3	2.6	97.67	-1,286.0	9,547.5	9,633.7	9,630.8	2.91	3,314.062	
295.3	295.3	281.3	281.3	0.5	4.6	97.67	-1,286.0	9,547.5	9,633.7	9,628.5	5.16	1,867.502	
300.0	300.0	286.0	286.0	0.5	4.7	97.67	-1,286.0	9,547.5	9,633.7	9,628.4	5.27	1,828.930	
393.7	393.7	379.7	379.7	0.7	6.6	97.67	-1,286.0	9,547.5	9,633.7	9,626.3	7.39	1,302.890	
400.0	400.0	386.0	386.0	0.8	6.8	97.67	-1,286.0	9,547.5	9,633.7	9,626.2	7.54	1,278.233	
492.1	492.1	478.1	478.1	1.0	8.6	97.67	-1,286.0	9,547.5	9,633.7	9,624.1	9.61	1,002.199	
500.0	500.0	486.0	486.0	1.0	8.8	97.67	-1,286.0	9,547.5	9,633.7	9,623.9	9.79	984.049	
590.5	590.5	576.5	576.5	1.2	10.6	97.67	-1,286.0	9,547.5	9,633.7	9,621.9	11.82	814.751	
600.0	600.0	586.0	586.0	1.2	10.8	97.67	-1,286.0	9,547.5	9,633.7	9,621.7	12.04	800.386	
689.0	689.0	675.0	675.0	1.4	12.6	97.67	-1,286.0	9,547.5	9,633.7	9,619.7	14.03	686.546	
700.0	700.0	686.0	686.0	1.4	12.8	97.67	-1,286.0	9,547.5	9,633.7	9,619.4	14.28	674.659	
787.4	787.4	773.4	773.4	1.6	14.6	97.67	-1,286.0	9,547.5	9,633.7	9,617.4	16.24	593.279	
800.0	800.0	786.0	786.0	1.7	14.9	97.67	-1,286.0	9,547.5	9,633.7	9,617.2	16.52	583.140	
885.8	885.8	871.8	871.8	1.9	16.6	97.67	-1,286.0	9,547.5	9,633.7	9,615.2	18.44	522.359	
900.0	900.0	886.0	886.0	1.9	16.9	97.67	-1,286.0	9,547.5	9,633.7	9,614.9	18.76	513.519	
984.2	984.2	970.2	970.2	2.1	18.6	97.67	-1,286.0	9,547.5	9,633.7	9,613.0	20.65	466.604	
1,000.0	1,000.0	986.0	986.0	2.1	18.9	97.67	-1,286.0	9,547.5	9,633.7	9,612.7	21.00	458.769	
1,082.7	1,082.7	1,068.7	1,068.7	2.3	20.6	97.67	-1,286.0	9,547.5	9,633.7	9,610.8	22.85	421.615	
1,100.0	1,100.0	1,086.0	1,086.0	2.3	20.9	97.67	-1,286.0	9,547.5	9,633.7	9,610.5	23.24	414.579	
1,150.0	1,150.0	1,136.0	1,136.0	2.4	21.9	97.67	-1,286.0	9,547.5	9,633.7	9,609.3	24.36	395.533	
1,181.1	1,181.1	1,167.1	1,167.1	2.5	22.5	130.36	-1,286.0	9,547.5	9,633.8	9,608.7	25.05	384.571	
1,200.0	1,200.0	1,186.0	1,186.0	2.6	22.9	130.36	-1,286.0	9,547.5	9,634.0	9,608.5	25.47	378.216	
1,279.5	1,279.5	1,265.5	1,265.5	2.7	24.5	130.34	-1,286.0	9,547.5	9,635.6	9,608.3	27.24	353.768	
1,300.0	1,299.9	1,285.9	1,285.9	2.8	24.9	130.34	-1,286.0	9,547.5	9,636.2	9,608.5	27.69	348.011	
1,377.9	1,377.7	1,363.7	1,363.7	3.0	26.5	130.31	-1,286.0	9,547.5	9,639.6	9,610.2	29.41	327.817	
1,400.0	1,399.7	1,385.7	1,385.7	3.0	26.9	130.30	-1,286.0	9,547.5	9,640.8	9,610.9	29.89	322.564	
1,476.4	1,475.7	1,461.7	1,461.7	3.2	28.5	130.26	-1,286.0	9,547.5	9,645.7	9,614.2	31.55	305.686	
1,500.0	1,499.1	1,485.1	1,485.1	3.2	28.9	130.24	-1,286.0	9,547.5	9,647.5	9,615.5	32.07	300.863	
1,574.8	1,573.2	1,559.2	1,559.2	3.4	30.4	130.19	-1,286.0	9,547.5	9,654.1	9,620.4	33.68	286.604	
1,600.0	1,598.2	1,584.2	1,584.2	3.5	30.9	130.17	-1,286.0	9,547.5	9,656.6	9,622.3	34.23	282.149	
1,673.2	1,670.3	1,656.3	1,656.3	3.7	32.4	130.10	-1,286.0	9,547.5	9,664.6	9,628.8	35.80	269.985	
1,700.0	1,696.6	1,682.6	1,682.6	3.8	32.9	130.07	-1,286.0	9,547.5	9,667.9	9,631.5	36.37	265.848	
1,749.9	1,745.5	1,731.5	1,731.5	3.9	33.9	130.02	-1,286.0	9,547.5	9,674.3	9,636.9	37.43	258.481	
1,771.6	1,766.8	1,752.8	1,752.8	4.0	34.3	130.04	-1,286.0	9,547.5	9,677.3	9,639.4	37.91	255.238	
1,800.0	1,794.5	1,780.5	1,780.5	4.1	34.9	130.06	-1,286.0	9,547.5	9,681.1	9,642.6	38.55	251.144	
1,870.1	1,863.1	1,849.1	1,849.1	4.3	36.3	130.13	-1,286.0	9,547.5	9,690.6	9,650.5	40.12	241.527	
1,900.0	1,892.3	1,878.3	1,878.3	4.4	36.8	130.16	-1,286.0	9,547.5	9,694.7	9,653.9	40.79	237.651	
1,968.5	1,959.4	1,945.4	1,945.4	4.7	38.2	130.22	-1,286.0	9,547.5	9,704.0	9,661.6	42.34	229.186	
2,000.0	1,990.2	1,976.2	1,976.2	4.8	38.8	130.25	-1,286.0	9,547.5	9,708.3	9,665.2	43.05	225.503	
2,066.9	2,055.6	2,041.6	2,041.6	5.1	40.1	130.31	-1,286.0	9,547.5	9,717.4	9,672.8	44.57	218.033	
2,100.0	2,088.0	2,074.0	2,074.0	5.2	40.8	130.34	-1,286.0	9,547.5	9,721.9	9,676.6	45.32	214.519	
2,165.3	2,151.9	2,137.9	2,137.9	5.4	42.1	130.40	-1,286.0	9,547.5	9,730.8	9,684.0	46.81	207.894	
2,200.0	2,185.8	2,171.8	2,171.8	5.6	42.7	130.43	-1,286.0	9,547.5	9,735.5	9,687.9	47.59	204.550	
2,263.8	2,248.2	2,234.2	2,234.2	5.8	44.0	130.49	-1,286.0	9,547.5	9,744.2	9,695.2	49.05	198.658	
2,300.0	2,283.6	2,269.6	2,269.6	6.0	44.7	130.53	-1,286.0	9,547.5	9,749.2	9,699.3	49.88	195.466	
2,362.2	2,344.5	2,330.5	2,330.5	6.2	45.9	130.58	-1,286.0	9,547.5	9,757.7	9,706.4	51.30	190.211	
2,400.0	2,381.4	2,367.4	2,367.4	6.4	46.7	130.62	-1,286.0	9,547.5	9,762.9	9,710.7	52.16	187.159	
2,460.6	2,440.7	2,426.7	2,426.7	6.6	47.9	130.67	-1,286.0	9,547.5	9,771.2	9,717.6	53.55	182.459	

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

Anticollision Report



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Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FORD PM-F #26-16 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,500.0	2,479.2	2,465.2	2,465.2	6.8	48.7	130.71	-1,286.0	9,547.5	9,776.6	9,722.1	54.45	179.536		
2,559.0	2,537.0	2,523.0	2,523.0	7.0	49.8	130.76	-1,286.0	9,547.5	9,784.7	9,728.9	55.81	175.322		
2,600.0	2,577.1	2,563.1	2,563.1	7.2	50.6	130.80	-1,286.0	9,547.5	9,790.3	9,733.6	56.75	172.519		
2,657.5	2,633.3	2,619.3	2,619.3	7.4	51.8	130.85	-1,286.0	9,547.5	9,798.3	9,740.2	58.07	168.732		
2,700.0	2,674.9	2,660.9	2,660.9	7.6	52.6	130.89	-1,286.0	9,547.5	9,804.1	9,745.1	59.05	166.040		
2,755.9	2,729.6	2,715.6	2,715.6	7.9	53.7	130.94	-1,286.0	9,547.5	9,811.8	9,751.5	60.33	162.630		
2,800.0	2,772.7	2,758.7	2,758.7	8.0	54.6	130.98	-1,286.0	9,547.5	9,817.9	9,756.6	61.35	160.041		
2,854.3	2,825.8	2,811.8	2,811.8	8.3	55.6	131.03	-1,286.0	9,547.5	9,825.4	9,762.8	62.60	156.964		
2,900.0	2,870.5	2,856.5	2,856.5	8.5	56.5	131.07	-1,286.0	9,547.5	9,831.7	9,768.1	63.65	154.471		
2,952.7	2,922.1	2,908.1	2,908.1	8.7	57.6	131.12	-1,286.0	9,547.5	9,839.0	9,774.1	64.86	151.690		
3,000.0	2,968.3	2,954.3	2,954.3	8.9	58.5	131.16	-1,286.0	9,547.5	9,845.6	9,779.6	65.95	149.286		
3,051.2	3,018.4	3,004.4	3,004.4	9.1	59.5	131.21	-1,286.0	9,547.5	9,852.6	9,785.5	67.13	146.769		
3,100.0	3,066.1	3,052.1	3,052.1	9.3	60.5	131.25	-1,286.0	9,547.5	9,859.4	9,791.2	68.26	144.450		
3,149.6	3,114.7	3,100.7	3,100.7	9.5	61.4	131.30	-1,286.0	9,547.5	9,866.3	9,796.9	69.40	142.169		
3,200.0	3,164.0	3,150.0	3,150.0	9.8	62.4	131.34	-1,286.0	9,547.5	9,873.3	9,802.7	70.56	139.927		
3,248.0	3,210.9	3,196.9	3,196.9	10.0	63.4	131.38	-1,286.0	9,547.5	9,880.0	9,808.3	71.67	137.858		
3,300.0	3,261.8	3,247.8	3,247.8	10.2	64.4	131.43	-1,286.0	9,547.5	9,887.2	9,814.4	72.87	135.690		
3,346.4	3,307.2	3,293.2	3,293.2	10.4	65.3	131.47	-1,286.0	9,547.5	9,893.7	9,819.8	73.94	133.811		
3,400.0	3,359.6	3,345.6	3,345.6	10.6	66.4	131.52	-1,286.0	9,547.5	9,901.2	9,826.0	75.17	131.711		
3,444.9	3,403.5	3,389.5	3,389.5	10.8	67.2	131.56	-1,286.0	9,547.5	9,907.4	9,831.2	76.21	130.004		
3,500.0	3,457.4	3,443.4	3,443.4	11.1	68.3	131.61	-1,286.0	9,547.5	9,915.1	9,837.6	77.48	127.970		
3,543.3	3,499.8	3,485.8	3,485.8	11.3	69.2	131.65	-1,286.0	9,547.5	9,921.2	9,842.7	78.48	126.417		
3,600.0	3,555.2	3,541.2	3,541.2	11.5	70.3	131.70	-1,286.0	9,547.5	9,929.1	9,849.3	79.79	124.444		
3,641.7	3,596.0	3,582.0	3,582.0	11.7	71.1	131.73	-1,286.0	9,547.5	9,934.9	9,854.2	80.75	123.032		
3,700.0	3,653.0	3,639.0	3,639.0	11.9	72.3	131.79	-1,286.0	9,547.5	9,943.1	9,861.0	82.10	121.116		
3,740.1	3,692.3	3,678.3	3,678.3	12.1	73.0	131.82	-1,286.0	9,547.5	9,948.7	9,865.7	83.02	119.832		
3,800.0	3,750.8	3,736.8	3,736.8	12.4	74.2	131.87	-1,286.0	9,547.5	9,957.1	9,872.7	84.40	117.970		
3,838.6	3,788.6	3,774.6	3,774.6	12.6	75.0	131.91	-1,286.0	9,547.5	9,962.6	9,877.3	85.29	116.802		
3,900.0	3,848.7	3,834.7	3,834.7	12.8	76.2	131.96	-1,286.0	9,547.5	9,971.2	9,884.5	86.71	114.992		
3,937.0	3,884.9	3,870.9	3,870.9	13.0	76.9	131.99	-1,286.0	9,547.5	9,976.4	9,888.8	87.57	113.930		
4,000.0	3,946.5	3,932.5	3,932.5	13.3	78.2	132.05	-1,286.0	9,547.5	9,985.3	9,896.3	89.02	112.169		
4,035.4	3,981.1	3,967.1	3,967.1	13.4	78.9	132.08	-1,286.0	9,547.5	9,990.3	9,900.4	89.84	111.203		
4,100.0	4,044.3	4,030.3	4,030.3	13.7	80.1	132.14	-1,286.0	9,547.5	9,999.4	9,908.0	91.33	109.488		
6,750.0	6,648.6	6,634.6	6,634.6	19.2	132.5	13.47	-1,286.0	9,547.5	9,990.2	9,867.0	123.18	81.103		
6,791.3	6,681.4	6,667.4	6,667.4	19.1	133.2	14.09	-1,286.0	9,547.5	9,965.5	9,846.4	119.07	83.697		
6,800.0	6,688.1	6,674.1	6,674.1	19.1	133.3	14.23	-1,286.0	9,547.5	9,960.1	9,841.9	118.17	84.289		
6,850.0	6,725.3	6,711.3	6,711.3	19.1	134.0	15.16	-1,286.0	9,547.5	9,927.3	9,814.5	112.78	88.023		
6,889.7	6,753.2	6,739.2	6,739.2	19.0	134.6	16.04	-1,286.0	9,547.5	9,899.5	9,791.1	108.34	91.372		
6,900.0	6,760.1	6,746.1	6,746.1	19.0	134.7	16.29	-1,286.0	9,547.5	9,892.1	9,784.9	107.19	92.287		
6,950.0	6,792.3	6,778.3	6,778.3	19.0	135.4	17.68	-1,286.0	9,547.5	9,854.6	9,752.9	101.63	96.965		
6,988.2	6,815.1	6,801.1	6,801.1	18.9	135.8	18.97	-1,286.0	9,547.5	9,824.5	9,726.9	97.63	100.627		
7,000.0	6,821.8	6,807.8	6,807.8	18.9	136.0	19.41	-1,286.0	9,547.5	9,814.9	9,718.5	96.47	101.739		
7,050.0	6,848.3	6,834.3	6,834.3	18.9	136.5	21.59	-1,286.0	9,547.5	9,773.4	9,681.1	92.26	105.936		
7,086.6	6,865.9	6,851.9	6,851.9	18.9	136.9	23.55	-1,286.0	9,547.5	9,741.9	9,651.7	90.23	107.968		
7,100.0	6,871.9	6,857.9	6,857.9	18.9	137.0	24.37	-1,286.0	9,547.5	9,730.2	9,640.4	89.79	108.361		
7,150.0	6,892.3	6,878.3	6,878.3	18.8	137.4	28.03	-1,286.0	9,547.5	9,685.4	9,595.2	90.19	107.389		
7,185.0	6,904.7	6,890.7	6,890.7	18.8	137.7	31.30	-1,286.0	9,547.5	9,653.3	9,560.4	92.90	103.911		
7,200.0	6,909.5	6,895.5	6,895.5	18.9	137.7	32.93	-1,286.0	9,547.5	9,639.4	9,544.6	94.80	101.684		
7,250.0	6,923.4	6,909.4	6,909.4	19.3	138.0	39.69	-1,286.0	9,547.5	9,592.3	9,487.4	104.91	91.437		
7,283.4	6,930.8	6,916.8	6,916.8	19.8	138.2	45.69	-1,286.0	9,547.5	9,560.3	9,445.3	115.06	83.090		
7,300.0	6,933.9	6,919.9	6,919.9	20.0	138.2	49.20	-1,286.0	9,547.5	9,544.4	9,423.4	121.01	78.873		
7,350.0	6,940.9	6,926.9	6,926.9	20.8	138.4	62.50	-1,286.0	9,547.5	9,495.9	9,354.9	141.01	67.340		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FORD PM-F #26-16 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,381.9	6,943.6	6,929.6	6,929.6	21.4	138.4	73.16	-1,286.0	9,547.5	9,464.8	9,312.2	152.57	62.037	
7,400.0	6,944.5	6,930.5	6,930.5	21.7	138.5	79.84	-1,286.0	9,547.5	9,447.1	9,289.8	157.31	60.054	
7,432.4	6,945.0	6,931.0	6,931.0	22.3	138.5	92.32	-1,286.0	9,547.5	9,415.3	9,254.7	160.62	58.620	
7,480.3	6,944.6	6,930.6	6,930.6	23.2	138.5	92.31	-1,286.0	9,547.5	9,368.4	9,206.9	161.50	58.009	
7,500.0	6,944.4	6,930.4	6,930.4	23.6	138.5	92.31	-1,286.0	9,547.5	9,349.2	9,187.3	161.87	57.759	
7,578.7	6,943.7	6,929.7	6,929.7	25.2	138.4	92.29	-1,286.0	9,547.5	9,272.1	9,108.7	163.44	56.732	
7,600.0	6,943.6	6,929.6	6,929.6	25.6	138.4	92.28	-1,286.0	9,547.5	9,251.3	9,087.4	163.86	56.458	
7,677.1	6,942.9	6,928.9	6,928.9	27.3	138.4	92.26	-1,286.0	9,547.5	9,175.8	9,010.3	165.51	55.440	
7,700.0	6,942.7	6,928.7	6,928.7	27.8	138.4	92.26	-1,286.0	9,547.5	9,153.4	8,987.4	166.00	55.142	
7,775.6	6,942.1	6,928.1	6,928.1	29.5	138.4	92.24	-1,286.0	9,547.5	9,079.5	8,911.8	167.69	54.145	
7,800.0	6,941.9	6,927.9	6,927.9	30.1	138.4	92.23	-1,286.0	9,547.5	9,055.7	8,887.4	168.24	53.826	
7,874.0	6,941.3	6,927.3	6,927.3	31.8	138.4	92.21	-1,286.0	9,547.5	8,983.3	8,813.4	169.96	52.855	
7,900.0	6,941.1	6,927.1	6,927.1	32.4	138.4	92.21	-1,286.0	9,547.5	8,957.9	8,787.4	170.57	52.519	
7,972.4	6,940.4	6,926.4	6,926.4	34.2	138.4	92.19	-1,286.0	9,547.5	8,887.2	8,714.9	172.30	51.579	
8,000.0	6,940.2	6,926.2	6,926.2	34.9	138.4	92.18	-1,286.0	9,547.5	8,860.2	8,687.3	172.96	51.226	
8,070.8	6,939.6	6,925.6	6,925.6	36.6	138.4	92.16	-1,286.0	9,547.5	8,791.0	8,616.3	174.70	50.321	
8,100.0	6,939.4	6,925.4	6,925.4	37.3	138.3	92.16	-1,286.0	9,547.5	8,762.6	8,587.2	175.42	49.953	
8,169.3	6,938.8	6,924.8	6,924.8	39.1	138.3	92.14	-1,286.0	9,547.5	8,695.0	8,517.8	177.15	49.084	
8,200.0	6,938.5	6,924.5	6,924.5	39.8	138.3	92.13	-1,286.0	9,547.5	8,665.0	8,487.1	177.91	48.704	
8,267.7	6,938.0	6,924.0	6,924.0	41.6	138.3	92.11	-1,286.0	9,547.5	8,599.0	8,419.3	179.63	47.871	
8,300.0	6,937.7	6,923.7	6,923.7	42.4	138.3	92.10	-1,286.0	9,547.5	8,567.5	8,387.0	180.45	47.479	
8,366.1	6,937.2	6,923.2	6,923.2	44.1	138.3	92.09	-1,286.0	9,547.5	8,503.0	8,320.9	182.15	46.683	
8,400.0	6,936.9	6,922.9	6,922.9	45.0	138.3	92.08	-1,286.0	9,547.5	8,470.0	8,287.0	183.01	46.280	
8,464.5	6,936.3	6,922.3	6,922.3	46.6	138.3	92.06	-1,286.0	9,547.5	8,407.1	8,222.4	184.69	45.521	
8,500.0	6,936.0	6,922.0	6,922.0	47.6	138.3	92.05	-1,286.0	9,547.5	8,372.6	8,187.0	185.61	45.109	
8,563.0	6,935.5	6,921.5	6,921.5	49.2	138.3	92.04	-1,286.0	9,547.5	8,311.3	8,124.0	187.25	44.385	
8,600.0	6,935.2	6,921.2	6,921.2	50.2	138.3	92.03	-1,286.0	9,547.5	8,275.3	8,087.0	188.22	43.966	
8,661.4	6,934.7	6,920.7	6,920.7	51.8	138.3	92.01	-1,286.0	9,547.5	8,215.5	8,025.7	189.84	43.276	
8,700.0	6,934.4	6,920.4	6,920.4	52.8	138.2	92.00	-1,286.0	9,547.5	8,178.0	7,987.1	190.85	42.849	
8,759.8	6,933.9	6,919.9	6,919.9	54.4	138.2	91.99	-1,286.0	9,547.5	8,119.8	7,927.4	192.44	42.194	
8,800.0	6,933.5	6,919.5	6,919.5	55.5	138.2	91.98	-1,286.0	9,547.5	8,080.7	7,887.2	193.50	41.760	
8,858.2	6,933.0	6,919.0	6,919.0	57.1	138.2	91.96	-1,286.0	9,547.5	8,024.1	7,829.1	195.05	41.138	
8,900.0	6,932.7	6,918.7	6,918.7	58.2	138.2	91.95	-1,286.0	9,547.5	7,983.6	7,787.4	196.16	40.698	
8,956.7	6,932.2	6,918.2	6,918.2	59.7	138.2	91.94	-1,286.0	9,547.5	7,928.6	7,730.9	197.68	40.108	
9,000.0	6,931.8	6,917.8	6,917.8	60.9	138.2	91.93	-1,286.0	9,547.5	7,886.5	7,687.7	198.84	39.663	
9,055.1	6,931.4	6,917.4	6,917.4	62.4	138.2	91.91	-1,286.0	9,547.5	7,833.1	7,632.7	200.32	39.103	
9,100.0	6,931.0	6,917.0	6,917.0	63.6	138.2	91.90	-1,286.0	9,547.5	7,789.5	7,588.0	201.52	38.653	
9,153.5	6,930.6	6,916.6	6,916.6	65.0	138.2	91.89	-1,286.0	9,547.5	7,737.6	7,534.7	202.97	38.123	
9,200.0	6,930.2	6,916.2	6,916.2	66.3	138.2	91.88	-1,286.0	9,547.5	7,692.6	7,488.4	204.22	37.669	
9,251.9	6,929.7	6,915.7	6,915.7	67.7	138.2	91.86	-1,286.0	9,547.5	7,642.3	7,436.6	205.62	37.167	
9,300.0	6,929.3	6,915.3	6,915.3	69.0	138.1	91.85	-1,286.0	9,547.5	7,595.7	7,388.8	206.92	36.709	
9,350.4	6,928.9	6,914.9	6,914.9	70.4	138.1	91.84	-1,286.0	9,547.5	7,547.0	7,338.7	208.28	36.234	
9,400.0	6,928.5	6,914.5	6,914.5	71.7	138.1	91.83	-1,286.0	9,547.5	7,499.0	7,289.3	209.63	35.773	
9,448.8	6,928.1	6,914.1	6,914.1	73.0	138.1	91.81	-1,286.0	9,547.5	7,451.8	7,240.8	210.95	35.324	
9,500.0	6,927.7	6,913.7	6,913.7	74.4	138.1	91.80	-1,286.0	9,547.5	7,402.3	7,189.9	212.34	34.860	
9,547.2	6,927.3	6,913.3	6,913.3	75.7	138.1	91.79	-1,286.0	9,547.5	7,356.7	7,143.0	213.63	34.437	
9,600.0	6,926.8	6,912.8	6,912.8	77.2	138.1	91.78	-1,286.0	9,547.5	7,305.7	7,090.6	215.07	33.970	
9,645.6	6,926.4	6,912.4	6,912.4	78.4	138.1	91.76	-1,286.0	9,547.5	7,261.6	7,045.3	216.31	33.571	
9,700.0	6,926.0	6,912.0	6,912.0	79.9	138.1	91.75	-1,286.0	9,547.5	7,209.2	6,991.4	217.79	33.101	
9,744.1	6,925.6	6,911.6	6,911.6	81.1	138.1	91.74	-1,286.0	9,547.5	7,166.7	6,947.7	219.00	32.725	
9,800.0	6,925.2	6,911.2	6,911.2	82.6	138.1	91.72	-1,286.0	9,547.5	7,112.8	6,892.3	220.52	32.254	
9,842.5	6,924.8	6,910.8	6,910.8	83.8	138.1	91.71	-1,286.0	9,547.5	7,071.9	6,850.2	221.68	31.901	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,900.0	6,924.3	6,910.3	6,910.3	85.4	138.0	91.70	-1,286.0	9,547.5	7,016.5	6,793.2	223.26	31.428	
9,940.9	6,924.0	6,910.0	6,910.0	86.5	138.0	91.69	-1,286.0	9,547.5	6,977.1	6,752.7	224.38	31.095	
10,000.0	6,923.5	6,909.5	6,909.5	88.1	138.0	91.67	-1,286.0	9,547.5	6,920.3	6,694.3	226.00	30.621	
10,039.3	6,923.2	6,909.2	6,909.2	89.2	138.0	91.66	-1,286.0	9,547.5	6,882.5	6,655.4	227.08	30.309	
10,100.0	6,922.6	6,908.6	6,908.6	90.9	138.0	91.65	-1,286.0	9,547.5	6,824.2	6,595.5	228.74	29.834	
10,137.8	6,922.3	6,908.3	6,908.3	91.9	138.0	91.64	-1,286.0	9,547.5	6,787.9	6,558.2	229.78	29.542	
10,200.0	6,921.8	6,907.8	6,907.8	93.7	138.0	91.62	-1,286.0	9,547.5	6,728.2	6,496.8	231.48	29.066	
10,236.2	6,921.5	6,907.5	6,907.5	94.7	138.0	91.61	-1,286.0	9,547.5	6,693.5	6,461.1	232.48	28.792	
10,300.0	6,921.0	6,907.0	6,907.0	96.4	138.0	91.60	-1,286.0	9,547.5	6,632.4	6,398.2	234.23	28.315	
10,334.6	6,920.7	6,906.7	6,906.7	97.4	138.0	91.59	-1,286.0	9,547.5	6,599.2	6,364.0	235.18	28.060	
10,400.0	6,920.1	6,906.1	6,906.1	99.2	138.0	91.57	-1,286.0	9,547.5	6,536.7	6,299.7	236.98	27.583	
10,433.0	6,919.9	6,905.9	6,905.9	100.1	138.0	91.56	-1,286.0	9,547.5	6,505.0	6,267.2	237.89	27.344	
10,500.0	6,919.3	6,905.3	6,905.3	101.9	137.9	91.55	-1,286.0	9,547.5	6,441.1	6,201.3	239.74	26.867	
10,531.5	6,919.0	6,905.0	6,905.0	102.8	137.9	91.54	-1,286.0	9,547.5	6,411.0	6,170.4	240.60	26.646	
10,600.0	6,918.5	6,904.5	6,904.5	104.7	137.9	91.52	-1,286.0	9,547.5	6,345.6	6,103.1	242.49	26.168	
10,629.9	6,918.2	6,904.2	6,904.2	105.5	137.9	91.52	-1,286.0	9,547.5	6,317.1	6,073.8	243.32	25.962	
10,700.0	6,917.6	6,903.6	6,903.6	107.5	137.9	91.50	-1,286.0	9,547.5	6,250.3	6,005.0	245.25	25.485	
10,728.3	6,917.4	6,903.4	6,903.4	108.3	137.9	91.49	-1,286.0	9,547.5	6,223.3	5,977.3	246.03	25.295	
10,800.0	6,916.8	6,902.8	6,902.8	110.3	137.9	91.47	-1,286.0	9,547.5	6,155.1	5,907.1	248.01	24.818	
10,826.7	6,916.6	6,902.6	6,902.6	111.0	137.9	91.47	-1,286.0	9,547.5	6,129.7	5,880.9	248.75	24.642	
10,900.0	6,916.0	6,902.0	6,902.0	113.0	137.9	91.45	-1,286.0	9,547.5	6,060.1	5,809.3	250.77	24.166	
10,925.2	6,915.8	6,901.8	6,901.8	113.7	137.9	91.44	-1,286.0	9,547.5	6,036.2	5,784.7	251.46	24.004	
11,000.0	6,915.1	6,901.1	6,901.1	115.8	137.9	91.42	-1,286.0	9,547.5	5,965.2	5,711.7	253.53	23.529	
11,023.6	6,914.9	6,900.9	6,900.9	116.5	137.9	91.42	-1,286.0	9,547.5	5,942.9	5,688.7	254.18	23.380	
11,100.0	6,914.3	6,900.3	6,900.3	118.6	137.8	91.40	-1,286.0	9,547.5	5,870.5	5,614.2	256.30	22.905	
11,122.0	6,914.1	6,900.1	6,900.1	119.2	137.8	91.39	-1,286.0	9,547.5	5,849.7	5,592.8	256.90	22.770	
11,200.0	6,913.5	6,899.5	6,899.5	121.4	137.8	91.37	-1,286.0	9,547.5	5,776.0	5,517.0	259.06	22.296	
11,220.4	6,913.3	6,899.3	6,899.3	121.9	137.8	91.37	-1,286.0	9,547.5	5,756.7	5,497.1	259.63	22.173	
11,300.0	6,912.6	6,898.6	6,898.6	124.1	137.8	91.35	-1,286.0	9,547.5	5,681.7	5,419.9	261.83	21.700	
11,318.9	6,912.5	6,898.5	6,898.5	124.7	137.8	91.34	-1,286.0	9,547.5	5,663.9	5,401.6	262.35	21.589	
11,400.0	6,911.8	6,897.8	6,897.8	126.9	137.8	91.32	-1,286.0	9,547.5	5,587.6	5,323.0	264.60	21.117	
11,417.3	6,911.6	6,897.6	6,897.6	127.4	137.8	91.32	-1,286.0	9,547.5	5,571.3	5,306.2	265.08	21.018	
11,500.0	6,911.0	6,897.0	6,897.0	129.7	137.8	91.30	-1,286.0	9,547.5	5,493.7	5,226.3	267.37	20.547	
11,515.7	6,910.8	6,896.8	6,896.8	130.2	137.8	91.29	-1,286.0	9,547.5	5,478.9	5,211.1	267.80	20.459	
11,600.0	6,910.1	6,896.1	6,896.1	132.5	137.8	91.27	-1,286.0	9,547.5	5,400.0	5,129.8	270.14	19.990	
11,614.1	6,910.0	6,896.0	6,896.0	132.9	137.8	91.27	-1,286.0	9,547.5	5,386.7	5,116.2	270.53	19.912	
11,700.0	6,909.3	6,895.3	6,895.3	135.3	137.7	91.24	-1,286.0	9,547.5	5,306.5	5,033.6	272.91	19.444	
11,712.6	6,909.2	6,895.2	6,895.2	135.6	137.7	91.24	-1,286.0	9,547.5	5,294.8	5,021.5	273.26	19.377	
11,800.0	6,908.5	6,894.5	6,894.5	138.1	137.7	91.22	-1,286.0	9,547.5	5,213.3	4,937.6	275.68	18.911	
11,811.0	6,908.4	6,894.4	6,894.4	138.4	137.7	91.22	-1,286.0	9,547.5	5,203.0	4,927.1	275.98	18.853	
11,900.0	6,907.6	6,893.6	6,893.6	140.9	137.7	91.19	-1,286.0	9,547.5	5,120.3	4,841.9	278.45	18.388	
11,909.4	6,907.5	6,893.5	6,893.5	141.1	137.7	91.19	-1,286.0	9,547.5	5,111.6	4,832.9	278.71	18.340	
12,000.0	6,906.8	6,892.8	6,892.8	143.6	137.7	91.17	-1,286.0	9,547.5	5,027.6	4,746.4	281.23	17.877	
12,007.8	6,906.7	6,892.7	6,892.7	143.9	137.7	91.17	-1,286.0	9,547.5	5,020.4	4,738.9	281.44	17.838	
12,100.0	6,905.9	6,891.9	6,891.9	146.4	137.7	91.14	-1,286.0	9,547.5	4,935.2	4,651.2	284.00	17.377	
12,106.3	6,905.9	6,891.9	6,891.9	146.6	137.7	91.14	-1,286.0	9,547.5	4,929.4	4,645.2	284.18	17.346	
12,200.0	6,905.1	6,891.1	6,891.1	149.2	137.7	91.12	-1,286.0	9,547.5	4,843.1	4,556.3	286.78	16.888	
12,204.7	6,905.1	6,891.1	6,891.1	149.4	137.7	91.12	-1,286.0	9,547.5	4,838.8	4,551.9	286.91	16.865	
12,300.0	6,904.3	6,890.3	6,890.3	152.0	137.6	91.09	-1,286.0	9,547.5	4,751.3	4,461.8	289.55	16.409	
12,303.1	6,904.3	6,890.3	6,890.3	152.1	137.6	91.09	-1,286.0	9,547.5	4,748.4	4,458.8	289.64	16.394	
12,400.0	6,903.4	6,889.4	6,889.4	154.8	137.6	91.07	-1,286.0	9,547.5	4,659.9	4,367.5	292.33	15.940	
12,401.5	6,903.4	6,889.4	6,889.4	154.8	137.6	91.07	-1,286.0	9,547.5	4,658.4	4,366.1	292.37	15.933	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT FORD PM-F #26-16 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,500.0	6,902.6	6,888.6	6,888.6	157.6	137.6	91.04	-1,286.0	9,547.5	4,568.8	4,273.6	295.11	15.482	
12,598.4	6,901.8	6,887.8	6,887.8	160.3	137.6	91.02	-1,286.0	9,547.5	4,479.5	4,181.6	297.84	15.040	
12,600.0	6,901.8	6,887.8	6,887.8	160.4	137.6	91.02	-1,286.0	9,547.5	4,478.0	4,180.2	297.89	15.033	
12,696.8	6,901.0	6,887.0	6,887.0	163.1	137.6	90.99	-1,286.0	9,547.5	4,390.6	4,090.0	300.58	14.607	
12,700.0	6,900.9	6,886.9	6,886.9	163.2	137.6	90.99	-1,286.0	9,547.5	4,387.7	4,087.1	300.66	14.593	
12,795.2	6,900.1	6,886.1	6,886.1	165.8	137.6	90.97	-1,286.0	9,547.5	4,302.1	3,998.8	303.31	14.184	
12,800.0	6,900.1	6,886.1	6,886.1	166.0	137.6	90.97	-1,286.0	9,547.5	4,297.8	3,994.4	303.44	14.164	
12,893.7	6,899.3	6,885.3	6,885.3	168.6	137.5	90.94	-1,286.0	9,547.5	4,214.1	3,908.0	306.05	13.769	
12,900.0	6,899.3	6,885.3	6,885.3	168.8	137.5	90.94	-1,286.0	9,547.5	4,208.4	3,902.2	306.22	13.743	
12,992.1	6,898.5	6,884.5	6,884.5	171.3	137.5	90.92	-1,286.0	9,547.5	4,126.5	3,817.7	308.78	13.364	
13,000.0	6,898.4	6,884.4	6,884.4	171.6	137.5	90.92	-1,286.0	9,547.5	4,119.5	3,810.5	309.00	13.332	
13,090.5	6,897.7	6,883.7	6,883.7	174.1	137.5	90.89	-1,286.0	9,547.5	4,039.4	3,727.9	311.52	12.967	
13,100.0	6,897.6	6,883.6	6,883.6	174.4	137.5	90.89	-1,286.0	9,547.5	4,031.0	3,719.3	311.78	12.929	
13,188.9	6,896.9	6,882.9	6,882.9	176.8	137.5	90.87	-1,286.0	9,547.5	3,952.9	3,638.6	314.26	12.578	
13,200.0	6,896.8	6,882.8	6,882.8	177.2	137.5	90.87	-1,286.0	9,547.5	3,943.2	3,628.6	314.56	12.535	
13,287.4	6,896.0	6,882.0	6,882.0	179.6	137.5	90.84	-1,286.0	9,547.5	3,866.9	3,549.9	316.99	12.199	
13,300.0	6,895.9	6,881.9	6,881.9	180.0	137.5	90.84	-1,286.0	9,547.5	3,855.9	3,538.5	317.34	12.150	
13,385.8	6,895.2	6,881.2	6,881.2	182.4	137.5	90.82	-1,286.0	9,547.5	3,781.5	3,461.8	319.73	11.827	
13,400.0	6,895.1	6,881.1	6,881.1	182.7	137.5	90.82	-1,286.0	9,547.5	3,769.2	3,449.1	320.13	11.774	
13,484.2	6,894.4	6,880.4	6,880.4	185.1	137.4	90.80	-1,286.0	9,547.5	3,696.8	3,374.3	322.47	11.464	
13,500.0	6,894.3	6,880.3	6,880.3	185.5	137.4	90.79	-1,286.0	9,547.5	3,683.3	3,360.4	322.91	11.407	
13,582.6	6,893.6	6,879.6	6,879.6	187.9	137.4	90.77	-1,286.0	9,547.5	3,612.8	3,287.5	325.21	11.109	
13,600.0	6,893.4	6,879.4	6,879.4	188.3	137.4	90.77	-1,286.0	9,547.5	3,598.0	3,272.3	325.69	11.047	
13,681.1	6,892.8	6,878.8	6,878.8	190.6	137.4	90.75	-1,286.0	9,547.5	3,529.5	3,201.5	327.95	10.762	
13,700.0	6,892.6	6,878.6	6,878.6	191.1	137.4	90.74	-1,286.0	9,547.5	3,513.5	3,185.1	328.47	10.697	
13,779.5	6,891.9	6,877.9	6,877.9	193.4	137.4	90.72	-1,286.0	9,547.5	3,447.0	3,116.3	330.69	10.424	
13,800.0	6,891.8	6,877.8	6,877.8	193.9	137.4	90.72	-1,286.0	9,547.5	3,429.9	3,098.7	331.26	10.354	
13,877.9	6,891.1	6,877.1	6,877.1	196.1	137.4	90.70	-1,286.0	9,547.5	3,365.4	3,031.9	333.42	10.093	
13,900.0	6,890.9	6,876.9	6,876.9	196.7	137.4	90.69	-1,286.0	9,547.5	3,347.2	3,013.1	334.04	10.020	
13,976.3	6,890.3	6,876.3	6,876.3	198.9	137.4	90.67	-1,286.0	9,547.5	3,284.7	2,948.5	336.16	9.771	
14,000.0	6,890.1	6,876.1	6,876.1	199.5	137.4	90.67	-1,286.0	9,547.5	3,265.4	2,928.6	336.82	9.695	
14,074.8	6,889.5	6,875.5	6,875.5	201.6	137.3	90.65	-1,286.0	9,547.5	3,204.9	2,866.0	338.90	9.457	
14,100.0	6,889.3	6,875.3	6,875.3	202.3	137.3	90.64	-1,286.0	9,547.5	3,184.7	2,845.1	339.61	9.378	
14,173.2	6,888.7	6,874.7	6,874.7	204.4	137.3	90.62	-1,286.0	9,547.5	3,126.3	2,784.6	341.64	9.151	
14,200.0	6,888.4	6,874.4	6,874.4	205.1	137.3	90.62	-1,286.0	9,547.5	3,105.1	2,762.7	342.39	9.069	
14,271.6	6,887.8	6,873.8	6,873.8	207.1	137.3	90.60	-1,286.0	9,547.5	3,048.8	2,704.4	344.38	8.853	
14,300.0	6,887.6	6,873.6	6,873.6	207.9	137.3	90.59	-1,286.0	9,547.5	3,026.7	2,681.5	345.17	8.769	
14,370.0	6,887.0	6,873.0	6,873.0	209.9	137.3	90.57	-1,286.0	9,547.5	2,972.5	2,625.4	347.12	8.563	
14,400.0	6,886.8	6,872.8	6,872.8	210.7	137.3	90.57	-1,286.0	9,547.5	2,949.6	2,601.6	347.96	8.477	
14,468.5	6,886.2	6,872.2	6,872.2	212.6	137.3	90.55	-1,286.0	9,547.5	2,897.6	2,547.7	349.87	8.282	
14,500.0	6,885.9	6,871.9	6,871.9	213.5	137.3	90.54	-1,286.0	9,547.5	2,873.9	2,523.1	350.74	8.194	
14,566.9	6,885.4	6,871.4	6,871.4	215.4	137.3	90.52	-1,286.0	9,547.5	2,824.1	2,471.5	352.61	8.009	
14,600.0	6,885.1	6,871.1	6,871.1	216.3	137.3	90.51	-1,286.0	9,547.5	2,799.7	2,446.2	353.53	7.919	
14,613.0	6,885.0	6,871.0	6,871.0	216.7	137.3	90.51	-1,286.0	9,547.5	2,790.2	2,436.3	353.89	7.884 CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HERBSTER F #35-27 - 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 +N/-S (usft)	+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	98.69	-1,322.7	8,650.4	8,751.0				
98.4	98.4	81.4	81.4	0.1	0.4	98.69	-1,322.7	8,650.4	8,751.0	8,750.5	0.49	N/A	
100.0	100.0	83.0	83.0	0.1	0.4	98.69	-1,322.7	8,650.4	8,751.0	8,750.5	0.50	N/A	
196.8	196.8	179.8	179.8	0.3	2.5	98.69	-1,322.7	8,650.4	8,751.0	8,748.2	2.78	3,152.256	
200.0	200.0	183.0	183.0	0.3	2.5	98.69	-1,322.7	8,650.4	8,751.0	8,748.1	2.86	3,058.435	
295.3	295.3	278.3	278.3	0.5	4.6	98.69	-1,322.7	8,650.4	8,751.0	8,745.9	5.12	1,707.880	
300.0	300.0	283.0	283.0	0.5	4.7	98.69	-1,322.7	8,650.4	8,751.0	8,745.8	5.23	1,672.356	
393.7	393.7	376.7	376.7	0.7	6.6	98.69	-1,322.7	8,650.4	8,751.0	8,743.6	7.36	1,188.804	
400.0	400.0	383.0	383.0	0.8	6.7	98.69	-1,322.7	8,650.4	8,751.0	8,743.5	7.50	1,166.202	
492.1	492.1	475.1	475.1	1.0	8.6	98.69	-1,322.7	8,650.4	8,751.0	8,741.4	9.58	913.427	
500.0	500.0	483.0	483.0	1.0	8.8	98.69	-1,322.7	8,650.4	8,751.0	8,741.2	9.76	896.828	
590.5	590.5	573.5	573.5	1.2	10.6	98.69	-1,322.7	8,650.4	8,751.0	8,739.2	11.79	742.090	
600.0	600.0	583.0	583.0	1.2	10.8	98.69	-1,322.7	8,650.4	8,751.0	8,739.0	12.00	728.970	
689.0	689.0	672.0	672.0	1.4	12.6	98.69	-1,322.7	8,650.4	8,751.0	8,737.0	14.00	625.042	
700.0	700.0	683.0	683.0	1.4	12.8	98.69	-1,322.7	8,650.4	8,751.0	8,736.7	14.25	614.195	
787.4	787.4	770.4	770.4	1.6	14.6	98.69	-1,322.7	8,650.4	8,751.0	8,734.8	16.21	539.959	
800.0	800.0	783.0	783.0	1.7	14.8	98.69	-1,322.7	8,650.4	8,751.0	8,734.5	16.49	530.713	
885.8	885.8	868.8	868.8	1.9	16.6	98.69	-1,322.7	8,650.4	8,751.0	8,732.6	18.41	475.299	
900.0	900.0	883.0	883.0	1.9	16.8	98.69	-1,322.7	8,650.4	8,751.0	8,732.3	18.73	467.242	
984.2	984.2	967.2	967.2	2.1	18.5	98.69	-1,322.7	8,650.4	8,751.0	8,730.4	20.62	424.488	
1,000.0	1,000.0	983.0	983.0	2.1	18.9	98.69	-1,322.7	8,650.4	8,751.0	8,730.0	20.97	417.350	
1,082.7	1,082.7	1,065.7	1,065.7	2.3	20.5	98.69	-1,322.7	8,650.4	8,751.0	8,728.2	22.82	383.503	
1,100.0	1,100.0	1,083.0	1,083.0	2.3	20.9	98.69	-1,322.7	8,650.4	8,751.0	8,727.8	23.21	377.095	
1,150.0	1,150.0	1,133.0	1,133.0	2.4	21.9	98.69	-1,322.7	8,650.4	8,751.0	8,726.7	24.33	359.748	
1,181.1	1,181.1	1,164.1	1,164.1	2.5	22.5	131.38	-1,322.7	8,650.4	8,751.1	8,726.1	25.02	349.766	
1,200.0	1,200.0	1,183.0	1,183.0	2.6	22.9	131.38	-1,322.7	8,650.4	8,751.3	8,725.8	25.44	343.980	
1,279.5	1,279.5	1,262.5	1,262.5	2.7	24.5	131.37	-1,322.7	8,650.4	8,752.9	8,725.7	27.21	321.730	
1,300.0	1,299.9	1,282.9	1,282.9	2.8	24.9	131.36	-1,322.7	8,650.4	8,753.6	8,725.9	27.66	316.494	
1,377.9	1,377.7	1,360.7	1,360.7	3.0	26.5	131.34	-1,322.7	8,650.4	8,757.0	8,727.6	29.37	298.131	
1,400.0	1,399.7	1,382.7	1,382.7	3.0	26.9	131.33	-1,322.7	8,650.4	8,758.2	8,728.3	29.86	293.356	
1,476.4	1,475.7	1,458.7	1,458.7	3.2	28.4	131.29	-1,322.7	8,650.4	8,763.3	8,731.8	31.52	278.023	
1,500.0	1,499.1	1,482.1	1,482.1	3.2	28.9	131.27	-1,322.7	8,650.4	8,765.1	8,733.1	32.03	273.643	
1,574.8	1,573.2	1,556.2	1,556.2	3.4	30.4	131.22	-1,322.7	8,650.4	8,771.8	8,738.2	33.65	260.702	
1,600.0	1,598.2	1,581.2	1,581.2	3.5	30.9	131.20	-1,322.7	8,650.4	8,774.4	8,740.2	34.19	256.662	
1,673.2	1,670.3	1,653.3	1,653.3	3.7	32.3	131.14	-1,322.7	8,650.4	8,782.6	8,746.8	35.75	245.635	
1,700.0	1,696.6	1,679.6	1,679.6	3.8	32.9	131.11	-1,322.7	8,650.4	8,785.9	8,749.6	36.32	241.887	
1,749.9	1,745.5	1,728.5	1,728.5	3.9	33.9	131.06	-1,322.7	8,650.4	8,792.5	8,755.1	37.38	235.216	
1,771.6	1,766.8	1,749.8	1,749.8	4.0	34.3	131.08	-1,322.7	8,650.4	8,795.5	8,757.6	37.87	232.273	
1,800.0	1,794.5	1,777.5	1,777.5	4.1	34.8	131.11	-1,322.7	8,650.4	8,799.4	8,760.9	38.50	228.558	
1,870.1	1,863.1	1,846.1	1,846.1	4.3	36.2	131.18	-1,322.7	8,650.4	8,809.1	8,769.1	40.07	219.833	
1,900.0	1,892.3	1,875.3	1,875.3	4.4	36.8	131.21	-1,322.7	8,650.4	8,813.3	8,772.5	40.74	216.316	
1,968.5	1,959.4	1,942.4	1,942.4	4.7	38.2	131.28	-1,322.7	8,650.4	8,822.8	8,780.5	42.29	208.637	
2,000.0	1,990.2	1,973.2	1,973.2	4.8	38.8	131.31	-1,322.7	8,650.4	8,827.2	8,784.2	43.00	205.296	
2,066.9	2,055.6	2,038.6	2,038.6	5.1	40.1	131.38	-1,322.7	8,650.4	8,836.5	8,791.9	44.51	198.520	
2,100.0	2,088.0	2,071.0	2,071.0	5.2	40.8	131.41	-1,322.7	8,650.4	8,841.1	8,795.8	45.26	195.333	
2,165.3	2,151.9	2,134.9	2,134.9	5.4	42.0	131.48	-1,322.7	8,650.4	8,850.2	8,803.4	46.75	189.323	
2,200.0	2,185.8	2,168.8	2,168.8	5.6	42.7	131.51	-1,322.7	8,650.4	8,855.0	8,807.5	47.53	186.289	
2,263.8	2,248.2	2,231.2	2,231.2	5.8	44.0	131.57	-1,322.7	8,650.4	8,863.9	8,814.9	48.99	180.946	
2,300.0	2,283.6	2,266.6	2,266.6	6.0	44.7	131.61	-1,322.7	8,650.4	8,869.0	8,819.1	49.81	178.050	
2,362.2	2,344.5	2,327.5	2,327.5	6.2	45.9	131.67	-1,322.7	8,650.4	8,877.6	8,826.4	51.23	173.284	
2,400.0	2,381.4	2,364.4	2,364.4	6.4	46.7	131.71	-1,322.7	8,650.4	8,882.9	8,830.8	52.09	170.515	
2,460.6	2,440.7	2,423.7	2,423.7	6.6	47.8	131.77	-1,322.7	8,650.4	8,891.4	8,837.9	53.48	166.253	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,462.2	2,462.2	6.8	48.6	131.81	-1,322.7	8,650.4	8,896.9	8,842.6	54.38	163.602	
2,559.0	2,537.0	2,520.0	2,520.0	7.0	49.8	131.87	-1,322.7	8,650.4	8,905.2	8,849.5	55.73	159.780	
2,600.0	2,577.1	2,560.1	2,560.1	7.2	50.6	131.91	-1,322.7	8,650.4	8,911.0	8,854.3	56.67	157.238	
2,657.5	2,633.3	2,616.3	2,616.3	7.4	51.7	131.96	-1,322.7	8,650.4	8,919.1	8,861.1	57.99	153.803	
2,700.0	2,674.9	2,657.9	2,657.9	7.6	52.6	132.01	-1,322.7	8,650.4	8,925.1	8,866.1	58.97	151.361	
2,755.9	2,729.6	2,712.6	2,712.6	7.9	53.7	132.06	-1,322.7	8,650.4	8,932.9	8,872.7	60.25	148.268	
2,800.0	2,772.7	2,755.7	2,755.7	8.0	54.5	132.10	-1,322.7	8,650.4	8,939.1	8,877.9	61.26	145.920	
2,854.3	2,825.8	2,808.8	2,808.8	8.3	55.6	132.16	-1,322.7	8,650.4	8,946.8	8,884.3	62.51	143.130	
2,900.0	2,870.5	2,853.5	2,853.5	8.5	56.5	132.20	-1,322.7	8,650.4	8,953.3	8,889.7	63.56	140.869	
2,952.7	2,922.1	2,905.1	2,905.1	8.7	57.5	132.25	-1,322.7	8,650.4	8,960.7	8,896.0	64.77	138.347	
3,000.0	2,968.3	2,951.3	2,951.3	8.9	58.5	132.30	-1,322.7	8,650.4	8,967.4	8,901.6	65.86	136.167	
3,051.2	3,018.4	3,001.4	3,001.4	9.1	59.5	132.35	-1,322.7	8,650.4	8,974.7	8,907.6	67.03	133.884	
3,100.0	3,066.1	3,049.1	3,049.1	9.3	60.4	132.39	-1,322.7	8,650.4	8,981.6	8,913.4	68.16	131.780	
3,149.6	3,114.7	3,097.7	3,097.7	9.5	61.4	132.44	-1,322.7	8,650.4	8,988.6	8,919.3	69.30	129.712	
3,200.0	3,164.0	3,147.0	3,147.0	9.8	62.4	132.49	-1,322.7	8,650.4	8,995.8	8,925.3	70.46	127.679	
3,248.0	3,210.9	3,193.9	3,193.9	10.0	63.3	132.54	-1,322.7	8,650.4	9,002.6	8,931.0	71.56	125.802	
3,300.0	3,261.8	3,244.8	3,244.8	10.2	64.4	132.59	-1,322.7	8,650.4	9,010.0	8,937.2	72.76	123.836	
3,346.4	3,307.2	3,290.2	3,290.2	10.4	65.3	132.63	-1,322.7	8,650.4	9,016.6	8,942.8	73.83	122.132	
3,400.0	3,359.6	3,342.6	3,342.6	10.6	66.3	132.68	-1,322.7	8,650.4	9,024.2	8,949.2	75.06	120.228	
3,444.9	3,403.5	3,386.5	3,386.5	10.8	67.2	132.73	-1,322.7	8,650.4	9,030.6	8,954.6	76.09	118.679	
3,500.0	3,457.4	3,440.4	3,440.4	11.1	68.3	132.78	-1,322.7	8,650.4	9,038.5	8,961.2	77.36	116.834	
3,543.3	3,499.8	3,482.8	3,482.8	11.3	69.1	132.82	-1,322.7	8,650.4	9,044.7	8,966.3	78.36	115.426	
3,600.0	3,555.2	3,538.2	3,538.2	11.5	70.3	132.87	-1,322.7	8,650.4	9,052.8	8,973.1	79.66	113.637	
3,641.7	3,596.0	3,579.0	3,579.0	11.7	71.1	132.91	-1,322.7	8,650.4	9,058.8	8,978.2	80.63	112.356	
3,700.0	3,653.0	3,636.0	3,636.0	11.9	72.2	132.97	-1,322.7	8,650.4	9,067.1	8,985.2	81.97	110.619	
3,740.1	3,692.3	3,675.3	3,675.3	12.1	73.0	133.01	-1,322.7	8,650.4	9,072.9	8,990.0	82.89	109.454	
3,800.0	3,750.8	3,733.8	3,733.8	12.4	74.2	133.06	-1,322.7	8,650.4	9,081.5	8,997.2	84.27	107.766	
3,838.6	3,788.6	3,771.6	3,771.6	12.6	75.0	133.10	-1,322.7	8,650.4	9,087.0	9,001.9	85.16	106.707	
3,900.0	3,848.7	3,831.7	3,831.7	12.8	76.2	133.16	-1,322.7	8,650.4	9,095.9	9,009.3	86.57	105.065	
3,937.0	3,884.9	3,867.9	3,867.9	13.0	76.9	133.19	-1,322.7	8,650.4	9,101.2	9,013.8	87.43	104.102	
4,000.0	3,946.5	3,929.5	3,929.5	13.3	78.1	133.25	-1,322.7	8,650.4	9,110.3	9,021.4	88.88	102.505	
4,035.4	3,981.1	3,964.1	3,964.1	13.4	78.8	133.29	-1,322.7	8,650.4	9,115.4	9,025.7	89.69	101.629	
4,100.0	4,044.3	4,027.3	4,027.3	13.7	80.1	133.35	-1,322.7	8,650.4	9,124.7	9,033.5	91.18	100.074	
4,133.8	4,077.4	4,060.4	4,060.4	13.9	80.8	133.38	-1,322.7	8,650.4	9,129.6	9,037.6	91.96	99.279	
4,200.0	4,142.1	4,125.1	4,125.1	14.2	82.1	133.44	-1,322.7	8,650.4	9,139.1	9,045.6	93.48	97.763	
4,232.3	4,173.7	4,156.7	4,156.7	14.3	82.7	133.47	-1,322.7	8,650.4	9,143.8	9,049.6	94.23	97.042	
4,300.0	4,239.9	4,222.9	4,222.9	14.6	84.0	133.53	-1,322.7	8,650.4	9,153.6	9,057.8	95.78	95.564	
4,330.7	4,270.0	4,253.0	4,253.0	14.7	84.6	133.56	-1,322.7	8,650.4	9,158.0	9,061.5	96.49	94.910	
4,400.0	4,337.7	4,320.7	4,320.7	15.0	86.0	133.63	-1,322.7	8,650.4	9,168.1	9,070.0	98.09	93.469	
4,429.1	4,366.2	4,349.2	4,349.2	15.2	86.6	133.65	-1,322.7	8,650.4	9,172.3	9,073.6	98.76	92.877	
4,500.0	4,435.6	4,418.6	4,418.6	15.5	88.0	133.72	-1,322.7	8,650.4	9,182.6	9,082.2	100.39	91.470	
4,527.5	4,462.5	4,445.5	4,445.5	15.6	88.5	133.75	-1,322.7	8,650.4	9,186.6	9,085.6	101.02	90.936	
4,600.0	4,533.4	4,516.4	4,516.4	15.9	89.9	133.81	-1,322.7	8,650.4	9,197.1	9,094.5	102.69	89.562	
4,626.0	4,558.8	4,541.8	4,541.8	16.0	90.4	133.84	-1,322.7	8,650.4	9,200.9	9,097.6	103.29	89.080	
4,673.6	4,605.3	4,588.3	4,588.3	16.3	91.4	133.88	-1,322.7	8,650.4	9,207.9	9,103.5	104.38	88.212	
4,700.0	4,631.2	4,614.2	4,614.2	16.4	91.9	133.96	-1,322.7	8,650.4	9,211.6	9,106.6	105.06	87.679	
4,724.4	4,655.1	4,638.1	4,638.1	16.4	92.4	134.03	-1,322.7	8,650.4	9,215.0	9,109.3	105.67	87.204	
4,800.0	4,729.5	4,712.5	4,712.5	16.7	93.9	134.22	-1,322.7	8,650.4	9,224.4	9,116.8	107.56	85.763	
4,822.8	4,752.1	4,735.1	4,735.1	16.7	94.3	134.28	-1,322.7	8,650.4	9,227.0	9,118.8	108.12	85.342	
4,900.0	4,828.4	4,811.4	4,811.4	17.0	95.9	134.44	-1,322.7	8,650.4	9,234.7	9,124.7	110.00	83.953	
4,921.2	4,849.5	4,832.5	4,832.5	17.0	96.3	134.48	-1,322.7	8,650.4	9,236.6	9,126.1	110.51	83.583	
5,000.0	4,927.8	4,910.8	4,910.8	17.2	97.9	134.60	-1,322.7	8,650.4	9,242.7	9,130.3	112.38	82.245	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,930.4	4,930.4	17.2	98.3	134.63	-1,322.7	8,650.4	9,243.9	9,131.1	112.84	81.923	
5,100.0	5,027.5	5,010.5	5,010.5	17.4	99.9	134.71	-1,322.7	8,650.4	9,248.1	9,133.5	114.69	80.637	
5,118.1	5,045.6	5,028.6	5,028.6	17.4	100.2	134.73	-1,322.7	8,650.4	9,248.9	9,133.8	115.10	80.358	
5,200.0	5,127.4	5,110.4	5,110.4	17.6	101.9	134.78	-1,322.7	8,650.4	9,251.2	9,134.3	116.92	79.125	
5,216.5	5,143.9	5,126.9	5,126.9	17.6	102.2	134.78	-1,322.7	8,650.4	9,251.4	9,134.2	117.28	78.885	
5,273.4	5,200.8	5,183.8	5,183.8	17.7	103.4	102.10	-1,322.7	8,650.4	9,251.8	9,133.2	118.67	77.965	
5,300.0	5,227.4	5,210.4	5,210.4	17.7	103.9	102.10	-1,322.7	8,650.4	9,251.8	9,132.6	119.24	77.590	
5,314.9	5,242.3	5,225.3	5,225.3	17.7	104.2	102.10	-1,322.7	8,650.4	9,251.8	9,132.3	119.57	77.378	
5,400.0	5,327.4	5,310.4	5,310.4	17.8	105.9	102.10	-1,322.7	8,650.4	9,251.8	9,130.4	121.42	76.199	
5,413.4	5,340.8	5,323.8	5,323.8	17.9	106.2	102.10	-1,322.7	8,650.4	9,251.8	9,130.1	121.71	76.017	
5,500.0	5,427.4	5,410.4	5,410.4	18.0	107.9	102.10	-1,322.7	8,650.4	9,251.8	9,128.2	123.59	74.857	
5,511.8	5,439.2	5,422.2	5,422.2	18.0	108.2	102.10	-1,322.7	8,650.4	9,251.8	9,128.0	123.85	74.702	
5,600.0	5,527.4	5,510.4	5,510.4	18.1	109.9	102.10	-1,322.7	8,650.4	9,251.8	9,126.1	125.77	73.561	
5,610.2	5,537.6	5,520.6	5,520.6	18.1	110.1	102.10	-1,322.7	8,650.4	9,251.8	9,125.8	125.99	73.430	
5,700.0	5,627.4	5,610.4	5,610.4	18.3	111.9	102.10	-1,322.7	8,650.4	9,251.8	9,123.9	127.95	72.307	
5,708.6	5,636.0	5,619.0	5,619.0	18.3	112.1	102.10	-1,322.7	8,650.4	9,251.8	9,123.7	128.14	72.201	
5,800.0	5,727.4	5,710.4	5,710.4	18.4	113.9	102.10	-1,322.7	8,650.4	9,251.8	9,121.7	130.13	71.095	
5,807.1	5,734.5	5,717.5	5,717.5	18.4	114.1	102.10	-1,322.7	8,650.4	9,251.8	9,121.5	130.29	71.011	
5,900.0	5,827.4	5,810.4	5,810.4	18.6	116.0	102.10	-1,322.7	8,650.4	9,251.8	9,119.5	132.32	69.923	
5,905.5	5,832.9	5,815.9	5,815.9	18.6	116.1	102.10	-1,322.7	8,650.4	9,251.8	9,119.4	132.44	69.859	
6,000.0	5,927.4	5,910.4	5,910.4	18.7	118.0	102.10	-1,322.7	8,650.4	9,251.8	9,117.3	134.50	68.787	
6,003.9	5,931.3	5,914.3	5,914.3	18.7	118.0	102.10	-1,322.7	8,650.4	9,251.8	9,117.2	134.58	68.744	
6,100.0	6,027.4	6,010.4	6,010.4	18.9	120.0	102.10	-1,322.7	8,650.4	9,251.8	9,115.2	136.68	67.688	
6,102.3	6,029.7	6,012.7	6,012.7	18.9	120.0	102.10	-1,322.7	8,650.4	9,251.8	9,115.1	136.74	67.662	
6,200.0	6,127.4	6,110.4	6,110.4	19.0	122.0	102.10	-1,322.7	8,650.4	9,251.8	9,113.0	138.87	66.622	
6,200.8	6,128.2	6,111.2	6,111.2	19.0	122.0	102.10	-1,322.7	8,650.4	9,251.8	9,112.9	138.89	66.614	
6,299.2	6,226.6	6,209.6	6,209.6	19.2	124.0	102.10	-1,322.7	8,650.4	9,251.8	9,110.8	141.04	65.597	
6,301.4	6,228.8	6,211.8	6,211.8	19.2	124.0	102.10	-1,322.7	8,650.4	9,251.8	9,110.7	141.09	65.575	
6,350.0	6,277.4	6,260.4	6,260.4	19.3	125.0	12.13	-1,322.7	8,650.4	9,250.2	9,108.6	141.57	65.338	
6,397.6	6,324.7	6,307.7	6,307.7	19.3	126.0	12.22	-1,322.7	8,650.4	9,245.5	9,103.9	141.63	65.279	
6,400.0	6,327.1	6,310.1	6,310.1	19.3	126.0	12.22	-1,322.7	8,650.4	9,245.2	9,103.6	141.62	65.283	
6,450.0	6,376.3	6,359.3	6,359.3	19.3	127.0	12.38	-1,322.7	8,650.4	9,236.8	9,095.8	140.98	65.517	
6,496.0	6,421.1	6,404.1	6,404.1	19.3	127.9	12.58	-1,322.7	8,650.4	9,226.1	9,086.3	139.80	65.997	
6,500.0	6,424.9	6,407.9	6,407.9	19.3	128.0	12.60	-1,322.7	8,650.4	9,225.1	9,085.4	139.67	66.051	
6,550.0	6,472.4	6,455.4	6,455.4	19.3	128.9	12.90	-1,322.7	8,650.4	9,210.1	9,072.4	137.67	66.898	
6,594.5	6,513.8	6,496.8	6,496.8	19.3	129.8	13.24	-1,322.7	8,650.4	9,194.0	9,058.7	135.34	67.931	
6,600.0	6,518.8	6,501.8	6,501.8	19.3	129.9	13.28	-1,322.7	8,650.4	9,191.9	9,056.8	135.02	68.078	
6,650.0	6,563.8	6,546.8	6,546.8	19.3	130.8	13.76	-1,322.7	8,650.4	9,170.5	9,038.8	131.73	69.617	
6,692.9	6,601.1	6,584.1	6,584.1	19.2	131.5	14.25	-1,322.7	8,650.4	9,149.8	9,021.4	128.43	71.243	
6,700.0	6,607.1	6,590.1	6,590.1	19.2	131.6	14.34	-1,322.7	8,650.4	9,146.2	9,018.3	127.85	71.541	
6,750.0	6,648.6	6,631.6	6,631.6	19.2	132.5	15.04	-1,322.7	8,650.4	9,118.9	8,995.5	123.43	73.879	
6,791.3	6,681.4	6,664.4	6,664.4	19.1	133.1	15.73	-1,322.7	8,650.4	9,094.3	8,974.9	119.44	76.140	
6,800.0	6,688.1	6,671.1	6,671.1	19.1	133.3	15.89	-1,322.7	8,650.4	9,088.9	8,970.4	118.57	76.653	
6,850.0	6,725.3	6,708.3	6,708.3	19.1	134.0	16.92	-1,322.7	8,650.4	9,056.3	8,942.9	113.40	79.861	
6,889.7	6,753.2	6,736.2	6,736.2	19.0	134.6	17.90	-1,322.7	8,650.4	9,028.7	8,919.5	109.19	82.688	
6,900.0	6,760.1	6,743.1	6,743.1	19.0	134.7	18.17	-1,322.7	8,650.4	9,021.3	8,913.2	108.10	83.450	
6,950.0	6,792.3	6,775.3	6,775.3	19.0	135.4	19.71	-1,322.7	8,650.4	8,984.0	8,881.0	102.95	87.262	
6,988.2	6,815.1	6,798.1	6,798.1	18.9	135.8	21.12	-1,322.7	8,650.4	8,954.0	8,854.7	99.37	90.112	
7,000.0	6,821.8	6,804.8	6,804.8	18.9	136.0	21.61	-1,322.7	8,650.4	8,944.5	8,846.2	98.35	90.945	
7,050.0	6,848.3	6,831.3	6,831.3	18.9	136.5	23.98	-1,322.7	8,650.4	8,903.2	8,808.3	94.88	93.834	
7,086.6	6,865.9	6,848.9	6,848.9	18.9	136.8	26.12	-1,322.7	8,650.4	8,871.9	8,778.3	93.53	94.859	
7,100.0	6,871.9	6,854.9	6,854.9	18.9	137.0	27.01	-1,322.7	8,650.4	8,860.2	8,766.8	93.36	94.901	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,875.3	6,875.3	18.8	137.4	30.93	-1,322.7	8,650.4	8,815.7	8,720.8	94.83	92.958	
7,185.0	6,904.7	6,887.7	6,887.7	18.8	137.6	34.40	-1,322.7	8,650.4	8,783.7	8,685.4	98.27	89.382	
7,200.0	6,909.5	6,892.5	6,892.5	18.9	137.7	36.11	-1,322.7	8,650.4	8,769.9	8,669.4	100.44	87.317	
7,250.0	6,923.4	6,906.4	6,906.4	19.3	138.0	43.09	-1,322.7	8,650.4	8,723.0	8,612.0	111.04	78.559	
7,283.4	6,930.8	6,913.8	6,913.8	19.8	138.1	49.10	-1,322.7	8,650.4	8,691.2	8,570.3	120.93	71.868	
7,300.0	6,933.9	6,916.9	6,916.9	20.0	138.2	52.57	-1,322.7	8,650.4	8,675.4	8,548.9	126.50	68.578	
7,350.0	6,940.9	6,923.9	6,923.9	20.8	138.4	65.23	-1,322.7	8,650.4	8,627.2	8,482.9	144.27	59.799	
7,381.9	6,943.6	6,926.6	6,926.6	21.4	138.4	74.98	-1,322.7	8,650.4	8,596.2	8,442.3	153.95	55.837	
7,400.0	6,944.5	6,927.5	6,927.5	21.7	138.4	80.98	-1,322.7	8,650.4	8,578.6	8,420.8	157.83	54.353	
7,432.4	6,945.0	6,928.0	6,928.0	22.3	138.4	92.06	-1,322.7	8,650.4	8,547.0	8,386.4	160.61	53.218	
7,480.3	6,944.6	6,927.6	6,927.6	23.2	138.4	92.05	-1,322.7	8,650.4	8,500.4	8,338.9	161.49	52.637	
7,500.0	6,944.4	6,927.4	6,927.4	23.6	138.4	92.04	-1,322.7	8,650.4	8,481.2	8,319.4	161.85	52.400	
7,578.7	6,943.7	6,926.7	6,926.7	25.2	138.4	92.02	-1,322.7	8,650.4	8,404.6	8,241.2	163.43	51.428	
7,600.0	6,943.6	6,926.6	6,926.6	25.6	138.4	92.02	-1,322.7	8,650.4	8,383.9	8,220.0	163.85	51.168	
7,677.1	6,942.9	6,925.9	6,925.9	27.3	138.4	92.00	-1,322.7	8,650.4	8,308.9	8,143.4	165.50	50.205	
7,700.0	6,942.7	6,925.7	6,925.7	27.8	138.4	91.99	-1,322.7	8,650.4	8,286.6	8,120.7	165.99	49.924	
7,775.6	6,942.1	6,925.1	6,925.1	29.5	138.4	91.97	-1,322.7	8,650.4	8,213.2	8,045.5	167.68	48.982	
7,800.0	6,941.9	6,924.9	6,924.9	30.1	138.4	91.97	-1,322.7	8,650.4	8,189.5	8,021.2	168.23	48.681	
7,874.0	6,941.3	6,924.3	6,924.3	31.8	138.4	91.95	-1,322.7	8,650.4	8,117.6	7,947.6	169.95	47.765	
7,900.0	6,941.1	6,924.1	6,924.1	32.4	138.4	91.94	-1,322.7	8,650.4	8,092.3	7,921.8	170.55	47.447	
7,972.4	6,940.4	6,923.4	6,923.4	34.2	138.3	91.92	-1,322.7	8,650.4	8,022.1	7,849.8	172.29	46.561	
8,000.0	6,940.2	6,923.2	6,923.2	34.9	138.3	91.92	-1,322.7	8,650.4	7,995.3	7,822.3	172.95	46.229	
8,070.8	6,939.6	6,922.6	6,922.6	36.6	138.3	91.90	-1,322.7	8,650.4	7,926.6	7,751.9	174.69	45.375	
8,100.0	6,939.4	6,922.4	6,922.4	37.3	138.3	91.89	-1,322.7	8,650.4	7,898.3	7,722.9	175.40	45.029	
8,169.3	6,938.8	6,921.8	6,921.8	39.1	138.3	91.88	-1,322.7	8,650.4	7,831.2	7,654.1	177.13	44.210	
8,200.0	6,938.5	6,921.5	6,921.5	39.8	138.3	91.87	-1,322.7	8,650.4	7,801.4	7,623.5	177.90	43.852	
8,267.7	6,938.0	6,921.0	6,921.0	41.6	138.3	91.85	-1,322.7	8,650.4	7,735.9	7,556.3	179.62	43.068	
8,300.0	6,937.7	6,920.7	6,920.7	42.4	138.3	91.84	-1,322.7	8,650.4	7,704.6	7,524.2	180.44	42.700	
8,366.1	6,937.2	6,920.2	6,920.2	44.1	138.3	91.83	-1,322.7	8,650.4	7,640.6	7,458.5	182.13	41.950	
8,400.0	6,936.9	6,919.9	6,919.9	45.0	138.3	91.82	-1,322.7	8,650.4	7,607.9	7,424.9	183.00	41.572	
8,464.5	6,936.3	6,919.3	6,919.3	46.6	138.3	91.80	-1,322.7	8,650.4	7,545.5	7,360.8	184.68	40.858	
8,500.0	6,936.0	6,919.0	6,919.0	47.6	138.3	91.79	-1,322.7	8,650.4	7,511.2	7,325.6	185.60	40.471	
8,563.0	6,935.5	6,918.5	6,918.5	49.2	138.2	91.78	-1,322.7	8,650.4	7,450.4	7,263.2	187.24	39.790	
8,600.0	6,935.2	6,918.2	6,918.2	50.2	138.2	91.77	-1,322.7	8,650.4	7,414.7	7,226.5	188.21	39.396	
8,661.4	6,934.7	6,917.7	6,917.7	51.8	138.2	91.75	-1,322.7	8,650.4	7,355.4	7,165.6	189.83	38.748	
8,700.0	6,934.4	6,917.4	6,917.4	52.8	138.2	91.74	-1,322.7	8,650.4	7,318.2	7,127.4	190.84	38.347	
8,759.8	6,933.9	6,916.9	6,916.9	54.4	138.2	91.73	-1,322.7	8,650.4	7,260.5	7,068.1	192.43	37.731	
8,800.0	6,933.5	6,916.5	6,916.5	55.5	138.2	91.72	-1,322.7	8,650.4	7,221.8	7,028.3	193.49	37.324	
8,858.2	6,933.0	6,916.0	6,916.0	57.1	138.2	91.70	-1,322.7	8,650.4	7,165.7	6,970.7	195.04	36.739	
8,900.0	6,932.7	6,915.7	6,915.7	58.2	138.2	91.69	-1,322.7	8,650.4	7,125.6	6,929.4	196.15	36.326	
8,956.7	6,932.2	6,915.2	6,915.2	59.7	138.2	91.68	-1,322.7	8,650.4	7,071.0	6,873.4	197.67	35.772	
9,000.0	6,931.8	6,914.8	6,914.8	60.9	138.2	91.67	-1,322.7	8,650.4	7,029.4	6,830.6	198.83	35.354	
9,055.1	6,931.4	6,914.4	6,914.4	62.4	138.2	91.66	-1,322.7	8,650.4	6,976.4	6,776.1	200.31	34.829	
9,100.0	6,931.0	6,914.0	6,914.0	63.6	138.2	91.64	-1,322.7	8,650.4	6,933.3	6,731.8	201.51	34.406	
9,153.5	6,930.6	6,913.6	6,913.6	65.0	138.1	91.63	-1,322.7	8,650.4	6,882.0	6,679.0	202.96	33.909	
9,200.0	6,930.2	6,913.2	6,913.2	66.3	138.1	91.62	-1,322.7	8,650.4	6,837.4	6,633.2	204.21	33.483	
9,251.9	6,929.7	6,912.7	6,912.7	67.7	138.1	91.61	-1,322.7	8,650.4	6,787.6	6,582.0	205.61	33.012	
9,300.0	6,929.3	6,912.3	6,912.3	69.0	138.1	91.59	-1,322.7	8,650.4	6,741.6	6,534.6	206.91	32.582	
9,350.4	6,928.9	6,911.9	6,911.9	70.4	138.1	91.58	-1,322.7	8,650.4	6,693.3	6,485.1	208.27	32.137	
9,400.0	6,928.5	6,911.5	6,911.5	71.7	138.1	91.57	-1,322.7	8,650.4	6,645.8	6,436.2	209.62	31.705	
9,448.8	6,928.1	6,911.1	6,911.1	73.0	138.1	91.56	-1,322.7	8,650.4	6,599.2	6,388.2	210.94	31.284	
9,500.0	6,927.7	6,910.7	6,910.7	74.4	138.1	91.55	-1,322.7	8,650.4	6,550.3	6,337.9	212.33	30.849	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HERBSTER F #35-27 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,910.3	6,910.3	75.7	138.1	91.53	-1,322.7	8,650.4	6,505.2	6,291.6	213.62	30.452	
9,600.0	6,926.8	6,909.8	6,909.8	77.2	138.1	91.52	-1,322.7	8,650.4	6,454.8	6,239.8	215.05	30.015	
9,645.6	6,926.4	6,909.4	6,909.4	78.4	138.1	91.51	-1,322.7	8,650.4	6,411.3	6,195.0	216.30	29.641	
9,700.0	6,926.0	6,909.0	6,909.0	79.9	138.1	91.50	-1,322.7	8,650.4	6,359.5	6,141.7	217.78	29.202	
9,744.1	6,925.6	6,908.6	6,908.6	81.1	138.0	91.48	-1,322.7	8,650.4	6,317.6	6,098.6	218.98	28.849	
9,800.0	6,925.2	6,908.2	6,908.2	82.6	138.0	91.47	-1,322.7	8,650.4	6,264.4	6,043.9	220.51	28.408	
9,842.5	6,924.8	6,907.8	6,907.8	83.8	138.0	91.46	-1,322.7	8,650.4	6,224.0	6,002.3	221.67	28.077	
9,900.0	6,924.3	6,907.3	6,907.3	85.4	138.0	91.45	-1,322.7	8,650.4	6,169.4	5,946.1	223.25	27.635	
9,940.9	6,924.0	6,907.0	6,907.0	86.5	138.0	91.44	-1,322.7	8,650.4	6,130.5	5,906.2	224.37	27.324	
10,000.0	6,923.5	6,906.5	6,906.5	88.1	138.0	91.42	-1,322.7	8,650.4	6,074.5	5,848.5	225.98	26.880	
10,039.3	6,923.2	6,906.2	6,906.2	89.2	138.0	91.41	-1,322.7	8,650.4	6,037.2	5,810.2	227.06	26.588	
10,100.0	6,922.6	6,905.6	6,905.6	90.9	138.0	91.40	-1,322.7	8,650.4	5,979.8	5,751.1	228.73	26.144	
10,137.8	6,922.3	6,905.3	6,905.3	91.9	138.0	91.39	-1,322.7	8,650.4	5,944.1	5,714.4	229.76	25.871	
10,200.0	6,921.8	6,904.8	6,904.8	93.7	138.0	91.37	-1,322.7	8,650.4	5,885.3	5,653.9	231.47	25.426	
10,236.2	6,921.5	6,904.5	6,904.5	94.7	138.0	91.36	-1,322.7	8,650.4	5,851.2	5,618.7	232.47	25.170	
10,300.0	6,921.0	6,904.0	6,904.0	96.4	137.9	91.35	-1,322.7	8,650.4	5,791.0	5,556.8	234.22	24.725	
10,334.6	6,920.7	6,903.7	6,903.7	97.4	137.9	91.34	-1,322.7	8,650.4	5,758.4	5,523.2	235.17	24.486	
10,400.0	6,920.1	6,903.1	6,903.1	99.2	137.9	91.32	-1,322.7	8,650.4	5,696.9	5,459.9	236.97	24.041	
10,433.0	6,919.9	6,902.9	6,902.9	100.1	137.9	91.31	-1,322.7	8,650.4	5,665.8	5,428.0	237.88	23.818	
10,500.0	6,919.3	6,902.3	6,902.3	101.9	137.9	91.30	-1,322.7	8,650.4	5,603.0	5,363.3	239.72	23.373	
10,531.5	6,919.0	6,902.0	6,902.0	102.8	137.9	91.29	-1,322.7	8,650.4	5,573.5	5,332.9	240.59	23.166	
10,600.0	6,918.5	6,901.5	6,901.5	104.7	137.9	91.27	-1,322.7	8,650.4	5,509.3	5,266.8	242.48	22.721	
10,629.9	6,918.2	6,901.2	6,901.2	105.5	137.9	91.27	-1,322.7	8,650.4	5,481.3	5,238.0	243.30	22.529	
10,700.0	6,917.6	6,900.6	6,900.6	107.5	137.9	91.25	-1,322.7	8,650.4	5,415.8	5,170.6	245.24	22.084	
10,728.3	6,917.4	6,900.4	6,900.4	108.3	137.9	91.24	-1,322.7	8,650.4	5,389.4	5,143.3	246.02	21.906	
10,800.0	6,916.8	6,899.8	6,899.8	110.3	137.9	91.22	-1,322.7	8,650.4	5,322.5	5,074.6	247.99	21.462	
10,826.7	6,916.6	6,899.6	6,899.6	111.0	137.9	91.22	-1,322.7	8,650.4	5,297.6	5,048.9	248.73	21.298	
10,900.0	6,916.0	6,899.0	6,899.0	113.0	137.8	91.20	-1,322.7	8,650.4	5,229.6	4,978.8	250.76	20.855	
10,925.2	6,915.8	6,898.8	6,898.8	113.7	137.8	91.19	-1,322.7	8,650.4	5,206.2	4,954.7	251.45	20.705	
11,000.0	6,915.1	6,898.1	6,898.1	115.8	137.8	91.17	-1,322.7	8,650.4	5,136.8	4,883.3	253.52	20.262	
11,023.6	6,914.9	6,897.9	6,897.9	116.5	137.8	91.17	-1,322.7	8,650.4	5,115.0	4,860.8	254.17	20.124	
11,100.0	6,914.3	6,897.3	6,897.3	118.6	137.8	91.15	-1,322.7	8,650.4	5,044.4	4,788.1	256.28	19.683	
11,122.0	6,914.1	6,897.1	6,897.1	119.2	137.8	91.14	-1,322.7	8,650.4	5,024.0	4,767.2	256.89	19.557	
11,200.0	6,913.5	6,896.5	6,896.5	121.4	137.8	91.12	-1,322.7	8,650.4	4,952.2	4,693.2	259.05	19.117	
11,220.4	6,913.3	6,896.3	6,896.3	121.9	137.8	91.12	-1,322.7	8,650.4	4,933.4	4,673.8	259.61	19.003	
11,300.0	6,912.6	6,895.6	6,895.6	124.1	137.8	91.10	-1,322.7	8,650.4	4,860.4	4,598.5	261.81	18.564	
11,318.9	6,912.5	6,895.5	6,895.5	124.7	137.8	91.09	-1,322.7	8,650.4	4,843.1	4,580.7	262.34	18.461	
11,400.0	6,911.8	6,894.8	6,894.8	126.9	137.8	91.07	-1,322.7	8,650.4	4,768.8	4,504.3	264.58	18.024	
11,417.3	6,911.6	6,894.6	6,894.6	127.4	137.8	91.07	-1,322.7	8,650.4	4,753.0	4,488.0	265.06	17.932	
11,500.0	6,911.0	6,894.0	6,894.0	129.7	137.7	91.05	-1,322.7	8,650.4	4,677.7	4,410.3	267.35	17.496	
11,515.7	6,910.8	6,893.8	6,893.8	130.2	137.7	91.05	-1,322.7	8,650.4	4,663.4	4,395.6	267.79	17.414	
11,600.0	6,910.1	6,893.1	6,893.1	132.5	137.7	91.02	-1,322.7	8,650.4	4,586.9	4,316.7	270.12	16.981	
11,614.1	6,910.0	6,893.0	6,893.0	132.9	137.7	91.02	-1,322.7	8,650.4	4,574.0	4,303.5	270.51	16.909	
11,700.0	6,909.3	6,892.3	6,892.3	135.3	137.7	91.00	-1,322.7	8,650.4	4,496.4	4,223.5	272.89	16.477	
11,712.6	6,909.2	6,892.2	6,892.2	135.6	137.7	91.00	-1,322.7	8,650.4	4,485.1	4,211.9	273.24	16.414	
11,800.0	6,908.5	6,891.5	6,891.5	138.1	137.7	90.98	-1,322.7	8,650.4	4,406.4	4,130.8	275.66	15.985	
11,811.0	6,908.4	6,891.4	6,891.4	138.4	137.7	90.97	-1,322.7	8,650.4	4,396.6	4,120.6	275.97	15.931	
11,900.0	6,907.6	6,890.6	6,890.6	140.9	137.7	90.95	-1,322.7	8,650.4	4,316.9	4,038.4	278.44	15.504	
11,909.4	6,907.5	6,890.5	6,890.5	141.1	137.7	90.95	-1,322.7	8,650.4	4,308.5	4,029.8	278.70	15.459	
12,000.0	6,906.8	6,889.8	6,889.8	143.6	137.7	90.93	-1,322.7	8,650.4	4,227.8	3,946.6	281.21	15.034	
12,007.8	6,906.7	6,889.7	6,889.7	143.9	137.7	90.92	-1,322.7	8,650.4	4,220.8	3,939.4	281.43	14.998	
12,100.0	6,905.9	6,888.9	6,888.9	146.4	137.6	90.90	-1,322.7	8,650.4	4,139.2	3,855.2	283.98	14.575	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HERBSTER F #35-27 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,888.9	6,888.9	146.6	137.6	90.90	-1,322.7	8,650.4	4,133.6	3,849.5	284.16	14.547	
12,200.0	6,905.1	6,888.1	6,888.1	149.2	137.6	90.88	-1,322.7	8,650.4	4,051.1	3,764.3	286.76	14.127	
12,204.7	6,905.1	6,888.1	6,888.1	149.4	137.6	90.88	-1,322.7	8,650.4	4,047.0	3,760.1	286.89	14.106	
12,300.0	6,904.3	6,887.3	6,887.3	152.0	137.6	90.85	-1,322.7	8,650.4	3,963.6	3,674.1	289.54	13.690	
12,303.1	6,904.3	6,887.3	6,887.3	152.1	137.6	90.85	-1,322.7	8,650.4	3,960.9	3,671.3	289.62	13.676	
12,400.0	6,903.4	6,886.4	6,886.4	154.8	137.6	90.83	-1,322.7	8,650.4	3,876.7	3,584.4	292.31	13.262	
12,401.5	6,903.4	6,886.4	6,886.4	154.8	137.6	90.83	-1,322.7	8,650.4	3,875.4	3,583.0	292.36	13.256	
12,500.0	6,902.6	6,885.6	6,885.6	157.6	137.6	90.80	-1,322.7	8,650.4	3,790.5	3,495.4	295.09	12.845	
12,598.4	6,901.8	6,884.8	6,884.8	160.3	137.6	90.78	-1,322.7	8,650.4	3,706.3	3,408.4	297.82	12.445	
12,600.0	6,901.8	6,884.8	6,884.8	160.4	137.6	90.78	-1,322.7	8,650.4	3,704.9	3,407.0	297.87	12.438	
12,696.8	6,901.0	6,884.0	6,884.0	163.1	137.5	90.75	-1,322.7	8,650.4	3,622.8	3,322.2	300.56	12.054	
12,700.0	6,900.9	6,883.9	6,883.9	163.2	137.5	90.75	-1,322.7	8,650.4	3,620.1	3,319.4	300.64	12.041	
12,795.2	6,900.1	6,883.1	6,883.1	165.8	137.5	90.73	-1,322.7	8,650.4	3,540.0	3,236.7	303.29	11.672	
12,800.0	6,900.1	6,883.1	6,883.1	166.0	137.5	90.73	-1,322.7	8,650.4	3,536.1	3,232.6	303.42	11.654	
12,893.7	6,899.3	6,882.3	6,882.3	168.6	137.5	90.71	-1,322.7	8,650.4	3,458.1	3,152.1	306.03	11.300	
12,900.0	6,899.3	6,882.3	6,882.3	168.8	137.5	90.70	-1,322.7	8,650.4	3,452.9	3,146.7	306.20	11.276	
12,992.1	6,898.5	6,881.5	6,881.5	171.3	137.5	90.68	-1,322.7	8,650.4	3,377.1	3,068.3	308.76	10.937	
13,000.0	6,898.4	6,881.4	6,881.4	171.6	137.5	90.68	-1,322.7	8,650.4	3,370.6	3,061.6	308.98	10.909	
13,090.5	6,897.7	6,880.7	6,880.7	174.1	137.5	90.66	-1,322.7	8,650.4	3,297.0	2,985.5	311.50	10.584	
13,100.0	6,897.6	6,880.6	6,880.6	174.4	137.5	90.65	-1,322.7	8,650.4	3,289.3	2,977.6	311.76	10.551	
13,188.9	6,896.9	6,879.9	6,879.9	176.8	137.5	90.63	-1,322.7	8,650.4	3,217.9	2,903.7	314.24	10.241	
13,200.0	6,896.8	6,879.8	6,879.8	177.2	137.5	90.63	-1,322.7	8,650.4	3,209.1	2,894.6	314.54	10.202	
13,287.4	6,896.0	6,879.0	6,879.0	179.6	137.4	90.61	-1,322.7	8,650.4	3,140.0	2,823.0	316.97	9.906	
13,300.0	6,895.9	6,878.9	6,878.9	180.0	137.4	90.60	-1,322.7	8,650.4	3,130.0	2,812.7	317.32	9.864	
13,385.8	6,895.2	6,878.2	6,878.2	182.4	137.4	90.58	-1,322.7	8,650.4	3,063.2	2,743.4	319.71	9.581	
13,400.0	6,895.1	6,878.1	6,878.1	182.7	137.4	90.58	-1,322.7	8,650.4	3,052.2	2,732.1	320.10	9.535	
13,484.2	6,894.4	6,877.4	6,877.4	185.1	137.4	90.56	-1,322.7	8,650.4	2,987.6	2,665.2	322.45	9.265	
13,500.0	6,894.3	6,877.3	6,877.3	185.5	137.4	90.56	-1,322.7	8,650.4	2,975.7	2,652.8	322.89	9.216	
13,582.6	6,893.6	6,876.6	6,876.6	187.9	137.4	90.54	-1,322.7	8,650.4	2,913.5	2,588.3	325.19	8.959	
13,600.0	6,893.4	6,876.4	6,876.4	188.3	137.4	90.53	-1,322.7	8,650.4	2,900.5	2,574.9	325.67	8.906	
13,681.1	6,892.8	6,875.8	6,875.8	190.6	137.4	90.51	-1,322.7	8,650.4	2,840.8	2,512.9	327.92	8.663	
13,700.0	6,892.6	6,875.6	6,875.6	191.1	137.4	90.51	-1,322.7	8,650.4	2,827.0	2,498.5	328.45	8.607	
13,779.5	6,891.9	6,874.9	6,874.9	193.4	137.4	90.49	-1,322.7	8,650.4	2,769.7	2,439.0	330.66	8.376	
13,800.0	6,891.8	6,874.8	6,874.8	193.9	137.4	90.48	-1,322.7	8,650.4	2,755.1	2,423.9	331.23	8.318	
13,877.9	6,891.1	6,874.1	6,874.1	196.1	137.3	90.46	-1,322.7	8,650.4	2,700.3	2,366.9	333.40	8.099	
13,900.0	6,890.9	6,873.9	6,873.9	196.7	137.3	90.46	-1,322.7	8,650.4	2,685.0	2,351.0	334.01	8.039	
13,976.3	6,890.3	6,873.3	6,873.3	198.9	137.3	90.44	-1,322.7	8,650.4	2,632.8	2,296.6	336.14	7.832	
14,000.0	6,890.1	6,873.1	6,873.1	199.5	137.3	90.43	-1,322.7	8,650.4	2,616.8	2,280.1	336.80	7.770	
14,074.8	6,889.5	6,872.5	6,872.5	201.6	137.3	90.41	-1,322.7	8,650.4	2,567.3	2,228.4	338.88	7.576	
14,100.0	6,889.3	6,872.3	6,872.3	202.3	137.3	90.41	-1,322.7	8,650.4	2,550.8	2,211.2	339.58	7.512	
14,173.2	6,888.7	6,871.7	6,871.7	204.4	137.3	90.39	-1,322.7	8,650.4	2,503.9	2,162.3	341.62	7.329	
14,200.0	6,888.4	6,871.4	6,871.4	205.1	137.3	90.38	-1,322.7	8,650.4	2,487.0	2,144.7	342.36	7.264	
14,271.6	6,887.8	6,870.8	6,870.8	207.1	137.3	90.37	-1,322.7	8,650.4	2,442.8	2,098.5	344.36	7.094	
14,300.0	6,887.6	6,870.6	6,870.6	207.9	137.3	90.36	-1,322.7	8,650.4	2,425.7	2,080.5	345.15	7.028	
14,370.0	6,887.0	6,870.0	6,870.0	209.9	137.3	90.34	-1,322.7	8,650.4	2,384.3	2,037.2	347.10	6.869	
14,400.0	6,886.8	6,869.8	6,869.8	210.7	137.3	90.33	-1,322.7	8,650.4	2,367.0	2,019.0	347.93	6.803	
14,468.5	6,886.2	6,869.2	6,869.2	212.6	137.3	90.32	-1,322.7	8,650.4	2,328.4	1,978.6	349.84	6.656	
14,500.0	6,885.9	6,868.9	6,868.9	213.5	137.2	90.31	-1,322.7	8,650.4	2,311.1	1,960.4	350.72	6.590	
14,566.9	6,885.4	6,868.4	6,868.4	215.4	137.2	90.29	-1,322.7	8,650.4	2,275.4	1,922.9	352.58	6.454	
14,600.0	6,885.1	6,868.1	6,868.1	216.3	137.2	90.28	-1,322.7	8,650.4	2,258.3	1,904.8	353.50	6.388	
14,613.0	6,885.0	6,868.0	6,868.0	216.7	137.2	90.28	-1,322.7	8,650.4	2,251.7	1,897.8	353.86	6.363 CC, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	96.52	-917.5	8,026.4	8,078.7				
98.4	98.4	73.4	73.4	0.1	0.4	96.52	-917.5	8,026.4	8,078.6	8,078.1	0.52	N/A	
100.0	100.0	75.0	75.0	0.1	0.4	96.52	-917.5	8,026.4	8,078.6	8,078.1	0.54	N/A	
196.8	196.8	171.8	171.8	0.3	2.4	96.52	-917.5	8,026.4	8,078.6	8,076.0	2.66	3,036.727	
200.0	200.0	175.0	175.0	0.3	2.4	96.52	-917.5	8,026.4	8,078.6	8,075.9	2.74	2,943.660	
295.3	295.3	270.3	270.3	0.5	4.5	96.52	-917.5	8,026.4	8,078.6	8,073.6	5.03	1,605.439	
300.0	300.0	275.0	275.0	0.5	4.6	96.52	-917.5	8,026.4	8,078.6	8,073.5	5.14	1,571.422	
393.7	393.7	368.7	368.7	0.7	6.5	96.52	-917.5	8,026.4	8,078.6	8,071.4	7.27	1,110.641	
400.0	400.0	375.0	375.0	0.8	6.7	96.52	-917.5	8,026.4	8,078.6	8,071.2	7.42	1,089.266	
492.1	492.1	467.1	467.1	1.0	8.5	96.52	-917.5	8,026.4	8,078.6	8,069.1	9.50	850.831	
500.0	500.0	475.0	475.0	1.0	8.7	96.52	-917.5	8,026.4	8,078.6	8,069.0	9.67	835.228	
590.5	590.5	565.5	565.5	1.2	10.5	96.52	-917.5	8,026.4	8,078.6	8,066.9	11.71	690.007	
600.0	600.0	575.0	575.0	1.2	10.7	96.52	-917.5	8,026.4	8,078.6	8,066.7	11.92	677.719	
689.0	689.0	664.0	664.0	1.4	12.5	96.52	-917.5	8,026.4	8,078.6	8,064.7	13.92	580.486	
700.0	700.0	675.0	675.0	1.4	12.7	96.52	-917.5	8,026.4	8,078.6	8,064.5	14.16	570.351	
787.4	787.4	762.4	762.4	1.6	14.5	96.52	-917.5	8,026.4	8,078.6	8,062.5	16.12	501.044	
800.0	800.0	775.0	775.0	1.7	14.7	96.52	-917.5	8,026.4	8,078.6	8,062.2	16.41	492.419	
885.8	885.8	860.8	860.8	1.9	16.5	96.52	-917.5	8,026.4	8,078.6	8,060.3	18.33	440.763	
900.0	900.0	875.0	875.0	1.9	16.8	96.52	-917.5	8,026.4	8,078.6	8,060.0	18.65	433.258	
984.2	984.2	959.2	959.2	2.1	18.5	96.52	-917.5	8,026.4	8,078.6	8,058.1	20.53	393.449	
1,000.0	1,000.0	975.0	975.0	2.1	18.8	96.52	-917.5	8,026.4	8,078.6	8,057.8	20.89	386.806	
1,082.7	1,082.7	1,057.7	1,057.7	2.3	20.4	96.52	-917.5	8,026.4	8,078.6	8,055.9	22.74	355.319	
1,100.0	1,100.0	1,075.0	1,075.0	2.3	20.8	96.52	-917.5	8,026.4	8,078.6	8,055.5	23.12	349.361	
1,150.0	1,150.0	1,125.0	1,125.0	2.4	21.8	96.52	-917.5	8,026.4	8,078.6	8,054.4	24.24	333.234	
1,181.1	1,181.1	1,156.1	1,156.1	2.5	22.4	129.21	-917.5	8,026.4	8,078.8	8,053.8	24.94	323.956	
1,200.0	1,200.0	1,175.0	1,175.0	2.6	22.8	129.21	-917.5	8,026.4	8,078.9	8,053.6	25.36	318.578	
1,279.5	1,279.5	1,254.5	1,254.5	2.7	24.4	129.20	-917.5	8,026.4	8,080.5	8,053.4	27.12	297.900	
1,300.0	1,299.9	1,274.9	1,274.9	2.8	24.8	129.19	-917.5	8,026.4	8,081.1	8,053.5	27.58	293.033	
1,377.9	1,377.7	1,352.7	1,352.7	3.0	26.4	129.17	-917.5	8,026.4	8,084.4	8,055.1	29.29	275.968	
1,400.0	1,399.7	1,374.7	1,374.7	3.0	26.8	129.16	-917.5	8,026.4	8,085.5	8,055.8	29.78	271.530	
1,476.4	1,475.7	1,450.7	1,450.7	3.2	28.4	129.13	-917.5	8,026.4	8,090.4	8,058.9	31.45	257.276	
1,500.0	1,499.1	1,474.1	1,474.1	3.2	28.8	129.12	-917.5	8,026.4	8,092.2	8,060.2	31.96	253.205	
1,574.8	1,573.2	1,548.2	1,548.2	3.4	30.3	129.07	-917.5	8,026.4	8,098.6	8,065.0	33.58	241.171	
1,600.0	1,598.2	1,573.2	1,573.2	3.5	30.8	129.05	-917.5	8,026.4	8,101.0	8,066.9	34.12	237.412	
1,673.2	1,670.3	1,645.3	1,645.3	3.7	32.3	129.00	-917.5	8,026.4	8,108.8	8,073.2	35.70	227.152	
1,700.0	1,696.6	1,671.6	1,671.6	3.8	32.8	128.98	-917.5	8,026.4	8,112.0	8,075.8	36.27	223.664	
1,749.9	1,745.5	1,720.5	1,720.5	3.9	33.8	128.93	-917.5	8,026.4	8,118.3	8,081.0	37.33	217.453	
1,771.6	1,766.8	1,741.8	1,741.8	4.0	34.2	128.96	-917.5	8,026.4	8,121.2	8,083.4	37.82	214.725	
1,800.0	1,794.5	1,769.5	1,769.5	4.1	34.8	128.99	-917.5	8,026.4	8,125.0	8,086.5	38.46	211.283	
1,870.1	1,863.1	1,838.1	1,838.1	4.3	36.1	129.07	-917.5	8,026.4	8,134.3	8,094.2	40.03	203.198	
1,900.0	1,892.3	1,867.3	1,867.3	4.4	36.7	129.10	-917.5	8,026.4	8,138.3	8,097.5	40.70	199.939	
1,968.5	1,959.4	1,934.4	1,934.4	4.7	38.1	129.18	-917.5	8,026.4	8,147.4	8,105.1	42.25	192.824	
2,000.0	1,990.2	1,965.2	1,965.2	4.8	38.7	129.21	-917.5	8,026.4	8,151.6	8,108.6	42.96	189.729	
2,066.9	2,055.6	2,030.6	2,030.6	5.1	40.0	129.29	-917.5	8,026.4	8,160.5	8,116.0	44.48	183.453	
2,100.0	2,088.0	2,063.0	2,063.0	5.2	40.7	129.32	-917.5	8,026.4	8,164.9	8,119.6	45.23	180.501	
2,165.3	2,151.9	2,126.9	2,126.9	5.4	42.0	129.40	-917.5	8,026.4	8,173.6	8,126.9	46.72	174.936	
2,200.0	2,185.8	2,160.8	2,160.8	5.6	42.6	129.43	-917.5	8,026.4	8,178.2	8,130.7	47.51	172.127	
2,263.8	2,248.2	2,223.2	2,223.2	5.8	43.9	129.51	-917.5	8,026.4	8,186.8	8,137.8	48.97	167.180	
2,300.0	2,283.6	2,258.6	2,258.6	6.0	44.6	129.55	-917.5	8,026.4	8,191.6	8,141.8	49.80	164.499	
2,362.2	2,344.5	2,319.5	2,319.5	6.2	45.8	129.61	-917.5	8,026.4	8,200.0	8,148.8	51.22	160.088	
2,400.0	2,381.4	2,356.4	2,356.4	6.4	46.6	129.66	-917.5	8,026.4	8,205.1	8,153.0	52.09	157.526	
2,460.6	2,440.7	2,415.7	2,415.7	6.6	47.8	129.72	-917.5	8,026.4	8,213.2	8,159.7	53.48	153.582	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,454.2	2,454.2	6.8	48.5	129.77	-917.5	8,026.4	8,218.5	8,164.1	54.38	151.129	
2,559.0	2,537.0	2,512.0	2,512.0	7.0	49.7	129.83	-917.5	8,026.4	8,226.5	8,170.7	55.74	147.594	
2,600.0	2,577.1	2,552.1	2,552.1	7.2	50.5	129.88	-917.5	8,026.4	8,232.0	8,175.3	56.68	145.242	
2,657.5	2,633.3	2,608.3	2,608.3	7.4	51.6	129.94	-917.5	8,026.4	8,239.8	8,181.8	58.00	142.066	
2,700.0	2,674.9	2,649.9	2,649.9	7.6	52.5	129.99	-917.5	8,026.4	8,245.5	8,186.5	58.98	139.808	
2,755.9	2,729.6	2,704.6	2,704.6	7.9	53.6	130.05	-917.5	8,026.4	8,253.1	8,192.8	60.26	136.948	
2,800.0	2,772.7	2,747.7	2,747.7	8.0	54.4	130.09	-917.5	8,026.4	8,259.1	8,197.8	61.28	134.777	
2,854.3	2,825.8	2,800.8	2,800.8	8.3	55.5	130.15	-917.5	8,026.4	8,266.4	8,203.9	62.53	132.197	
2,900.0	2,870.5	2,845.5	2,845.5	8.5	56.4	130.20	-917.5	8,026.4	8,272.6	8,209.0	63.58	130.107	
2,952.7	2,922.1	2,897.1	2,897.1	8.7	57.4	130.26	-917.5	8,026.4	8,279.8	8,215.0	64.80	127.776	
3,000.0	2,968.3	2,943.3	2,943.3	8.9	58.4	130.31	-917.5	8,026.4	8,286.2	8,220.3	65.89	125.762	
3,051.2	3,018.4	2,993.4	2,993.4	9.1	59.4	130.37	-917.5	8,026.4	8,293.2	8,226.1	67.07	123.652	
3,100.0	3,066.1	3,041.1	3,041.1	9.3	60.3	130.42	-917.5	8,026.4	8,299.9	8,231.7	68.19	121.709	
3,149.6	3,114.7	3,089.7	3,089.7	9.5	61.3	130.47	-917.5	8,026.4	8,306.6	8,237.3	69.34	119.797	
3,200.0	3,164.0	3,139.0	3,139.0	9.8	62.3	130.53	-917.5	8,026.4	8,313.5	8,243.0	70.50	117.919	
3,248.0	3,210.9	3,185.9	3,185.9	10.0	63.3	130.58	-917.5	8,026.4	8,320.1	8,248.5	71.61	116.186	
3,300.0	3,261.8	3,236.8	3,236.8	10.2	64.3	130.63	-917.5	8,026.4	8,327.2	8,254.4	72.81	114.370	
3,346.4	3,307.2	3,282.2	3,282.2	10.4	65.2	130.68	-917.5	8,026.4	8,333.6	8,259.7	73.88	112.796	
3,400.0	3,359.6	3,334.6	3,334.6	10.6	66.2	130.74	-917.5	8,026.4	8,341.0	8,265.8	75.12	111.038	
3,444.9	3,403.5	3,378.5	3,378.5	10.8	67.1	130.79	-917.5	8,026.4	8,347.1	8,271.0	76.15	109.608	
3,500.0	3,457.4	3,432.4	3,432.4	11.1	68.2	130.85	-917.5	8,026.4	8,354.7	8,277.3	77.43	107.904	
3,543.3	3,499.8	3,474.8	3,474.8	11.3	69.1	130.89	-917.5	8,026.4	8,360.7	8,282.2	78.43	106.605	
3,600.0	3,555.2	3,530.2	3,530.2	11.5	70.2	130.95	-917.5	8,026.4	8,368.5	8,288.7	79.74	104.952	
3,641.7	3,596.0	3,571.0	3,571.0	11.7	71.0	131.00	-917.5	8,026.4	8,374.2	8,293.5	80.70	103.771	
3,700.0	3,653.0	3,628.0	3,628.0	11.9	72.1	131.06	-917.5	8,026.4	8,382.3	8,300.3	82.05	102.167	
3,740.1	3,692.3	3,667.3	3,667.3	12.1	72.9	131.10	-917.5	8,026.4	8,387.8	8,304.9	82.97	101.092	
3,800.0	3,750.8	3,725.8	3,725.8	12.4	74.1	131.17	-917.5	8,026.4	8,396.1	8,311.8	84.35	99.534	
3,838.6	3,788.6	3,763.6	3,763.6	12.6	74.9	131.21	-917.5	8,026.4	8,401.5	8,316.2	85.25	98.556	
3,900.0	3,848.7	3,823.7	3,823.7	12.8	76.1	131.27	-917.5	8,026.4	8,410.0	8,323.3	86.66	97.042	
3,937.0	3,884.9	3,859.9	3,859.9	13.0	76.8	131.31	-917.5	8,026.4	8,415.1	8,327.6	87.52	96.153	
4,000.0	3,946.5	3,921.5	3,921.5	13.3	78.1	131.38	-917.5	8,026.4	8,423.9	8,334.9	88.97	94.679	
4,035.4	3,981.1	3,956.1	3,956.1	13.4	78.7	131.41	-917.5	8,026.4	8,428.8	8,339.0	89.79	93.872	
4,100.0	4,044.3	4,019.3	4,019.3	13.7	80.0	131.48	-917.5	8,026.4	8,437.8	8,346.5	91.28	92.437	
4,133.8	4,077.4	4,052.4	4,052.4	13.9	80.7	131.52	-917.5	8,026.4	8,442.5	8,350.5	92.06	91.703	
4,200.0	4,142.1	4,117.1	4,117.1	14.2	82.0	131.59	-917.5	8,026.4	8,451.8	8,358.2	93.59	90.306	
4,232.3	4,173.7	4,148.7	4,148.7	14.3	82.6	131.62	-917.5	8,026.4	8,456.3	8,361.9	94.34	89.640	
4,300.0	4,239.9	4,214.9	4,214.9	14.6	84.0	131.69	-917.5	8,026.4	8,465.8	8,369.9	95.90	88.278	
4,330.7	4,270.0	4,245.0	4,245.0	14.7	84.6	131.72	-917.5	8,026.4	8,470.1	8,373.4	96.61	87.674	
4,400.0	4,337.7	4,312.7	4,312.7	15.0	85.9	131.79	-917.5	8,026.4	8,479.8	8,381.6	98.21	86.345	
4,429.1	4,366.2	4,341.2	4,341.2	15.2	86.5	131.82	-917.5	8,026.4	8,483.8	8,385.0	98.88	85.800	
4,500.0	4,435.6	4,410.6	4,410.6	15.5	87.9	131.90	-917.5	8,026.4	8,493.8	8,393.3	100.52	84.502	
4,527.5	4,462.5	4,437.5	4,437.5	15.6	88.4	131.92	-917.5	8,026.4	8,497.7	8,396.5	101.15	84.009	
4,600.0	4,533.4	4,508.4	4,508.4	15.9	89.9	132.00	-917.5	8,026.4	8,507.9	8,405.0	102.82	82.743	
4,626.0	4,558.8	4,533.8	4,533.8	16.0	90.4	132.03	-917.5	8,026.4	8,511.5	8,408.1	103.42	82.299	
4,673.6	4,605.3	4,580.3	4,580.3	16.3	91.3	132.07	-917.5	8,026.4	8,518.2	8,413.7	104.52	81.498	
4,700.0	4,631.2	4,606.2	4,606.2	16.4	91.8	132.16	-917.5	8,026.4	8,521.9	8,416.7	105.19	81.012	
4,724.4	4,655.1	4,630.1	4,630.1	16.4	92.3	132.23	-917.5	8,026.4	8,525.1	8,419.3	105.80	80.578	
4,800.0	4,729.5	4,704.5	4,704.5	16.7	93.8	132.43	-917.5	8,026.4	8,534.2	8,426.5	107.67	79.260	
4,822.8	4,752.1	4,727.1	4,727.1	16.7	94.3	132.48	-917.5	8,026.4	8,536.7	8,428.5	108.23	78.875	
4,900.0	4,828.4	4,803.4	4,803.4	17.0	95.8	132.65	-917.5	8,026.4	8,544.2	8,434.1	110.10	77.602	
4,921.2	4,849.5	4,824.5	4,824.5	17.0	96.2	132.69	-917.5	8,026.4	8,546.1	8,435.4	110.61	77.263	
5,000.0	4,927.8	4,902.8	4,902.8	17.2	97.8	132.82	-917.5	8,026.4	8,551.9	8,439.4	112.47	76.034	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,922.4	4,922.4	17.2	98.2	132.85	-917.5	8,026.4	8,553.1	8,440.2	112.93	75.738	
5,100.0	5,027.5	5,002.5	5,002.5	17.4	99.8	132.93	-917.5	8,026.4	8,557.2	8,442.4	114.78	74.556	
5,118.1	5,045.6	5,020.6	5,020.6	17.4	100.2	132.95	-917.5	8,026.4	8,557.9	8,442.7	115.18	74.299	
5,200.0	5,127.4	5,102.4	5,102.4	17.6	101.8	133.00	-917.5	8,026.4	8,560.1	8,443.1	117.00	73.162	
5,216.5	5,143.9	5,118.9	5,118.9	17.6	102.1	133.00	-917.5	8,026.4	8,560.4	8,443.0	117.36	72.940	
5,273.4	5,200.8	5,175.8	5,175.8	17.7	103.3	100.32	-917.5	8,026.4	8,560.8	8,442.4	118.42	72.290	
5,300.0	5,227.4	5,202.4	5,202.4	17.7	103.8	100.32	-917.5	8,026.4	8,560.8	8,441.8	119.00	71.941	
5,314.9	5,242.3	5,217.3	5,217.3	17.7	104.1	100.32	-917.5	8,026.4	8,560.8	8,441.5	119.32	71.745	
5,400.0	5,327.4	5,302.4	5,302.4	17.8	105.8	100.32	-917.5	8,026.4	8,560.8	8,439.6	121.17	70.649	
5,413.4	5,340.8	5,315.8	5,315.8	17.9	106.1	100.32	-917.5	8,026.4	8,560.8	8,439.3	121.47	70.479	
5,500.0	5,427.4	5,402.4	5,402.4	18.0	107.8	100.32	-917.5	8,026.4	8,560.8	8,437.4	123.35	69.401	
5,511.8	5,439.2	5,414.2	5,414.2	18.0	108.1	100.32	-917.5	8,026.4	8,560.8	8,437.2	123.61	69.257	
5,600.0	5,527.4	5,502.4	5,502.4	18.1	109.8	100.32	-917.5	8,026.4	8,560.8	8,435.3	125.53	68.196	
5,610.2	5,537.6	5,512.6	5,512.6	18.1	110.0	100.32	-917.5	8,026.4	8,560.8	8,435.0	125.76	68.075	
5,700.0	5,627.4	5,602.4	5,602.4	18.3	111.9	100.32	-917.5	8,026.4	8,560.8	8,433.1	127.71	67.031	
5,708.6	5,636.0	5,611.0	5,611.0	18.3	112.0	100.32	-917.5	8,026.4	8,560.8	8,432.9	127.90	66.932	
5,800.0	5,727.4	5,702.4	5,702.4	18.4	113.9	100.32	-917.5	8,026.4	8,560.8	8,430.9	129.90	65.904	
5,807.1	5,734.5	5,709.5	5,709.5	18.4	114.0	100.32	-917.5	8,026.4	8,560.8	8,430.7	130.05	65.826	
5,900.0	5,827.4	5,802.4	5,802.4	18.6	115.9	100.32	-917.5	8,026.4	8,560.8	8,428.7	132.08	64.815	
5,905.5	5,832.9	5,807.9	5,807.9	18.6	116.0	100.32	-917.5	8,026.4	8,560.8	8,428.6	132.20	64.756	
6,000.0	5,927.4	5,902.4	5,902.4	18.7	117.9	100.32	-917.5	8,026.4	8,560.8	8,426.5	134.27	63.760	
6,003.9	5,931.3	5,906.3	5,906.3	18.7	118.0	100.32	-917.5	8,026.4	8,560.8	8,426.4	134.35	63.719	
6,100.0	6,027.4	6,002.4	6,002.4	18.9	119.9	100.32	-917.5	8,026.4	8,560.8	8,424.3	136.45	62.738	
6,102.3	6,029.7	6,004.7	6,004.7	18.9	119.9	100.32	-917.5	8,026.4	8,560.8	8,424.3	136.50	62.714	
6,200.0	6,127.4	6,102.4	6,102.4	19.0	121.9	100.32	-917.5	8,026.4	8,560.8	8,422.1	138.64	61.748	
6,200.8	6,128.2	6,103.2	6,103.2	19.0	121.9	100.32	-917.5	8,026.4	8,560.8	8,422.1	138.66	61.740	
6,299.2	6,226.6	6,201.6	6,201.6	19.2	123.9	100.32	-917.5	8,026.4	8,560.8	8,420.0	140.81	60.796	
6,301.4	6,228.8	6,203.8	6,203.8	19.2	123.9	100.32	-917.5	8,026.4	8,560.8	8,419.9	140.86	60.775	
6,350.0	6,277.4	6,252.4	6,252.4	19.3	124.9	10.35	-917.5	8,026.4	8,559.2	8,417.5	141.64	60.429	
6,397.6	6,324.7	6,299.7	6,299.7	19.3	125.9	10.42	-917.5	8,026.4	8,554.4	8,412.8	141.69	60.376	
6,400.0	6,327.1	6,302.1	6,302.1	19.3	125.9	10.43	-917.5	8,026.4	8,554.1	8,412.4	141.67	60.379	
6,450.0	6,376.3	6,351.3	6,351.3	19.3	126.9	10.56	-917.5	8,026.4	8,545.7	8,404.7	141.02	60.599	
6,496.0	6,421.1	6,396.1	6,396.1	19.3	127.8	10.74	-917.5	8,026.4	8,534.9	8,395.1	139.80	61.049	
6,500.0	6,424.9	6,399.9	6,399.9	19.3	127.9	10.76	-917.5	8,026.4	8,533.9	8,394.2	139.67	61.099	
6,550.0	6,472.4	6,447.4	6,447.4	19.3	128.8	11.02	-917.5	8,026.4	8,518.8	8,381.1	137.64	61.893	
6,594.5	6,513.8	6,488.8	6,488.8	19.3	129.7	11.31	-917.5	8,026.4	8,502.6	8,367.4	135.26	62.863	
6,600.0	6,518.8	6,493.8	6,493.8	19.3	129.8	11.35	-917.5	8,026.4	8,500.4	8,365.5	134.92	63.002	
6,650.0	6,563.8	6,538.8	6,538.8	19.3	130.7	11.76	-917.5	8,026.4	8,479.0	8,347.4	131.55	64.453	
6,692.9	6,601.1	6,576.1	6,576.1	19.2	131.4	12.18	-917.5	8,026.4	8,458.1	8,330.0	128.16	65.995	
6,700.0	6,607.1	6,582.1	6,582.1	19.2	131.6	12.26	-917.5	8,026.4	8,454.5	8,326.9	127.56	66.279	
6,750.0	6,648.6	6,623.6	6,623.6	19.2	132.4	12.87	-917.5	8,026.4	8,427.1	8,304.1	122.99	68.516	
6,791.3	6,681.4	6,656.4	6,656.4	19.1	133.1	13.48	-917.5	8,026.4	8,402.3	8,283.5	118.84	70.701	
6,800.0	6,688.1	6,663.1	6,663.1	19.1	133.2	13.62	-917.5	8,026.4	8,396.9	8,279.0	117.93	71.201	
6,850.0	6,725.3	6,700.3	6,700.3	19.1	133.9	14.52	-917.5	8,026.4	8,364.1	8,251.6	112.48	74.360	
6,889.7	6,753.2	6,728.2	6,728.2	19.0	134.5	15.37	-917.5	8,026.4	8,336.2	8,228.2	107.97	77.208	
6,900.0	6,760.1	6,735.1	6,735.1	19.0	134.6	15.62	-917.5	8,026.4	8,328.8	8,222.0	106.80	77.988	
6,950.0	6,792.3	6,767.3	6,767.3	19.0	135.3	16.97	-917.5	8,026.4	8,291.2	8,190.1	101.11	82.002	
6,988.2	6,815.1	6,790.1	6,790.1	18.9	135.7	18.21	-917.5	8,026.4	8,261.1	8,164.1	96.98	85.181	
7,000.0	6,821.8	6,796.8	6,796.8	18.9	135.9	18.65	-917.5	8,026.4	8,251.5	8,155.8	95.78	86.155	
7,050.0	6,848.3	6,823.3	6,823.3	18.9	136.4	20.77	-917.5	8,026.4	8,209.9	8,118.6	91.33	89.897	
7,086.6	6,865.9	6,840.9	6,840.9	18.9	136.8	22.69	-917.5	8,026.4	8,178.4	8,089.3	89.08	91.806	
7,100.0	6,871.9	6,846.9	6,846.9	18.9	136.9	23.49	-917.5	8,026.4	8,166.6	8,078.1	88.56	92.214	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,867.3	6,867.3	18.8	137.3	27.07	-917.5	8,026.4	8,121.8	8,033.2	88.61	91.659	
7,185.0	6,904.7	6,879.7	6,879.7	18.8	137.5	30.29	-917.5	8,026.4	8,089.6	7,998.6	91.08	88.822	
7,200.0	6,909.5	6,884.5	6,884.5	18.9	137.6	31.90	-917.5	8,026.4	8,075.7	7,982.8	92.88	86.944	
7,250.0	6,923.4	6,898.4	6,898.4	19.3	137.9	38.61	-917.5	8,026.4	8,028.6	7,925.8	102.81	78.090	
7,283.4	6,930.8	6,905.8	6,905.8	19.8	138.1	44.60	-917.5	8,026.4	7,996.6	7,883.5	113.03	70.749	
7,300.0	6,933.9	6,908.9	6,908.9	20.0	138.1	48.13	-917.5	8,026.4	7,980.6	7,861.5	119.09	67.013	
7,350.0	6,940.9	6,915.9	6,915.9	20.8	138.3	61.63	-917.5	8,026.4	7,932.0	7,792.2	139.80	56.737	
7,381.9	6,943.6	6,918.6	6,918.6	21.4	138.3	72.57	-917.5	8,026.4	7,900.9	7,748.9	151.98	51.987	
7,400.0	6,944.5	6,919.5	6,919.5	21.7	138.3	79.48	-917.5	8,026.4	7,883.1	7,726.1	157.01	50.207	
7,432.4	6,945.0	6,920.0	6,920.0	22.3	138.4	92.41	-917.5	8,026.4	7,851.3	7,690.9	160.50	48.918	
7,480.3	6,944.6	6,919.6	6,919.6	23.2	138.3	92.39	-917.5	8,026.4	7,804.4	7,643.0	161.38	48.359	
7,500.0	6,944.4	6,919.4	6,919.4	23.6	138.3	92.39	-917.5	8,026.4	7,785.1	7,623.3	161.75	48.131	
7,578.7	6,943.7	6,918.7	6,918.7	25.2	138.3	92.36	-917.5	8,026.4	7,707.9	7,544.6	163.32	47.195	
7,600.0	6,943.6	6,918.6	6,918.6	25.6	138.3	92.35	-917.5	8,026.4	7,687.1	7,523.3	163.75	46.945	
7,677.1	6,942.9	6,917.9	6,917.9	27.3	138.3	92.33	-917.5	8,026.4	7,611.5	7,446.1	165.39	46.021	
7,700.0	6,942.7	6,917.7	6,917.7	27.8	138.3	92.32	-917.5	8,026.4	7,589.1	7,423.2	165.88	45.750	
7,775.6	6,942.1	6,917.1	6,917.1	29.5	138.3	92.30	-917.5	8,026.4	7,515.1	7,347.5	167.57	44.846	
7,800.0	6,941.9	6,916.9	6,916.9	30.1	138.3	92.29	-917.5	8,026.4	7,491.2	7,323.1	168.12	44.558	
7,874.0	6,941.3	6,916.3	6,916.3	31.8	138.3	92.27	-917.5	8,026.4	7,418.8	7,248.9	169.84	43.680	
7,900.0	6,941.1	6,916.1	6,916.1	32.4	138.3	92.26	-917.5	8,026.4	7,393.4	7,222.9	170.45	43.375	
7,972.4	6,940.4	6,915.4	6,915.4	34.2	138.3	92.24	-917.5	8,026.4	7,322.5	7,150.3	172.19	42.527	
8,000.0	6,940.2	6,915.2	6,915.2	34.9	138.3	92.23	-917.5	8,026.4	7,295.6	7,122.7	172.85	42.208	
8,070.8	6,939.6	6,914.6	6,914.6	36.6	138.2	92.21	-917.5	8,026.4	7,226.3	7,051.7	174.59	41.391	
8,100.0	6,939.4	6,914.4	6,914.4	37.3	138.2	92.20	-917.5	8,026.4	7,197.8	7,022.5	175.30	41.060	
8,169.3	6,938.8	6,913.8	6,913.8	39.1	138.2	92.18	-917.5	8,026.4	7,130.2	6,953.1	177.03	40.276	
8,200.0	6,938.5	6,913.5	6,913.5	39.8	138.2	92.17	-917.5	8,026.4	7,100.2	6,922.4	177.80	39.934	
8,267.7	6,938.0	6,913.0	6,913.0	41.6	138.2	92.15	-917.5	8,026.4	7,034.1	6,854.6	179.52	39.184	
8,300.0	6,937.7	6,912.7	6,912.7	42.4	138.2	92.13	-917.5	8,026.4	7,002.6	6,822.2	180.34	38.831	
8,366.1	6,937.2	6,912.2	6,912.2	44.1	138.2	92.11	-917.5	8,026.4	6,938.1	6,756.0	182.03	38.114	
8,400.0	6,936.9	6,911.9	6,911.9	45.0	138.2	92.10	-917.5	8,026.4	6,905.0	6,722.1	182.90	37.753	
8,464.5	6,936.3	6,911.3	6,911.3	46.6	138.2	92.08	-917.5	8,026.4	6,842.1	6,657.5	184.58	37.069	
8,500.0	6,936.0	6,911.0	6,911.0	47.6	138.2	92.07	-917.5	8,026.4	6,807.6	6,622.1	185.49	36.700	
8,563.0	6,935.5	6,910.5	6,910.5	49.2	138.2	92.05	-917.5	8,026.4	6,746.2	6,559.1	187.14	36.049	
8,600.0	6,935.2	6,910.2	6,910.2	50.2	138.2	92.04	-917.5	8,026.4	6,710.2	6,522.1	188.11	35.672	
8,661.4	6,934.7	6,909.7	6,909.7	51.8	138.1	92.02	-917.5	8,026.4	6,650.4	6,460.7	189.73	35.053	
8,700.0	6,934.4	6,909.4	6,909.4	52.8	138.1	92.01	-917.5	8,026.4	6,612.9	6,422.1	190.74	34.669	
8,759.8	6,933.9	6,908.9	6,908.9	54.4	138.1	91.99	-917.5	8,026.4	6,554.7	6,362.4	192.33	34.081	
8,800.0	6,933.5	6,908.5	6,908.5	55.5	138.1	91.98	-917.5	8,026.4	6,515.7	6,322.3	193.39	33.691	
8,858.2	6,933.0	6,908.0	6,908.0	57.1	138.1	91.96	-917.5	8,026.4	6,459.1	6,264.1	194.94	33.133	
8,900.0	6,932.7	6,907.7	6,907.7	58.2	138.1	91.95	-917.5	8,026.4	6,418.5	6,222.5	196.05	32.738	
8,956.7	6,932.2	6,907.2	6,907.2	59.7	138.1	91.93	-917.5	8,026.4	6,363.5	6,165.9	197.57	32.209	
9,000.0	6,931.8	6,906.8	6,906.8	60.9	138.1	91.92	-917.5	8,026.4	6,321.5	6,122.7	198.73	31.809	
9,055.1	6,931.4	6,906.4	6,906.4	62.4	138.1	91.90	-917.5	8,026.4	6,268.0	6,067.8	200.21	31.307	
9,100.0	6,931.0	6,906.0	6,906.0	63.6	138.1	91.88	-917.5	8,026.4	6,224.5	6,023.1	201.41	30.904	
9,153.5	6,930.6	6,905.6	6,905.6	65.0	138.1	91.87	-917.5	8,026.4	6,172.6	5,969.8	202.86	30.429	
9,200.0	6,930.2	6,905.2	6,905.2	66.3	138.1	91.85	-917.5	8,026.4	6,127.6	5,923.5	204.11	30.021	
9,251.9	6,929.7	6,904.7	6,904.7	67.7	138.0	91.84	-917.5	8,026.4	6,077.4	5,871.8	205.51	29.572	
9,300.0	6,929.3	6,904.3	6,904.3	69.0	138.0	91.82	-917.5	8,026.4	6,030.9	5,824.1	206.81	29.161	
9,350.4	6,928.9	6,903.9	6,903.9	70.4	138.0	91.81	-917.5	8,026.4	5,982.2	5,774.0	208.18	28.736	
9,400.0	6,928.5	6,903.5	6,903.5	71.7	138.0	91.79	-917.5	8,026.4	5,934.2	5,724.7	209.52	28.323	
9,448.8	6,928.1	6,903.1	6,903.1	73.0	138.0	91.77	-917.5	8,026.4	5,887.1	5,676.3	210.85	27.921	
9,500.0	6,927.7	6,902.7	6,902.7	74.4	138.0	91.76	-917.5	8,026.4	5,837.7	5,625.5	212.24	27.506	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,902.3	6,902.3	75.7	138.0	91.74	-917.5	8,026.4	5,792.1	5,578.6	213.52	27.127	
9,600.0	6,926.8	6,901.8	6,901.8	77.2	138.0	91.73	-917.5	8,026.4	5,741.3	5,526.3	214.96	26.709	
9,645.6	6,926.4	6,901.4	6,901.4	78.4	138.0	91.71	-917.5	8,026.4	5,697.3	5,481.1	216.20	26.352	
9,700.0	6,926.0	6,901.0	6,901.0	79.9	138.0	91.70	-917.5	8,026.4	5,645.0	5,427.3	217.69	25.932	
9,744.1	6,925.6	6,900.6	6,900.6	81.1	138.0	91.68	-917.5	8,026.4	5,602.6	5,383.7	218.89	25.595	
9,800.0	6,925.2	6,900.2	6,900.2	82.6	138.0	91.66	-917.5	8,026.4	5,548.8	5,328.4	220.42	25.174	
9,842.5	6,924.8	6,899.8	6,899.8	83.8	137.9	91.65	-917.5	8,026.4	5,508.0	5,286.4	221.58	24.858	
9,900.0	6,924.3	6,899.3	6,899.3	85.4	137.9	91.63	-917.5	8,026.4	5,452.8	5,229.6	223.15	24.435	
9,940.9	6,924.0	6,899.0	6,899.0	86.5	137.9	91.62	-917.5	8,026.4	5,413.5	5,189.2	224.27	24.138	
10,000.0	6,923.5	6,898.5	6,898.5	88.1	137.9	91.60	-917.5	8,026.4	5,356.9	5,131.0	225.89	23.715	
10,039.3	6,923.2	6,898.2	6,898.2	89.2	137.9	91.59	-917.5	8,026.4	5,319.2	5,092.2	226.97	23.436	
10,100.0	6,922.6	6,897.6	6,897.6	90.9	137.9	91.57	-917.5	8,026.4	5,261.2	5,032.5	228.63	23.011	
10,137.8	6,922.3	6,897.3	6,897.3	91.9	137.9	91.56	-917.5	8,026.4	5,225.0	4,995.4	229.67	22.750	
10,200.0	6,921.8	6,896.8	6,896.8	93.7	137.9	91.54	-917.5	8,026.4	5,165.6	4,934.2	231.38	22.325	
10,236.2	6,921.5	6,896.5	6,896.5	94.7	137.9	91.53	-917.5	8,026.4	5,131.0	4,898.7	232.37	22.081	
10,300.0	6,921.0	6,896.0	6,896.0	96.4	137.9	91.51	-917.5	8,026.4	5,070.2	4,836.1	234.13	21.656	
10,334.6	6,920.7	6,895.7	6,895.7	97.4	137.9	91.50	-917.5	8,026.4	5,037.2	4,802.1	235.08	21.428	
10,400.0	6,920.1	6,895.1	6,895.1	99.2	137.9	91.48	-917.5	8,026.4	4,975.0	4,738.1	236.88	21.002	
10,433.0	6,919.9	6,894.9	6,894.9	100.1	137.8	91.47	-917.5	8,026.4	4,943.6	4,705.8	237.79	20.790	
10,500.0	6,919.3	6,894.3	6,894.3	101.9	137.8	91.45	-917.5	8,026.4	4,880.0	4,640.3	239.63	20.364	
10,531.5	6,919.0	6,894.0	6,894.0	102.8	137.8	91.44	-917.5	8,026.4	4,850.1	4,609.6	240.50	20.167	
10,600.0	6,918.5	6,893.5	6,893.5	104.7	137.8	91.41	-917.5	8,026.4	4,785.1	4,542.8	242.39	19.742	
10,629.9	6,918.2	6,893.2	6,893.2	105.5	137.8	91.40	-917.5	8,026.4	4,756.8	4,513.6	243.21	19.558	
10,700.0	6,917.6	6,892.6	6,892.6	107.5	137.8	91.38	-917.5	8,026.4	4,690.5	4,445.4	245.15	19.134	
10,728.3	6,917.4	6,892.4	6,892.4	108.3	137.8	91.37	-917.5	8,026.4	4,663.8	4,417.8	245.93	18.964	
10,800.0	6,916.8	6,891.8	6,891.8	110.3	137.8	91.35	-917.5	8,026.4	4,596.2	4,348.2	247.91	18.540	
10,826.7	6,916.6	6,891.6	6,891.6	111.0	137.8	91.34	-917.5	8,026.4	4,570.9	4,322.3	248.64	18.383	
10,900.0	6,916.0	6,891.0	6,891.0	113.0	137.8	91.32	-917.5	8,026.4	4,502.0	4,251.3	250.67	17.960	
10,925.2	6,915.8	6,890.8	6,890.8	113.7	137.8	91.31	-917.5	8,026.4	4,478.4	4,227.0	251.36	17.816	
11,000.0	6,915.1	6,890.1	6,890.1	115.8	137.8	91.29	-917.5	8,026.4	4,408.1	4,154.7	253.43	17.394	
11,023.6	6,914.9	6,889.9	6,889.9	116.5	137.7	91.28	-917.5	8,026.4	4,386.0	4,131.9	254.08	17.262	
11,100.0	6,914.3	6,889.3	6,889.3	118.6	137.7	91.26	-917.5	8,026.4	4,314.5	4,058.3	256.19	16.841	
11,122.0	6,914.1	6,889.1	6,889.1	119.2	137.7	91.25	-917.5	8,026.4	4,294.0	4,037.2	256.80	16.721	
11,200.0	6,913.5	6,888.5	6,888.5	121.4	137.7	91.23	-917.5	8,026.4	4,221.2	3,962.3	258.96	16.301	
11,220.4	6,913.3	6,888.3	6,888.3	121.9	137.7	91.22	-917.5	8,026.4	4,202.2	3,942.7	259.53	16.192	
11,300.0	6,912.6	6,887.6	6,887.6	124.1	137.7	91.19	-917.5	8,026.4	4,128.2	3,866.5	261.73	15.773	
11,318.9	6,912.5	6,887.5	6,887.5	124.7	137.7	91.19	-917.5	8,026.4	4,110.7	3,848.5	262.25	15.675	
11,400.0	6,911.8	6,886.8	6,886.8	126.9	137.7	91.16	-917.5	8,026.4	4,035.6	3,771.1	264.50	15.258	
11,417.3	6,911.6	6,886.6	6,886.6	127.4	137.7	91.16	-917.5	8,026.4	4,019.6	3,754.6	264.98	15.170	
11,500.0	6,911.0	6,886.0	6,886.0	129.7	137.7	91.13	-917.5	8,026.4	3,943.3	3,676.0	267.27	14.754	
11,515.7	6,910.8	6,885.8	6,885.8	130.2	137.7	91.13	-917.5	8,026.4	3,928.8	3,661.1	267.70	14.676	
11,600.0	6,910.1	6,885.1	6,885.1	132.5	137.7	91.10	-917.5	8,026.4	3,851.3	3,581.3	270.04	14.262	
11,614.1	6,910.0	6,885.0	6,885.0	132.9	137.6	91.10	-917.5	8,026.4	3,838.4	3,567.9	270.43	14.194	
11,700.0	6,909.3	6,884.3	6,884.3	135.3	137.6	91.07	-917.5	8,026.4	3,759.8	3,487.0	272.81	13.782	
11,712.6	6,909.2	6,884.2	6,884.2	135.6	137.6	91.07	-917.5	8,026.4	3,748.4	3,475.2	273.16	13.722	
11,800.0	6,908.5	6,883.5	6,883.5	138.1	137.6	91.04	-917.5	8,026.4	3,668.8	3,393.2	275.58	13.313	
11,811.0	6,908.4	6,883.4	6,883.4	138.4	137.6	91.04	-917.5	8,026.4	3,658.8	3,382.9	275.88	13.262	
11,900.0	6,907.6	6,882.6	6,882.6	140.9	137.6	91.01	-917.5	8,026.4	3,578.2	3,299.8	278.35	12.855	
11,909.4	6,907.5	6,882.5	6,882.5	141.1	137.6	91.00	-917.5	8,026.4	3,569.7	3,291.1	278.61	12.812	
12,000.0	6,906.8	6,881.8	6,881.8	143.6	137.6	90.98	-917.5	8,026.4	3,488.1	3,207.0	281.13	12.408	
12,007.8	6,906.7	6,881.7	6,881.7	143.9	137.6	90.97	-917.5	8,026.4	3,481.1	3,199.7	281.34	12.373	
12,100.0	6,905.9	6,880.9	6,880.9	146.4	137.6	90.94	-917.5	8,026.4	3,398.6	3,114.7	283.90	11.971	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,880.9	6,880.9	146.6	137.6	90.94	-917.5	8,026.4	3,393.0	3,108.9	284.08	11.944	
12,200.0	6,905.1	6,880.1	6,880.1	149.2	137.5	90.91	-917.5	8,026.4	3,309.7	3,023.0	286.68	11.545	
12,204.7	6,905.1	6,880.1	6,880.1	149.4	137.5	90.91	-917.5	8,026.4	3,305.5	3,018.7	286.81	11.525	
12,300.0	6,904.3	6,879.3	6,879.3	152.0	137.5	90.88	-917.5	8,026.4	3,221.4	2,931.9	289.45	11.129	
12,303.1	6,904.3	6,879.3	6,879.3	152.1	137.5	90.88	-917.5	8,026.4	3,218.7	2,929.1	289.54	11.116	
12,400.0	6,903.4	6,878.4	6,878.4	154.8	137.5	90.85	-917.5	8,026.4	3,133.8	2,841.6	292.23	10.724	
12,401.5	6,903.4	6,878.4	6,878.4	154.8	137.5	90.85	-917.5	8,026.4	3,132.5	2,840.2	292.27	10.718	
12,500.0	6,902.6	6,877.6	6,877.6	157.6	137.5	90.82	-917.5	8,026.4	3,047.0	2,752.0	295.01	10.329	
12,598.4	6,901.8	6,876.8	6,876.8	160.3	137.5	90.79	-917.5	8,026.4	2,962.4	2,664.7	297.74	9.950	
12,600.0	6,901.8	6,876.8	6,876.8	160.4	137.5	90.79	-917.5	8,026.4	2,961.1	2,663.3	297.79	9.944	
12,696.8	6,901.0	6,876.0	6,876.0	163.1	137.5	90.76	-917.5	8,026.4	2,878.7	2,578.2	300.48	9.580	
12,700.0	6,900.9	6,875.9	6,875.9	163.2	137.5	90.76	-917.5	8,026.4	2,876.0	2,575.5	300.56	9.569	
12,795.2	6,900.1	6,875.1	6,875.1	165.8	137.4	90.73	-917.5	8,026.4	2,795.9	2,492.7	303.21	9.221	
12,800.0	6,900.1	6,875.1	6,875.1	166.0	137.4	90.73	-917.5	8,026.4	2,791.9	2,488.6	303.34	9.204	
12,893.7	6,899.3	6,874.3	6,874.3	168.6	137.4	90.70	-917.5	8,026.4	2,714.2	2,408.2	305.95	8.871	
12,900.0	6,899.3	6,874.3	6,874.3	168.8	137.4	90.70	-917.5	8,026.4	2,709.0	2,402.8	306.12	8.849	
12,992.1	6,898.5	6,873.5	6,873.5	171.3	137.4	90.67	-917.5	8,026.4	2,633.6	2,324.9	308.68	8.532	
13,000.0	6,898.4	6,873.4	6,873.4	171.6	137.4	90.66	-917.5	8,026.4	2,627.2	2,318.3	308.90	8.505	
13,090.5	6,897.7	6,872.7	6,872.7	174.1	137.4	90.64	-917.5	8,026.4	2,554.2	2,242.8	311.42	8.202	
13,100.0	6,897.6	6,872.6	6,872.6	174.4	137.4	90.63	-917.5	8,026.4	2,546.7	2,235.0	311.68	8.171	
13,188.9	6,896.9	6,871.9	6,871.9	176.8	137.4	90.61	-917.5	8,026.4	2,476.2	2,162.1	314.16	7.882	
13,200.0	6,896.8	6,871.8	6,871.8	177.2	137.4	90.60	-917.5	8,026.4	2,467.6	2,153.1	314.46	7.847	
13,287.4	6,896.0	6,871.0	6,871.0	179.6	137.4	90.57	-917.5	8,026.4	2,399.8	2,082.9	316.89	7.573	
13,300.0	6,895.9	6,870.9	6,870.9	180.0	137.4	90.57	-917.5	8,026.4	2,390.1	2,072.8	317.24	7.534	
13,385.8	6,895.2	6,870.2	6,870.2	182.4	137.4	90.54	-917.5	8,026.4	2,324.9	2,005.3	319.63	7.274	
13,400.0	6,895.1	6,870.1	6,870.1	182.7	137.3	90.54	-917.5	8,026.4	2,314.3	1,994.3	320.02	7.232	
13,484.2	6,894.4	6,869.4	6,869.4	185.1	137.3	90.51	-917.5	8,026.4	2,251.9	1,929.6	322.37	6.986	
13,500.0	6,894.3	6,869.3	6,869.3	185.5	137.3	90.51	-917.5	8,026.4	2,240.4	1,917.6	322.81	6.940	
13,582.6	6,893.6	6,868.6	6,868.6	187.9	137.3	90.48	-917.5	8,026.4	2,180.9	1,855.8	325.11	6.708	
13,600.0	6,893.4	6,868.4	6,868.4	188.3	137.3	90.48	-917.5	8,026.4	2,168.6	1,843.0	325.59	6.661	
13,681.1	6,892.8	6,867.8	6,867.8	190.6	137.3	90.45	-917.5	8,026.4	2,112.1	1,784.3	327.84	6.442	
13,700.0	6,892.6	6,867.6	6,867.6	191.1	137.3	90.45	-917.5	8,026.4	2,099.2	1,770.8	328.37	6.393	
13,779.5	6,891.9	6,866.9	6,866.9	193.4	137.3	90.42	-917.5	8,026.4	2,045.7	1,715.1	330.58	6.188	
13,800.0	6,891.8	6,866.8	6,866.8	193.9	137.3	90.41	-917.5	8,026.4	2,032.2	1,701.1	331.15	6.137	
13,877.9	6,891.1	6,866.1	6,866.1	196.1	137.3	90.39	-917.5	8,026.4	1,982.0	1,648.7	333.32	5.946	
13,900.0	6,890.9	6,865.9	6,865.9	196.7	137.3	90.38	-917.5	8,026.4	1,968.1	1,634.2	333.94	5.894	
13,976.3	6,890.3	6,865.3	6,865.3	198.9	137.3	90.36	-917.5	8,026.4	1,921.2	1,585.2	336.06	5.717	
14,000.0	6,890.1	6,865.1	6,865.1	199.5	137.2	90.35	-917.5	8,026.4	1,907.1	1,570.4	336.72	5.664	
14,074.8	6,889.5	6,864.5	6,864.5	201.6	137.2	90.33	-917.5	8,026.4	1,863.6	1,524.8	338.80	5.501	
14,100.0	6,889.3	6,864.3	6,864.3	202.3	137.2	90.32	-917.5	8,026.4	1,849.4	1,509.9	339.50	5.448	
14,173.2	6,888.7	6,863.7	6,863.7	204.4	137.2	90.30	-917.5	8,026.4	1,809.6	1,468.0	341.54	5.298	
14,200.0	6,888.4	6,863.4	6,863.4	205.1	137.2	90.29	-917.5	8,026.4	1,795.5	1,453.2	342.28	5.246	
14,271.6	6,887.8	6,862.8	6,862.8	207.1	137.2	90.27	-917.5	8,026.4	1,759.4	1,415.1	344.28	5.110	
14,300.0	6,887.6	6,862.6	6,862.6	207.9	137.2	90.26	-917.5	8,026.4	1,745.7	1,400.6	345.07	5.059	
14,370.0	6,887.0	6,862.0	6,862.0	209.9	137.2	90.24	-917.5	8,026.4	1,713.4	1,366.4	347.02	4.937	
14,400.0	6,886.8	6,861.8	6,861.8	210.7	137.2	90.23	-917.5	8,026.4	1,700.3	1,352.4	347.85	4.888	
14,468.5	6,886.2	6,861.2	6,861.2	212.6	137.2	90.21	-917.5	8,026.4	1,671.9	1,322.1	349.76	4.780	
14,500.0	6,885.9	6,860.9	6,860.9	213.5	137.2	90.20	-917.5	8,026.4	1,659.6	1,309.0	350.63	4.733	
14,566.9	6,885.4	6,860.4	6,860.4	215.4	137.2	90.18	-917.5	8,026.4	1,635.3	1,282.8	352.50	4.639	
14,600.0	6,885.1	6,860.1	6,860.1	216.3	137.1	90.17	-917.5	8,026.4	1,624.1	1,270.7	353.42	4.596	
14,613.0	6,885.0	6,860.0	6,860.0	216.7	137.1	90.16	-917.5	8,026.4	1,619.9	1,266.1	353.78	4.579 CC, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	87.35	255.6	5,531.2	5,537.2				
98.4	98.4	77.4	77.4	0.1	0.4	87.35	255.6	5,531.2	5,537.1	5,536.6	0.51	N/A	
100.0	100.0	79.0	79.0	0.1	0.4	87.35	255.6	5,531.2	5,537.1	5,536.6	0.52	N/A	
196.8	196.8	175.8	175.8	0.3	2.4	87.35	255.6	5,531.2	5,537.1	5,534.4	2.72	2,037.695	
200.0	200.0	179.0	179.0	0.3	2.5	87.35	255.6	5,531.2	5,537.1	5,534.3	2.80	1,976.151	
295.3	295.3	274.3	274.3	0.5	4.6	87.35	255.6	5,531.2	5,537.1	5,532.1	5.08	1,090.450	
300.0	300.0	279.0	279.0	0.5	4.7	87.35	255.6	5,531.2	5,537.1	5,531.9	5.19	1,067.558	
393.7	393.7	372.7	372.7	0.7	6.6	87.35	255.6	5,531.2	5,537.1	5,529.8	7.32	756.704	
400.0	400.0	379.0	379.0	0.8	6.7	87.35	255.6	5,531.2	5,537.1	5,529.7	7.46	742.230	
492.1	492.1	471.1	471.1	1.0	8.6	87.35	255.6	5,531.2	5,537.1	5,527.6	9.54	580.556	
500.0	500.0	479.0	479.0	1.0	8.7	87.35	255.6	5,531.2	5,537.1	5,527.4	9.71	569.958	
590.5	590.5	569.5	569.5	1.2	10.6	87.35	255.6	5,531.2	5,537.1	5,525.4	11.75	471.239	
600.0	600.0	579.0	579.0	1.2	10.8	87.35	255.6	5,531.2	5,537.1	5,525.2	11.96	462.877	
689.0	689.0	668.0	668.0	1.4	12.5	87.35	255.6	5,531.2	5,537.1	5,523.2	13.96	396.677	
700.0	700.0	679.0	679.0	1.4	12.8	87.35	255.6	5,531.2	5,537.1	5,522.9	14.21	389.772	
787.4	787.4	766.4	766.4	1.6	14.5	87.35	255.6	5,531.2	5,537.1	5,521.0	16.17	342.535	
800.0	800.0	779.0	779.0	1.7	14.8	87.35	255.6	5,531.2	5,537.1	5,520.7	16.45	336.654	
885.8	885.8	864.8	864.8	1.9	16.5	87.35	255.6	5,531.2	5,537.1	5,518.8	18.37	301.421	
900.0	900.0	879.0	879.0	1.9	16.8	87.35	255.6	5,531.2	5,537.1	5,518.4	18.69	296.300	
984.2	984.2	963.2	963.2	2.1	18.5	87.35	255.6	5,531.2	5,537.1	5,516.6	20.57	269.131	
1,000.0	1,000.0	979.0	979.0	2.1	18.8	87.35	255.6	5,531.2	5,537.1	5,516.2	20.93	264.596	
1,082.7	1,082.7	1,061.7	1,061.7	2.3	20.5	87.35	255.6	5,531.2	5,537.1	5,514.4	22.78	243.098	
1,100.0	1,100.0	1,079.0	1,079.0	2.3	20.8	87.35	255.6	5,531.2	5,537.1	5,514.0	23.17	239.028	
1,150.0	1,150.0	1,129.0	1,129.0	2.4	21.8	87.35	255.6	5,531.2	5,537.1	5,512.8	24.28	228.014	
1,181.1	1,181.1	1,160.1	1,160.1	2.5	22.5	120.04	255.6	5,531.2	5,537.2	5,512.2	24.98	221.675	
1,200.0	1,200.0	1,179.0	1,179.0	2.6	22.8	120.04	255.6	5,531.2	5,537.4	5,512.0	25.40	217.999	
1,279.5	1,279.5	1,258.5	1,258.5	2.7	24.4	120.04	255.6	5,531.2	5,538.6	5,511.4	27.17	203.851	
1,300.0	1,299.9	1,278.9	1,278.9	2.8	24.9	120.04	255.6	5,531.2	5,539.1	5,511.5	27.62	200.518	
1,377.9	1,377.7	1,356.7	1,356.7	3.0	26.4	120.04	255.6	5,531.2	5,541.7	5,512.3	29.35	188.818	
1,400.0	1,399.7	1,378.7	1,378.7	3.0	26.9	120.04	255.6	5,531.2	5,542.6	5,512.8	29.84	185.772	
1,476.4	1,475.7	1,454.7	1,454.7	3.2	28.4	120.05	255.6	5,531.2	5,546.5	5,514.9	31.52	175.975	
1,500.0	1,499.1	1,478.1	1,478.1	3.2	28.9	120.05	255.6	5,531.2	5,547.9	5,515.8	32.04	173.172	
1,574.8	1,573.2	1,552.2	1,552.2	3.4	30.4	120.05	255.6	5,531.2	5,552.9	5,519.3	33.68	164.876	
1,600.0	1,598.2	1,577.2	1,577.2	3.5	30.9	120.05	255.6	5,531.2	5,554.9	5,520.6	34.23	162.282	
1,673.2	1,670.3	1,649.3	1,649.3	3.7	32.3	120.05	255.6	5,531.2	5,561.1	5,525.3	35.84	155.186	
1,700.0	1,696.6	1,675.6	1,675.6	3.8	32.8	120.05	255.6	5,531.2	5,563.7	5,527.3	36.42	152.770	
1,749.9	1,745.5	1,724.5	1,724.5	3.9	33.8	120.05	255.6	5,531.2	5,568.7	5,531.2	37.51	148.461	
1,771.6	1,766.8	1,745.8	1,745.8	4.0	34.3	120.09	255.6	5,531.2	5,571.0	5,533.0	38.00	146.601	
1,800.0	1,794.5	1,773.5	1,773.5	4.1	34.8	120.14	255.6	5,531.2	5,574.0	5,535.4	38.64	144.252	
1,870.1	1,863.1	1,842.1	1,842.1	4.3	36.2	120.27	255.6	5,531.2	5,581.5	5,541.3	40.23	138.736	
1,900.0	1,892.3	1,871.3	1,871.3	4.4	36.8	120.32	255.6	5,531.2	5,584.7	5,543.8	40.91	136.512	
1,968.5	1,959.4	1,938.4	1,938.4	4.7	38.1	120.44	255.6	5,531.2	5,592.0	5,549.5	42.47	131.658	
2,000.0	1,990.2	1,969.2	1,969.2	4.8	38.7	120.50	255.6	5,531.2	5,595.4	5,552.2	43.19	129.545	
2,066.9	2,055.6	2,034.6	2,034.6	5.1	40.1	120.62	255.6	5,531.2	5,602.6	5,557.8	44.73	125.262	
2,100.0	2,088.0	2,067.0	2,067.0	5.2	40.7	120.68	255.6	5,531.2	5,606.1	5,560.6	45.49	123.249	
2,165.3	2,151.9	2,130.9	2,130.9	5.4	42.0	120.80	255.6	5,531.2	5,613.2	5,566.2	46.99	119.453	
2,200.0	2,185.8	2,164.8	2,164.8	5.6	42.7	120.86	255.6	5,531.2	5,616.9	5,569.1	47.79	117.537	
2,263.8	2,248.2	2,227.2	2,227.2	5.8	43.9	120.98	255.6	5,531.2	5,623.9	5,574.6	49.26	114.163	
2,300.0	2,283.6	2,262.6	2,262.6	6.0	44.6	121.04	255.6	5,531.2	5,627.8	5,577.7	50.10	112.336	
2,362.2	2,344.5	2,323.5	2,323.5	6.2	45.9	121.15	255.6	5,531.2	5,634.6	5,583.0	51.54	109.329	
2,400.0	2,381.4	2,360.4	2,360.4	6.4	46.6	121.22	255.6	5,531.2	5,638.7	5,586.3	52.41	107.584	
2,460.6	2,440.7	2,419.7	2,419.7	6.6	47.8	121.33	255.6	5,531.2	5,645.4	5,591.5	53.82	104.897	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HOECHER 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,500.0	2,479.2	2,458.2	2,458.2	6.8	48.6	121.40	255.6	5,531.2	5,649.7	5,595.0	54.73	103.226		
2,559.0	2,537.0	2,516.0	2,516.0	7.0	49.7	121.50	255.6	5,531.2	5,656.2	5,600.1	56.10	100.819		
2,600.0	2,577.1	2,556.1	2,556.1	7.2	50.5	121.57	255.6	5,531.2	5,660.7	5,603.7	57.05	99.218		
2,657.5	2,633.3	2,612.3	2,612.3	7.4	51.7	121.67	255.6	5,531.2	5,667.1	5,608.7	58.39	97.056		
2,700.0	2,674.9	2,653.9	2,653.9	7.6	52.5	121.75	255.6	5,531.2	5,671.8	5,612.4	59.38	95.520		
2,755.9	2,729.6	2,708.6	2,708.6	7.9	53.6	121.85	255.6	5,531.2	5,678.0	5,617.3	60.68	93.574		
2,800.0	2,772.7	2,751.7	2,751.7	8.0	54.5	121.92	255.6	5,531.2	5,682.9	5,621.2	61.71	92.098		
2,854.3	2,825.8	2,804.8	2,804.8	8.3	55.6	122.02	255.6	5,531.2	5,689.0	5,626.0	62.97	90.344		
2,900.0	2,870.5	2,849.5	2,849.5	8.5	56.5	122.10	255.6	5,531.2	5,694.1	5,630.1	64.03	88.924		
2,952.7	2,922.1	2,901.1	2,901.1	8.7	57.5	122.19	255.6	5,531.2	5,700.1	5,634.8	65.26	87.340		
3,000.0	2,968.3	2,947.3	2,947.3	8.9	58.4	122.27	255.6	5,531.2	5,705.4	5,639.0	66.36	85.971		
3,051.2	3,018.4	2,997.4	2,997.4	9.1	59.4	122.36	255.6	5,531.2	5,711.2	5,643.6	67.56	84.539		
3,100.0	3,066.1	3,045.1	3,045.1	9.3	60.4	122.45	255.6	5,531.2	5,716.7	5,648.0	68.69	83.219		
3,149.6	3,114.7	3,093.7	3,093.7	9.5	61.4	122.53	255.6	5,531.2	5,722.3	5,652.5	69.85	81.921		
3,200.0	3,164.0	3,143.0	3,143.0	9.8	62.4	122.62	255.6	5,531.2	5,728.0	5,657.0	71.03	80.647		
3,248.0	3,210.9	3,189.9	3,189.9	10.0	63.3	122.70	255.6	5,531.2	5,733.5	5,661.4	72.15	79.471		
3,300.0	3,261.8	3,240.8	3,240.8	10.2	64.3	122.79	255.6	5,531.2	5,739.4	5,666.1	73.36	78.239		
3,346.4	3,307.2	3,286.2	3,286.2	10.4	65.2	122.87	255.6	5,531.2	5,744.8	5,670.3	74.44	77.172		
3,400.0	3,359.6	3,338.6	3,338.6	10.6	66.3	122.96	255.6	5,531.2	5,750.9	5,675.2	75.69	75.980		
3,444.9	3,403.5	3,382.5	3,382.5	10.8	67.2	123.04	255.6	5,531.2	5,756.1	5,679.3	76.74	75.010		
3,500.0	3,457.4	3,436.4	3,436.4	11.1	68.3	123.13	255.6	5,531.2	5,762.4	5,684.4	78.02	73.856		
3,543.3	3,499.8	3,478.8	3,478.8	11.3	69.1	123.21	255.6	5,531.2	5,767.4	5,688.4	79.03	72.975		
3,600.0	3,555.2	3,534.2	3,534.2	11.5	70.2	123.30	255.6	5,531.2	5,774.0	5,693.6	80.35	71.856		
3,641.7	3,596.0	3,575.0	3,575.0	11.7	71.0	123.37	255.6	5,531.2	5,778.8	5,697.5	81.33	71.056		
3,700.0	3,653.0	3,632.0	3,632.0	11.9	72.2	123.47	255.6	5,531.2	5,785.6	5,702.9	82.69	69.970		
3,740.1	3,692.3	3,671.3	3,671.3	12.1	73.0	123.54	255.6	5,531.2	5,790.3	5,706.7	83.62	69.242		
3,800.0	3,750.8	3,729.8	3,729.8	12.4	74.2	123.64	255.6	5,531.2	5,797.3	5,712.2	85.02	68.188		
3,838.6	3,788.6	3,767.6	3,767.6	12.6	74.9	123.71	255.6	5,531.2	5,801.8	5,715.9	85.92	67.527		
3,900.0	3,848.7	3,827.7	3,827.7	12.8	76.1	123.81	255.6	5,531.2	5,809.0	5,721.6	87.35	66.502		
3,937.0	3,884.9	3,863.9	3,863.9	13.0	76.9	123.87	255.6	5,531.2	5,813.3	5,725.1	88.21	65.901		
4,000.0	3,946.5	3,925.5	3,925.5	13.3	78.1	123.98	255.6	5,531.2	5,820.7	5,731.1	89.68	64.905		
4,035.4	3,981.1	3,960.1	3,960.1	13.4	78.8	124.04	255.6	5,531.2	5,824.9	5,734.4	90.51	64.359		
4,100.0	4,044.3	4,023.3	4,023.3	13.7	80.1	124.14	255.6	5,531.2	5,832.6	5,740.6	92.01	63.389		
4,133.8	4,077.4	4,056.4	4,056.4	13.9	80.7	124.20	255.6	5,531.2	5,836.6	5,743.8	92.80	62.894		
4,200.0	4,142.1	4,121.1	4,121.1	14.2	82.0	124.31	255.6	5,531.2	5,844.4	5,750.1	94.34	61.950		
4,232.3	4,173.7	4,152.7	4,152.7	14.3	82.7	124.36	255.6	5,531.2	5,848.3	5,753.2	95.09	61.500		
4,300.0	4,239.9	4,218.9	4,218.9	14.6	84.0	124.48	255.6	5,531.2	5,856.4	5,759.7	96.67	60.580		
4,330.7	4,270.0	4,249.0	4,249.0	14.7	84.6	124.53	255.6	5,531.2	5,860.0	5,762.6	97.39	60.173		
4,400.0	4,337.7	4,316.7	4,316.7	15.0	86.0	124.64	255.6	5,531.2	5,868.3	5,769.3	99.00	59.276		
4,429.1	4,366.2	4,345.2	4,345.2	15.2	86.5	124.69	255.6	5,531.2	5,871.8	5,772.1	99.68	58.908		
4,500.0	4,435.6	4,414.6	4,414.6	15.5	87.9	124.80	255.6	5,531.2	5,880.3	5,779.0	101.33	58.032		
4,527.5	4,462.5	4,441.5	4,441.5	15.6	88.5	124.85	255.6	5,531.2	5,883.7	5,781.7	101.97	57.700		
4,600.0	4,533.4	4,512.4	4,512.4	15.9	89.9	124.97	255.6	5,531.2	5,892.4	5,788.7	103.66	56.846		
4,626.0	4,558.8	4,537.8	4,537.8	16.0	90.4	125.01	255.6	5,531.2	5,895.5	5,791.3	104.26	56.546		
4,673.6	4,605.3	4,584.3	4,584.3	16.3	91.3	125.09	255.6	5,531.2	5,901.3	5,795.9	105.37	56.007		
4,700.0	4,631.2	4,610.2	4,610.2	16.4	91.9	125.18	255.6	5,531.2	5,904.4	5,798.4	106.02	55.690		
4,724.4	4,655.1	4,634.1	4,634.1	16.4	92.3	125.26	255.6	5,531.2	5,907.2	5,800.6	106.62	55.406		
4,800.0	4,729.5	4,708.5	4,708.5	16.7	93.8	125.50	255.6	5,531.2	5,915.1	5,806.6	108.45	54.543		
4,822.8	4,752.1	4,731.1	4,731.1	16.7	94.3	125.56	255.6	5,531.2	5,917.2	5,808.2	108.99	54.290		
4,900.0	4,828.4	4,807.4	4,807.4	17.0	95.8	125.75	255.6	5,531.2	5,923.7	5,812.9	110.83	53.448		
4,921.2	4,849.5	4,828.5	4,828.5	17.0	96.3	125.80	255.6	5,531.2	5,925.3	5,814.0	111.33	53.223		
5,000.0	4,927.8	4,906.8	4,906.8	17.2	97.8	125.95	255.6	5,531.2	5,930.3	5,817.2	113.16	52.405		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HOECHER 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,019.7	4,947.4	4,926.4	4,926.4	17.2	98.2	125.98	255.6	5,531.2	5,931.4	5,817.8	113.61	52.207		
5,100.0	5,027.5	5,006.5	5,006.5	17.4	99.8	126.08	255.6	5,531.2	5,934.9	5,819.5	115.44	51.411		
5,118.1	5,045.6	5,024.6	5,024.6	17.4	100.2	126.10	255.6	5,531.2	5,935.5	5,819.7	115.84	51.238		
5,200.0	5,127.4	5,106.4	5,106.4	17.6	101.8	126.16	255.6	5,531.2	5,937.5	5,819.8	117.65	50.466		
5,216.5	5,143.9	5,122.9	5,122.9	17.6	102.2	126.17	255.6	5,531.2	5,937.7	5,819.7	118.01	50.315		
5,273.4	5,200.8	5,179.8	5,179.8	17.7	103.3	93.49	255.6	5,531.2	5,938.0	5,820.2	117.82	50.397		
5,300.0	5,227.4	5,206.4	5,206.4	17.7	103.9	93.49	255.6	5,531.2	5,938.0	5,819.6	118.40	50.152		
5,314.9	5,242.3	5,221.3	5,221.3	17.7	104.2	93.49	255.6	5,531.2	5,938.0	5,819.3	118.73	50.014		
5,400.0	5,327.4	5,306.4	5,306.4	17.8	105.9	93.49	255.6	5,531.2	5,938.0	5,817.4	120.58	49.244		
5,413.4	5,340.8	5,319.8	5,319.8	17.9	106.1	93.49	255.6	5,531.2	5,938.0	5,817.1	120.88	49.125		
5,500.0	5,427.4	5,406.4	5,406.4	18.0	107.9	93.49	255.6	5,531.2	5,938.0	5,815.3	122.77	48.367		
5,511.8	5,439.2	5,418.2	5,418.2	18.0	108.1	93.49	255.6	5,531.2	5,938.0	5,815.0	123.03	48.266		
5,600.0	5,527.4	5,506.4	5,506.4	18.1	109.9	93.49	255.6	5,531.2	5,938.0	5,813.1	124.96	47.521		
5,610.2	5,537.6	5,516.6	5,516.6	18.1	110.1	93.49	255.6	5,531.2	5,938.0	5,812.8	125.18	47.436		
5,700.0	5,627.4	5,606.4	5,606.4	18.3	111.9	93.49	255.6	5,531.2	5,938.0	5,810.9	127.14	46.703		
5,708.6	5,636.0	5,615.0	5,615.0	18.3	112.1	93.49	255.6	5,531.2	5,938.0	5,810.7	127.33	46.633		
5,800.0	5,727.4	5,706.4	5,706.4	18.4	113.9	93.49	255.6	5,531.2	5,938.0	5,808.7	129.33	45.912		
5,807.1	5,734.5	5,713.5	5,713.5	18.4	114.0	93.49	255.6	5,531.2	5,938.0	5,808.5	129.49	45.857		
5,900.0	5,827.4	5,806.4	5,806.4	18.6	115.9	93.49	255.6	5,531.2	5,938.0	5,806.5	131.53	45.147		
5,905.5	5,832.9	5,811.9	5,811.9	18.6	116.0	93.49	255.6	5,531.2	5,938.0	5,806.4	131.65	45.106		
6,000.0	5,927.4	5,906.4	5,906.4	18.7	117.9	93.49	255.6	5,531.2	5,938.0	5,804.3	133.72	44.407		
6,003.9	5,931.3	5,910.3	5,910.3	18.7	118.0	93.49	255.6	5,531.2	5,938.0	5,804.2	133.80	44.379		
6,100.0	6,027.4	6,006.4	6,006.4	18.9	119.9	93.49	255.6	5,531.2	5,938.0	5,802.1	135.91	43.691		
6,102.3	6,029.7	6,008.7	6,008.7	18.9	120.0	93.49	255.6	5,531.2	5,938.0	5,802.1	135.96	43.674		
6,200.0	6,127.4	6,106.4	6,106.4	19.0	122.0	93.49	255.6	5,531.2	5,938.0	5,799.9	138.10	42.997		
6,200.8	6,128.2	6,107.2	6,107.2	19.0	122.0	93.49	255.6	5,531.2	5,938.0	5,799.9	138.12	42.992		
6,299.2	6,226.6	6,205.6	6,205.6	19.2	123.9	93.49	255.6	5,531.2	5,938.0	5,797.7	140.28	42.329		
6,301.4	6,228.8	6,207.8	6,207.8	19.2	124.0	93.49	255.6	5,531.2	5,938.0	5,797.7	140.33	42.315		
6,350.0	6,277.4	6,256.4	6,256.4	19.3	125.0	3.50	255.6	5,531.2	5,936.4	5,794.2	142.23	41.739		
6,397.6	6,324.7	6,303.7	6,303.7	19.3	125.9	3.52	255.6	5,531.2	5,931.6	5,789.3	142.25	41.697		
6,400.0	6,327.1	6,306.1	6,306.1	19.3	126.0	3.52	255.6	5,531.2	5,931.3	5,789.0	142.24	41.699		
6,450.0	6,376.3	6,355.3	6,355.3	19.3	127.0	3.57	255.6	5,531.2	5,922.7	5,781.2	141.54	41.845		
6,496.0	6,421.1	6,400.1	6,400.1	19.3	127.9	3.64	255.6	5,531.2	5,911.8	5,771.5	140.26	42.148		
6,500.0	6,424.9	6,403.9	6,403.9	19.3	127.9	3.64	255.6	5,531.2	5,910.7	5,770.6	140.12	42.182		
6,550.0	6,472.4	6,451.4	6,451.4	19.3	128.9	3.73	255.6	5,531.2	5,895.4	5,757.4	137.98	42.725		
6,594.5	6,513.8	6,492.8	6,492.8	19.3	129.7	3.84	255.6	5,531.2	5,879.0	5,743.5	135.48	43.395		
6,600.0	6,518.8	6,497.8	6,497.8	19.3	129.8	3.85	255.6	5,531.2	5,876.8	5,741.7	135.12	43.492		
6,650.0	6,563.8	6,542.8	6,542.8	19.3	130.7	4.00	255.6	5,531.2	5,855.0	5,723.5	131.55	44.507		
6,692.9	6,601.1	6,580.1	6,580.1	19.2	131.5	4.15	255.6	5,531.2	5,833.9	5,705.9	127.93	45.602		
6,700.0	6,607.1	6,586.1	6,586.1	19.2	131.6	4.18	255.6	5,531.2	5,830.1	5,702.9	127.28	45.805		
6,750.0	6,648.6	6,627.6	6,627.6	19.2	132.4	4.40	255.6	5,531.2	5,802.3	5,680.0	122.34	47.429		
6,791.3	6,681.4	6,660.4	6,660.4	19.1	133.1	4.62	255.6	5,531.2	5,777.2	5,659.4	117.76	49.059		
6,800.0	6,688.1	6,667.1	6,667.1	19.1	133.2	4.67	255.6	5,531.2	5,771.7	5,654.9	116.75	49.438		
6,850.0	6,725.3	6,704.3	6,704.3	19.1	134.0	5.00	255.6	5,531.2	5,738.4	5,627.8	110.55	51.907		
6,889.7	6,753.2	6,732.2	6,732.2	19.0	134.5	5.32	255.6	5,531.2	5,710.1	5,604.9	105.23	54.264		
6,900.0	6,760.1	6,739.1	6,739.1	19.0	134.7	5.41	255.6	5,531.2	5,702.6	5,598.7	103.80	54.936		
6,950.0	6,792.3	6,771.3	6,771.3	19.0	135.3	5.91	255.6	5,531.2	5,664.4	5,567.8	96.58	58.649		
6,988.2	6,815.1	6,794.1	6,794.1	18.9	135.8	6.38	255.6	5,531.2	5,633.8	5,543.0	90.81	62.040		
7,000.0	6,821.8	6,800.8	6,800.8	18.9	135.9	6.55	255.6	5,531.2	5,624.1	5,535.1	88.99	63.202		
7,050.0	6,848.3	6,827.3	6,827.3	18.9	136.4	7.36	255.6	5,531.2	5,581.8	5,500.7	81.18	68.762		
7,086.6	6,865.9	6,844.9	6,844.9	18.9	136.8	8.12	255.6	5,531.2	5,549.8	5,474.3	75.47	73.535		
7,100.0	6,871.9	6,850.9	6,850.9	18.9	136.9	8.45	255.6	5,531.2	5,537.8	5,464.4	73.42	75.429		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,871.3	6,871.3	18.8	137.3	9.93	255.6	5,531.2	5,492.3	5,426.1	66.20	82.964	
7,185.0	6,904.7	6,883.7	6,883.7	18.8	137.6	11.34	255.6	5,531.2	5,459.6	5,397.7	61.98	88.093	
7,200.0	6,909.5	6,888.5	6,888.5	18.9	137.7	12.07	255.6	5,531.2	5,445.5	5,384.9	60.53	89.956	
7,250.0	6,923.4	6,902.4	6,902.4	19.3	138.0	15.38	255.6	5,531.2	5,397.6	5,339.0	58.58	92.135	
7,283.4	6,930.8	6,909.8	6,909.8	19.8	138.1	18.79	255.6	5,531.2	5,365.0	5,303.6	61.42	87.344	
7,300.0	6,933.9	6,912.9	6,912.9	20.0	138.2	21.08	255.6	5,531.2	5,348.8	5,284.0	64.81	82.527	
7,350.0	6,940.9	6,919.9	6,919.9	20.8	138.3	32.68	255.6	5,531.2	5,299.4	5,211.4	88.05	60.185	
7,381.9	6,943.6	6,922.6	6,922.6	21.4	138.4	47.88	255.6	5,531.2	5,267.7	5,149.1	118.60	44.415	
7,400.0	6,944.5	6,923.5	6,923.5	21.7	138.4	61.87	255.6	5,531.2	5,249.7	5,108.9	140.77	37.293	
7,432.4	6,945.0	6,924.0	6,924.0	22.3	138.4	96.88	255.6	5,531.2	5,217.3	5,057.7	159.70	32.670	
7,480.3	6,944.6	6,923.6	6,923.6	23.2	138.4	96.82	255.6	5,531.2	5,169.6	5,009.0	160.59	32.190	
7,500.0	6,944.4	6,923.4	6,923.4	23.6	138.4	96.80	255.6	5,531.2	5,149.9	4,989.0	160.96	31.994	
7,578.7	6,943.7	6,922.7	6,922.7	25.2	138.4	96.69	255.6	5,531.2	5,071.4	4,908.8	162.55	31.198	
7,600.0	6,943.6	6,922.6	6,922.6	25.6	138.4	96.66	255.6	5,531.2	5,050.2	4,887.2	162.98	30.986	
7,677.1	6,942.9	6,921.9	6,921.9	27.3	138.4	96.56	255.6	5,531.2	4,973.2	4,808.6	164.65	30.205	
7,700.0	6,942.7	6,921.7	6,921.7	27.8	138.3	96.53	255.6	5,531.2	4,950.4	4,785.3	165.14	29.977	
7,775.6	6,942.1	6,921.1	6,921.1	29.5	138.3	96.43	255.6	5,531.2	4,875.1	4,708.2	166.85	29.218	
7,800.0	6,941.9	6,920.9	6,920.9	30.1	138.3	96.40	255.6	5,531.2	4,850.7	4,683.3	167.41	28.976	
7,874.0	6,941.3	6,920.3	6,920.3	31.8	138.3	96.30	255.6	5,531.2	4,776.9	4,607.8	169.14	28.242	
7,900.0	6,941.1	6,920.1	6,920.1	32.4	138.3	96.27	255.6	5,531.2	4,751.0	4,581.2	169.76	27.987	
7,972.4	6,940.4	6,919.4	6,919.4	34.2	138.3	96.17	255.6	5,531.2	4,678.8	4,507.3	171.51	27.280	
8,000.0	6,940.2	6,919.2	6,919.2	34.9	138.3	96.14	255.6	5,531.2	4,651.3	4,479.1	172.17	27.015	
8,070.8	6,939.6	6,918.6	6,918.6	36.6	138.3	96.04	255.6	5,531.2	4,580.7	4,406.7	173.93	26.337	
8,100.0	6,939.4	6,918.4	6,918.4	37.3	138.3	96.00	255.6	5,531.2	4,551.6	4,377.0	174.65	26.061	
8,169.3	6,938.8	6,917.8	6,917.8	39.1	138.3	95.91	255.6	5,531.2	4,482.6	4,306.2	176.40	25.412	
8,200.0	6,938.5	6,917.5	6,917.5	39.8	138.3	95.87	255.6	5,531.2	4,451.9	4,274.8	177.17	25.128	
8,267.7	6,938.0	6,917.0	6,917.0	41.6	138.3	95.78	255.6	5,531.2	4,384.5	4,205.6	178.90	24.508	
8,300.0	6,937.7	6,916.7	6,916.7	42.4	138.2	95.74	255.6	5,531.2	4,352.3	4,172.6	179.73	24.216	
8,366.1	6,937.2	6,916.2	6,916.2	44.1	138.2	95.65	255.6	5,531.2	4,286.4	4,104.9	181.44	23.624	
8,400.0	6,936.9	6,915.9	6,915.9	45.0	138.2	95.61	255.6	5,531.2	4,252.6	4,070.3	182.32	23.325	
8,464.5	6,936.3	6,915.3	6,915.3	46.6	138.2	95.52	255.6	5,531.2	4,188.3	4,004.3	184.01	22.762	
8,500.0	6,936.0	6,915.0	6,915.0	47.6	138.2	95.48	255.6	5,531.2	4,153.0	3,968.1	184.93	22.457	
8,563.0	6,935.5	6,914.5	6,914.5	49.2	138.2	95.39	255.6	5,531.2	4,090.3	3,903.7	186.59	21.921	
8,600.0	6,935.2	6,914.2	6,914.2	50.2	138.2	95.34	255.6	5,531.2	4,053.4	3,865.8	187.57	21.610	
8,661.4	6,934.7	6,913.7	6,913.7	51.8	138.2	95.26	255.6	5,531.2	3,992.3	3,803.1	189.20	21.101	
8,700.0	6,934.4	6,913.4	6,913.4	52.8	138.2	95.21	255.6	5,531.2	3,953.8	3,763.6	190.23	20.785	
8,759.8	6,933.9	6,912.9	6,912.9	54.4	138.2	95.13	255.6	5,531.2	3,894.2	3,702.4	191.82	20.301	
8,800.0	6,933.5	6,912.5	6,912.5	55.5	138.2	95.08	255.6	5,531.2	3,854.2	3,661.3	192.90	19.981	
8,858.2	6,933.0	6,912.0	6,912.0	57.1	138.2	95.00	255.6	5,531.2	3,796.3	3,601.8	194.46	19.522	
8,900.0	6,932.7	6,911.7	6,911.7	58.2	138.1	94.95	255.6	5,531.2	3,754.7	3,559.1	195.58	19.197	
8,956.7	6,932.2	6,911.2	6,911.2	59.7	138.1	94.87	255.6	5,531.2	3,698.3	3,501.2	197.11	18.762	
9,000.0	6,931.8	6,910.8	6,910.8	60.9	138.1	94.82	255.6	5,531.2	3,655.2	3,456.9	198.28	18.434	
9,055.1	6,931.4	6,910.4	6,910.4	62.4	138.1	94.74	255.6	5,531.2	3,600.4	3,400.6	199.77	18.022	
9,100.0	6,931.0	6,910.0	6,910.0	63.6	138.1	94.68	255.6	5,531.2	3,555.7	3,354.7	200.99	17.691	
9,153.5	6,930.6	6,909.6	6,909.6	65.0	138.1	94.61	255.6	5,531.2	3,502.4	3,300.0	202.44	17.301	
9,200.0	6,930.2	6,909.2	6,909.2	66.3	138.1	94.55	255.6	5,531.2	3,456.2	3,252.5	203.71	16.967	
9,251.9	6,929.7	6,908.7	6,908.7	67.7	138.1	94.48	255.6	5,531.2	3,404.6	3,199.4	205.12	16.598	
9,300.0	6,929.3	6,908.3	6,908.3	69.0	138.1	94.42	255.6	5,531.2	3,356.8	3,150.4	206.43	16.261	
9,350.4	6,928.9	6,907.9	6,907.9	70.4	138.1	94.35	255.6	5,531.2	3,306.7	3,098.9	207.81	15.912	
9,400.0	6,928.5	6,907.5	6,907.5	71.7	138.1	94.29	255.6	5,531.2	3,257.4	3,048.2	209.16	15.573	
9,448.8	6,928.1	6,907.1	6,907.1	73.0	138.1	94.22	255.6	5,531.2	3,208.9	2,998.4	210.50	15.244	
9,500.0	6,927.7	6,906.7	6,906.7	74.4	138.0	94.15	255.6	5,531.2	3,158.0	2,946.1	211.90	14.903	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HOECHER 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,547.2	6,927.3	6,906.3	6,906.3	75.7	138.0	94.09	255.6	5,531.2	3,111.1	2,897.9	213.20	14.593		
9,600.0	6,926.8	6,905.8	6,905.8	77.2	138.0	94.02	255.6	5,531.2	3,058.7	2,844.1	214.65	14.250		
9,645.6	6,926.4	6,905.4	6,905.4	78.4	138.0	93.96	255.6	5,531.2	3,013.4	2,797.5	215.90	13.957		
9,700.0	6,926.0	6,905.0	6,905.0	79.9	138.0	93.89	255.6	5,531.2	2,959.4	2,742.0	217.40	13.613		
9,744.1	6,925.6	6,904.6	6,904.6	81.1	138.0	93.83	255.6	5,531.2	2,915.7	2,697.1	218.61	13.338		
9,800.0	6,925.2	6,904.2	6,904.2	82.6	138.0	93.76	255.6	5,531.2	2,860.2	2,640.1	220.15	12.992		
9,842.5	6,924.8	6,903.8	6,903.8	83.8	138.0	93.70	255.6	5,531.2	2,818.1	2,596.7	221.32	12.733		
9,900.0	6,924.3	6,903.3	6,903.3	85.4	138.0	93.63	255.6	5,531.2	2,761.0	2,538.1	222.91	12.387		
9,940.9	6,924.0	6,903.0	6,903.0	86.5	138.0	93.57	255.6	5,531.2	2,720.5	2,496.4	224.03	12.143		
10,000.0	6,923.5	6,902.5	6,902.5	88.1	138.0	93.49	255.6	5,531.2	2,661.9	2,436.3	225.67	11.796		
10,039.3	6,923.2	6,902.2	6,902.2	89.2	138.0	93.44	255.6	5,531.2	2,623.0	2,396.2	226.75	11.568		
10,100.0	6,922.6	6,901.6	6,901.6	90.9	137.9	93.36	255.6	5,531.2	2,562.9	2,334.5	228.43	11.220		
10,137.8	6,922.3	6,901.3	6,901.3	91.9	137.9	93.31	255.6	5,531.2	2,525.5	2,296.0	229.47	11.006		
10,200.0	6,921.8	6,900.8	6,900.8	93.7	137.9	93.23	255.6	5,531.2	2,463.9	2,232.8	231.19	10.657		
10,236.2	6,921.5	6,900.5	6,900.5	94.7	137.9	93.18	255.6	5,531.2	2,428.1	2,196.0	232.20	10.457		
10,300.0	6,921.0	6,900.0	6,900.0	96.4	137.9	93.10	255.6	5,531.2	2,365.1	2,131.1	233.96	10.109		
10,334.6	6,920.7	6,899.7	6,899.7	97.4	137.9	93.05	255.6	5,531.2	2,330.9	2,095.9	234.92	9.922		
10,400.0	6,920.1	6,899.1	6,899.1	99.2	137.9	92.96	255.6	5,531.2	2,266.3	2,029.6	236.73	9.573		
10,433.0	6,919.9	6,898.9	6,898.9	100.1	137.9	92.92	255.6	5,531.2	2,233.7	1,996.0	237.65	9.399		
10,500.0	6,919.3	6,898.3	6,898.3	101.9	137.9	92.83	255.6	5,531.2	2,167.6	1,928.1	239.50	9.051		
10,531.5	6,919.0	6,898.0	6,898.0	102.8	137.9	92.79	255.6	5,531.2	2,136.6	1,896.2	240.38	8.889		
10,600.0	6,918.5	6,897.5	6,897.5	104.7	137.9	92.70	255.6	5,531.2	2,069.1	1,826.8	242.28	8.540		
10,629.9	6,918.2	6,897.2	6,897.2	105.5	137.9	92.66	255.6	5,531.2	2,039.7	1,796.6	243.11	8.390		
10,700.0	6,917.6	6,896.6	6,896.6	107.5	137.8	92.57	255.6	5,531.2	1,970.7	1,725.7	245.05	8.042		
10,728.3	6,917.4	6,896.4	6,896.4	108.3	137.8	92.53	255.6	5,531.2	1,942.9	1,697.1	245.84	7.903		
10,800.0	6,916.8	6,895.8	6,895.8	110.3	137.8	92.43	255.6	5,531.2	1,872.5	1,624.7	247.83	7.556		
10,826.7	6,916.6	6,895.6	6,895.6	111.0	137.8	92.40	255.6	5,531.2	1,846.3	1,597.7	248.57	7.428		
10,900.0	6,916.0	6,895.0	6,895.0	113.0	137.8	92.30	255.6	5,531.2	1,774.5	1,523.9	250.61	7.081		
10,925.2	6,915.8	6,894.8	6,894.8	113.7	137.8	92.27	255.6	5,531.2	1,749.9	1,498.6	251.30	6.963		
11,000.0	6,915.1	6,894.1	6,894.1	115.8	137.8	92.17	255.6	5,531.2	1,676.7	1,423.3	253.38	6.617		
11,023.6	6,914.9	6,893.9	6,893.9	116.5	137.8	92.14	255.6	5,531.2	1,653.7	1,399.6	254.04	6.510		
11,100.0	6,914.3	6,893.3	6,893.3	118.6	137.8	92.04	255.6	5,531.2	1,579.2	1,323.1	256.16	6.165		
11,122.0	6,914.1	6,893.1	6,893.1	119.2	137.8	92.01	255.6	5,531.2	1,557.8	1,301.0	256.77	6.067		
11,200.0	6,913.5	6,892.5	6,892.5	121.4	137.8	91.90	255.6	5,531.2	1,482.1	1,223.1	258.94	5.724		
11,220.4	6,913.3	6,892.3	6,892.3	121.9	137.8	91.88	255.6	5,531.2	1,462.2	1,202.7	259.51	5.635		
11,300.0	6,912.6	6,891.6	6,891.6	124.1	137.7	91.77	255.6	5,531.2	1,385.3	1,123.6	261.72	5.293		
11,318.9	6,912.5	6,891.5	6,891.5	124.7	137.7	91.75	255.6	5,531.2	1,367.1	1,104.8	262.24	5.213		
11,400.0	6,911.8	6,890.8	6,890.8	126.9	137.7	91.64	255.6	5,531.2	1,289.0	1,024.5	264.50	4.873		
11,417.3	6,911.6	6,890.6	6,890.6	127.4	137.7	91.62	255.6	5,531.2	1,272.4	1,007.4	264.98	4.802		
11,500.0	6,911.0	6,890.0	6,890.0	129.7	137.7	91.51	255.6	5,531.2	1,193.3	926.1	267.28	4.465		
11,515.7	6,910.8	6,889.8	6,889.8	130.2	137.7	91.49	255.6	5,531.2	1,178.4	910.7	267.72	4.402		
11,600.0	6,910.1	6,889.1	6,889.1	132.5	137.7	91.37	255.6	5,531.2	1,098.5	828.4	270.06	4.068		
11,614.1	6,910.0	6,889.0	6,889.0	132.9	137.7	91.35	255.6	5,531.2	1,085.1	814.7	270.45	4.012		
11,700.0	6,909.3	6,888.3	6,888.3	135.3	137.7	91.24	255.6	5,531.2	1,004.6	731.7	272.84	3.682		
11,712.6	6,909.2	6,888.2	6,888.2	135.6	137.7	91.22	255.6	5,531.2	992.8	719.7	273.19	3.634		
11,800.0	6,908.5	6,887.5	6,887.5	138.1	137.7	91.11	255.6	5,531.2	912.0	636.3	275.62	3.309		
11,811.0	6,908.4	6,887.4	6,887.4	138.4	137.7	91.09	255.6	5,531.2	901.9	625.9	275.92	3.269		
11,900.0	6,907.6	6,886.6	6,886.6	140.9	137.6	90.98	255.6	5,531.2	821.1	542.7	278.40	2.949		
11,909.4	6,907.5	6,886.5	6,886.5	141.1	137.6	90.96	255.6	5,531.2	812.6	534.0	278.66	2.916		
12,000.0	6,906.8	6,885.8	6,885.8	143.6	137.6	90.84	255.6	5,531.2	732.6	451.4	281.17	2.606		
12,007.8	6,906.7	6,885.7	6,885.7	143.9	137.6	90.83	255.6	5,531.2	725.8	444.4	281.39	2.579		
12,100.0	6,905.9	6,884.9	6,884.9	146.4	137.6	90.71	255.6	5,531.2	647.5	363.5	283.95	2.280		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HOECHER 2 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,106.3	6,905.9	6,884.9	6,884.9	146.6	137.6	90.70	255.6	5,531.2	642.3	358.2	284.13	2.261		
12,200.0	6,905.1	6,884.1	6,884.1	149.2	137.6	90.58	255.6	5,531.2	567.3	280.5	286.73	1.978		
12,204.7	6,905.1	6,884.1	6,884.1	149.4	137.6	90.57	255.6	5,531.2	563.6	276.8	286.86	1.965		
12,300.0	6,904.3	6,883.3	6,883.3	152.0	137.6	90.45	255.6	5,531.2	494.3	204.8	289.51	1.707		
12,303.1	6,904.3	6,883.3	6,883.3	152.1	137.6	90.44	255.6	5,531.2	492.1	202.5	289.59	1.699		
12,400.0	6,903.4	6,882.4	6,882.4	154.8	137.6	90.31	255.6	5,531.2	432.2	139.9	292.28	1.479	Level 3	
12,401.5	6,903.4	6,882.4	6,882.4	154.8	137.6	90.31	255.6	5,531.2	431.4	139.0	292.32	1.476	Level 3	
12,500.0	6,902.6	6,881.6	6,881.6	157.6	137.5	90.18	255.6	5,531.2	386.4	91.4	295.06	1.310	Level 3	
12,598.4	6,901.8	6,880.8	6,880.8	160.3	137.5	90.05	255.6	5,531.2	363.3	65.5	297.79	1.220	Level 2	
12,600.0	6,901.8	6,880.8	6,880.8	160.4	137.5	90.05	255.6	5,531.2	363.1	65.3	297.83	1.219	Level 2	
12,637.4	6,901.5	6,880.5	6,880.5	161.4	137.5	90.00	255.6	5,531.2	361.2	62.3	298.87	1.208	Level 2, CC, ES, SF	
12,696.8	6,901.0	6,880.0	6,880.0	163.1	137.5	89.92	255.6	5,531.2	366.0	65.5	300.52	1.218	Level 2	
12,700.0	6,900.9	6,879.9	6,879.9	163.2	137.5	89.92	255.6	5,531.2	366.6	66.0	300.60	1.219	Level 2	
12,795.2	6,900.1	6,879.1	6,879.1	165.8	137.5	89.79	255.6	5,531.2	394.2	90.9	303.25	1.300	Level 3	
12,800.0	6,900.1	6,879.1	6,879.1	166.0	137.5	89.78	255.6	5,531.2	396.1	92.7	303.38	1.306	Level 3	
12,893.7	6,899.3	6,878.3	6,878.3	168.6	137.5	89.66	255.6	5,531.2	442.8	136.9	305.97	1.447	Level 3	
12,900.0	6,899.3	6,878.3	6,878.3	168.8	137.5	89.65	255.6	5,531.2	446.5	140.4	306.15	1.459	Level 3	
12,992.1	6,898.5	6,877.5	6,877.5	171.3	137.5	89.53	255.6	5,531.2	506.2	197.5	308.70	1.640		
13,000.0	6,898.4	6,877.4	6,877.4	171.6	137.5	89.52	255.6	5,531.2	511.8	202.9	308.92	1.657		
13,090.5	6,897.7	6,876.7	6,876.7	174.1	137.4	89.40	255.6	5,531.2	579.4	268.0	311.42	1.861		
13,100.0	6,897.6	6,876.6	6,876.6	174.4	137.4	89.39	255.6	5,531.2	586.9	275.2	311.69	1.883		
13,188.9	6,896.9	6,875.9	6,875.9	176.8	137.4	89.27	255.6	5,531.2	659.3	345.1	314.15	2.099		
13,200.0	6,896.8	6,875.8	6,875.8	177.2	137.4	89.26	255.6	5,531.2	668.5	354.1	314.45	2.126		
13,287.4	6,896.0	6,875.0	6,875.0	179.6	137.4	89.14	255.6	5,531.2	743.6	426.7	316.87	2.347		
13,300.0	6,895.9	6,874.9	6,874.9	180.0	137.4	89.12	255.6	5,531.2	754.6	437.4	317.22	2.379		
13,385.8	6,895.2	6,874.2	6,874.2	182.4	137.4	89.01	255.6	5,531.2	831.0	511.4	319.59	2.600		
13,400.0	6,895.1	6,874.1	6,874.1	182.7	137.4	88.99	255.6	5,531.2	843.8	523.8	319.99	2.637		
13,484.2	6,894.4	6,873.4	6,873.4	185.1	137.4	88.88	255.6	5,531.2	920.6	598.3	322.31	2.856		
13,500.0	6,894.3	6,873.3	6,873.3	185.5	137.4	88.86	255.6	5,531.2	935.1	612.4	322.75	2.897		
13,582.6	6,893.6	6,872.6	6,872.6	187.9	137.4	88.75	255.6	5,531.2	1,011.9	686.8	325.03	3.113		
13,600.0	6,893.4	6,872.4	6,872.4	188.3	137.4	88.73	255.6	5,531.2	1,028.1	702.6	325.51	3.158		
13,681.1	6,892.8	6,871.8	6,871.8	190.6	137.3	88.62	255.6	5,531.2	1,104.4	776.6	327.75	3.370		
13,700.0	6,892.6	6,871.6	6,871.6	191.1	137.3	88.60	255.6	5,531.2	1,122.3	794.0	328.27	3.419		
13,779.5	6,891.9	6,870.9	6,870.9	193.4	137.3	88.49	255.6	5,531.2	1,197.8	867.3	330.46	3.625		
13,800.0	6,891.8	6,870.8	6,870.8	193.9	137.3	88.46	255.6	5,531.2	1,217.4	886.3	331.03	3.677		
13,877.9	6,891.1	6,870.1	6,870.1	196.1	137.3	88.36	255.6	5,531.2	1,292.0	958.8	333.18	3.878		
13,900.0	6,890.9	6,869.9	6,869.9	196.7	137.3	88.33	255.6	5,531.2	1,313.2	979.4	333.79	3.934		
13,976.3	6,890.3	6,869.3	6,869.3	198.9	137.3	88.23	255.6	5,531.2	1,386.7	1,050.9	335.89	4.129		
14,000.0	6,890.1	6,869.1	6,869.1	199.5	137.3	88.20	255.6	5,531.2	1,409.6	1,073.1	336.54	4.188		
14,074.8	6,889.5	6,868.5	6,868.5	201.6	137.3	88.10	255.6	5,531.2	1,482.0	1,143.4	338.60	4.377		
14,100.0	6,889.3	6,868.3	6,868.3	202.3	137.3	88.07	255.6	5,531.2	1,506.5	1,167.2	339.29	4.440		
14,173.2	6,888.7	6,867.7	6,867.7	204.4	137.3	87.97	255.6	5,531.2	1,577.6	1,236.3	341.31	4.622		
14,200.0	6,888.4	6,867.4	6,867.4	205.1	137.3	87.94	255.6	5,531.2	1,603.7	1,261.7	342.05	4.689		
14,271.6	6,887.8	6,866.8	6,866.8	207.1	137.2	87.84	255.6	5,531.2	1,673.6	1,329.6	344.02	4.865		
14,300.0	6,887.6	6,866.6	6,866.6	207.9	137.2	87.80	255.6	5,531.2	1,701.3	1,356.5	344.80	4.934		
14,370.0	6,887.0	6,866.0	6,866.0	209.9	137.2	87.71	255.6	5,531.2	1,769.8	1,423.1	346.72	5.104		
14,400.0	6,886.8	6,865.8	6,865.8	210.7	137.2	87.67	255.6	5,531.2	1,799.1	1,451.6	347.54	5.177		
14,468.5	6,886.2	6,865.2	6,865.2	212.6	137.2	87.58	255.6	5,531.2	1,866.3	1,516.9	349.42	5.341		
14,500.0	6,885.9	6,864.9	6,864.9	213.5	137.2	87.54	255.6	5,531.2	1,897.2	1,546.9	350.29	5.416		
14,566.9	6,885.4	6,864.4	6,864.4	215.4	137.2	87.45	255.6	5,531.2	1,962.9	1,610.8	352.12	5.575		
14,600.0	6,885.1	6,864.1	6,864.1	216.3	137.2	87.41	255.6	5,531.2	1,995.5	1,642.4	353.03	5.652		
14,613.0	6,885.0	6,864.0	6,864.0	216.7	137.2	87.39	255.6	5,531.2	2,008.3	1,654.9	353.39	5.683		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	70.55	1,439.4	4,076.5	4,323.2				
98.4	98.4	66.4	66.4	0.1	0.5	70.55	1,439.4	4,076.5	4,323.1	4,322.6	0.54	7,937.729	
100.0	100.0	68.0	68.0	0.1	0.5	70.55	1,439.4	4,076.5	4,323.1	4,322.6	0.56	7,757.214	
196.8	196.8	164.8	164.8	0.3	2.3	70.55	1,439.4	4,076.5	4,323.1	4,320.6	2.56	1,685.818	
200.0	200.0	168.0	168.0	0.3	2.3	70.55	1,439.4	4,076.5	4,323.1	4,320.5	2.65	1,632.819	
295.3	295.3	263.3	263.3	0.5	4.4	70.55	1,439.4	4,076.5	4,323.1	4,318.2	4.95	872.903	
300.0	300.0	268.0	268.0	0.5	4.5	70.55	1,439.4	4,076.5	4,323.1	4,318.1	5.06	854.109	
393.7	393.7	361.7	361.7	0.7	6.5	70.55	1,439.4	4,076.5	4,323.1	4,315.9	7.20	600.599	
400.0	400.0	368.0	368.0	0.8	6.6	70.55	1,439.4	4,076.5	4,323.1	4,315.8	7.34	588.916	
492.1	492.1	460.1	460.1	1.0	8.5	70.55	1,439.4	4,076.5	4,323.1	4,313.7	9.42	458.895	
500.0	500.0	468.0	468.0	1.0	8.6	70.55	1,439.4	4,076.5	4,323.1	4,313.5	9.60	450.412	
590.5	590.5	558.5	558.5	1.2	10.4	70.55	1,439.4	4,076.5	4,323.1	4,311.5	11.63	371.574	
600.0	600.0	568.0	568.0	1.2	10.6	70.55	1,439.4	4,076.5	4,323.1	4,311.3	11.85	364.914	
689.0	689.0	657.0	657.0	1.4	12.4	70.55	1,439.4	4,076.5	4,323.1	4,309.3	13.84	312.271	
700.0	700.0	668.0	668.0	1.4	12.7	70.55	1,439.4	4,076.5	4,323.1	4,309.0	14.09	306.790	
787.4	787.4	755.4	755.4	1.6	14.4	70.55	1,439.4	4,076.5	4,323.1	4,307.1	16.05	269.334	
800.0	800.0	768.0	768.0	1.7	14.7	70.55	1,439.4	4,076.5	4,323.1	4,306.8	16.33	264.677	
885.8	885.8	853.8	853.8	1.9	16.4	70.55	1,439.4	4,076.5	4,323.1	4,304.9	18.26	236.799	
900.0	900.0	868.0	868.0	1.9	16.7	70.55	1,439.4	4,076.5	4,323.1	4,304.5	18.57	232.750	
984.2	984.2	952.2	952.2	2.1	18.4	70.55	1,439.4	4,076.5	4,323.1	4,302.7	20.46	211.287	
1,000.0	1,000.0	968.0	968.0	2.1	18.7	70.55	1,439.4	4,076.5	4,323.1	4,302.3	20.81	207.707	
1,082.7	1,082.7	1,050.7	1,050.7	2.3	20.4	70.55	1,439.4	4,076.5	4,323.1	4,300.5	22.66	190.745	
1,100.0	1,100.0	1,068.0	1,068.0	2.3	20.7	70.55	1,439.4	4,076.5	4,323.1	4,300.1	23.05	187.536	
1,150.0	1,150.0	1,118.0	1,118.0	2.4	21.7	70.55	1,439.4	4,076.5	4,323.1	4,299.0	24.17	178.852	
1,181.1	1,181.1	1,149.1	1,149.1	2.5	22.4	103.24	1,439.4	4,076.5	4,323.2	4,298.3	24.87	173.854	
1,200.0	1,200.0	1,168.0	1,168.0	2.6	22.7	103.24	1,439.4	4,076.5	4,323.2	4,297.9	25.29	170.953	
1,279.5	1,279.5	1,247.5	1,247.5	2.7	24.3	103.27	1,439.4	4,076.5	4,323.8	4,296.7	27.06	159.768	
1,300.0	1,299.9	1,267.9	1,267.9	2.8	24.7	103.27	1,439.4	4,076.5	4,324.0	4,296.5	27.52	157.128	
1,377.9	1,377.7	1,345.7	1,345.7	3.0	26.3	103.32	1,439.4	4,076.5	4,325.2	4,296.0	29.26	147.839	
1,400.0	1,399.7	1,367.7	1,367.7	3.0	26.8	103.33	1,439.4	4,076.5	4,325.6	4,295.9	29.75	145.415	
1,476.4	1,475.7	1,443.7	1,443.7	3.2	28.3	103.40	1,439.4	4,076.5	4,327.4	4,296.0	31.45	137.598	
1,500.0	1,499.1	1,467.1	1,467.1	3.2	28.8	103.42	1,439.4	4,076.5	4,328.1	4,296.1	31.98	135.356	
1,574.8	1,573.2	1,541.2	1,541.2	3.4	30.2	103.50	1,439.4	4,076.5	4,330.4	4,296.8	33.65	128.698	
1,600.0	1,598.2	1,566.2	1,566.2	3.5	30.7	103.53	1,439.4	4,076.5	4,331.3	4,297.1	34.21	126.609	
1,673.2	1,670.3	1,638.3	1,638.3	3.7	32.2	103.63	1,439.4	4,076.5	4,334.3	4,298.4	35.86	120.878	
1,700.0	1,696.6	1,664.6	1,664.6	3.8	32.7	103.67	1,439.4	4,076.5	4,335.5	4,299.0	36.46	118.920	
1,749.9	1,745.5	1,713.5	1,713.5	3.9	33.7	103.75	1,439.4	4,076.5	4,337.9	4,300.3	37.58	115.418	
1,771.6	1,766.8	1,734.8	1,734.8	4.0	34.1	103.81	1,439.4	4,076.5	4,339.0	4,300.9	38.08	113.939	
1,800.0	1,794.5	1,762.5	1,762.5	4.1	34.7	103.88	1,439.4	4,076.5	4,340.4	4,301.7	38.73	112.070	
1,870.1	1,863.1	1,831.1	1,831.1	4.3	36.1	104.06	1,439.4	4,076.5	4,344.0	4,303.7	40.34	107.684	
1,900.0	1,892.3	1,860.3	1,860.3	4.4	36.7	104.14	1,439.4	4,076.5	4,345.6	4,304.5	41.03	105.914	
1,968.5	1,959.4	1,927.4	1,927.4	4.7	38.0	104.32	1,439.4	4,076.5	4,349.1	4,306.5	42.62	102.055	
2,000.0	1,990.2	1,958.2	1,958.2	4.8	38.6	104.40	1,439.4	4,076.5	4,350.8	4,307.4	43.35	100.375	
2,066.9	2,055.6	2,023.6	2,023.6	5.1	39.9	104.58	1,439.4	4,076.5	4,354.3	4,309.4	44.90	96.972	
2,100.0	2,088.0	2,056.0	2,056.0	5.2	40.6	104.66	1,439.4	4,076.5	4,356.1	4,310.4	45.67	95.374	
2,165.3	2,151.9	2,119.9	2,119.9	5.4	41.9	104.83	1,439.4	4,076.5	4,359.6	4,312.4	47.20	92.361	
2,200.0	2,185.8	2,153.8	2,153.8	5.6	42.6	104.92	1,439.4	4,076.5	4,361.5	4,313.5	48.01	90.841	
2,263.8	2,248.2	2,216.2	2,216.2	5.8	43.8	105.08	1,439.4	4,076.5	4,365.0	4,315.5	49.51	88.166	
2,300.0	2,283.6	2,251.6	2,251.6	6.0	44.5	105.18	1,439.4	4,076.5	4,367.0	4,316.7	50.36	86.717	
2,362.2	2,344.5	2,312.5	2,312.5	6.2	45.8	105.34	1,439.4	4,076.5	4,370.5	4,318.7	51.82	84.335	
2,400.0	2,381.4	2,349.4	2,349.4	6.4	46.5	105.44	1,439.4	4,076.5	4,372.6	4,319.9	52.71	82.953	
2,460.6	2,440.7	2,408.7	2,408.7	6.6	47.7	105.59	1,439.4	4,076.5	4,376.1	4,321.9	54.14	80.826	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,447.2	2,447.2	6.8	48.5	105.69	1,439.4	4,076.5	4,378.3	4,323.3	55.07	79.504	
2,559.0	2,537.0	2,505.0	2,505.0	7.0	49.6	105.84	1,439.4	4,076.5	4,381.7	4,325.3	56.47	77.601	
2,600.0	2,577.1	2,545.1	2,545.1	7.2	50.4	105.95	1,439.4	4,076.5	4,384.1	4,326.7	57.43	76.336	
2,657.5	2,633.3	2,601.3	2,601.3	7.4	51.6	106.10	1,439.4	4,076.5	4,387.5	4,328.7	58.79	74.628	
2,700.0	2,674.9	2,642.9	2,642.9	7.6	52.4	106.20	1,439.4	4,076.5	4,390.0	4,330.2	59.80	73.415	
2,755.9	2,729.6	2,697.6	2,697.6	7.9	53.5	106.35	1,439.4	4,076.5	4,393.3	4,332.2	61.12	71.880	
2,800.0	2,772.7	2,740.7	2,740.7	8.0	54.4	106.46	1,439.4	4,076.5	4,396.0	4,333.8	62.16	70.715	
2,854.3	2,825.8	2,793.8	2,793.8	8.3	55.4	106.60	1,439.4	4,076.5	4,399.2	4,335.8	63.45	69.333	
2,900.0	2,870.5	2,838.5	2,838.5	8.5	56.3	106.71	1,439.4	4,076.5	4,402.0	4,337.5	64.53	68.213	
2,952.7	2,922.1	2,890.1	2,890.1	8.7	57.4	106.85	1,439.4	4,076.5	4,405.2	4,339.5	65.78	66.965	
3,000.0	2,968.3	2,936.3	2,936.3	8.9	58.3	106.97	1,439.4	4,076.5	4,408.2	4,341.3	66.90	65.888	
3,051.2	3,018.4	2,986.4	2,986.4	9.1	59.3	107.10	1,439.4	4,076.5	4,411.3	4,343.2	68.12	64.761	
3,100.0	3,066.1	3,034.1	3,034.1	9.3	60.3	107.22	1,439.4	4,076.5	4,414.4	4,345.1	69.28	63.722	
3,149.6	3,114.7	3,082.7	3,082.7	9.5	61.3	107.35	1,439.4	4,076.5	4,417.5	4,347.1	70.45	62.702	
3,200.0	3,164.0	3,132.0	3,132.0	9.8	62.2	107.47	1,439.4	4,076.5	4,420.7	4,349.1	71.65	61.700	
3,248.0	3,210.9	3,178.9	3,178.9	10.0	63.2	107.59	1,439.4	4,076.5	4,423.8	4,351.0	72.79	60.776	
3,300.0	3,261.8	3,229.8	3,229.8	10.2	64.2	107.72	1,439.4	4,076.5	4,427.1	4,353.1	74.02	59.809	
3,346.4	3,307.2	3,275.2	3,275.2	10.4	65.1	107.84	1,439.4	4,076.5	4,430.1	4,355.0	75.12	58.971	
3,400.0	3,359.6	3,327.6	3,327.6	10.6	66.2	107.97	1,439.4	4,076.5	4,433.6	4,357.2	76.39	58.036	
3,444.9	3,403.5	3,371.5	3,371.5	10.8	67.1	108.09	1,439.4	4,076.5	4,436.6	4,359.1	77.46	57.276	
3,500.0	3,457.4	3,425.4	3,425.4	11.1	68.1	108.22	1,439.4	4,076.5	4,440.2	4,361.4	78.77	56.371	
3,543.3	3,499.8	3,467.8	3,467.8	11.3	69.0	108.33	1,439.4	4,076.5	4,443.1	4,363.3	79.80	55.681	
3,600.0	3,555.2	3,523.2	3,523.2	11.5	70.1	108.47	1,439.4	4,076.5	4,446.9	4,365.7	81.14	54.804	
3,641.7	3,596.0	3,564.0	3,564.0	11.7	70.9	108.58	1,439.4	4,076.5	4,449.7	4,367.6	82.13	54.177	
3,700.0	3,653.0	3,621.0	3,621.0	11.9	72.1	108.72	1,439.4	4,076.5	4,453.7	4,370.1	83.52	53.328	
3,740.1	3,692.3	3,660.3	3,660.3	12.1	72.9	108.82	1,439.4	4,076.5	4,456.4	4,371.9	84.47	52.758	
3,800.0	3,750.8	3,718.8	3,718.8	12.4	74.0	108.97	1,439.4	4,076.5	4,460.5	4,374.6	85.89	51.934	
3,838.6	3,788.6	3,756.6	3,756.6	12.6	74.8	109.07	1,439.4	4,076.5	4,463.2	4,376.4	86.80	51.417	
3,900.0	3,848.7	3,816.7	3,816.7	12.8	76.0	109.22	1,439.4	4,076.5	4,467.4	4,379.2	88.26	50.616	
3,937.0	3,884.9	3,852.9	3,852.9	13.0	76.7	109.31	1,439.4	4,076.5	4,470.0	4,380.9	89.14	50.147	
4,000.0	3,946.5	3,914.5	3,914.5	13.3	78.0	109.46	1,439.4	4,076.5	4,474.5	4,383.8	90.63	49.369	
4,035.4	3,981.1	3,949.1	3,949.1	13.4	78.7	109.55	1,439.4	4,076.5	4,477.0	4,385.5	91.47	48.943	
4,100.0	4,044.3	4,012.3	4,012.3	13.7	79.9	109.71	1,439.4	4,076.5	4,481.6	4,388.6	93.01	48.186	
4,133.8	4,077.4	4,045.4	4,045.4	13.9	80.6	109.79	1,439.4	4,076.5	4,484.0	4,390.2	93.81	47.800	
4,200.0	4,142.1	4,110.1	4,110.1	14.2	81.9	109.96	1,439.4	4,076.5	4,488.8	4,393.4	95.38	47.064	
4,232.3	4,173.7	4,141.7	4,141.7	14.3	82.5	110.03	1,439.4	4,076.5	4,491.1	4,395.0	96.14	46.713	
4,300.0	4,239.9	4,207.9	4,207.9	14.6	83.9	110.20	1,439.4	4,076.5	4,496.0	4,398.3	97.75	45.997	
4,330.7	4,270.0	4,238.0	4,238.0	14.7	84.5	110.27	1,439.4	4,076.5	4,498.3	4,399.8	98.47	45.680	
4,400.0	4,337.7	4,305.7	4,305.7	15.0	85.8	110.44	1,439.4	4,076.5	4,503.4	4,403.3	100.12	44.981	
4,429.1	4,366.2	4,334.2	4,334.2	15.2	86.4	110.51	1,439.4	4,076.5	4,505.5	4,404.7	100.81	44.695	
4,500.0	4,435.6	4,403.6	4,403.6	15.5	87.8	110.69	1,439.4	4,076.5	4,510.8	4,408.3	102.49	44.014	
4,527.5	4,462.5	4,430.5	4,430.5	15.6	88.4	110.75	1,439.4	4,076.5	4,512.9	4,409.8	103.14	43.756	
4,600.0	4,533.4	4,501.4	4,501.4	15.9	89.8	110.93	1,439.4	4,076.5	4,518.4	4,413.5	104.85	43.092	
4,626.0	4,558.8	4,526.8	4,526.8	16.0	90.3	110.99	1,439.4	4,076.5	4,520.3	4,414.9	105.47	42.859	
4,673.6	4,605.3	4,573.3	4,573.3	16.3	91.2	111.10	1,439.4	4,076.5	4,523.9	4,417.4	106.60	42.441	
4,700.0	4,631.2	4,599.2	4,599.2	16.4	91.8	111.20	1,439.4	4,076.5	4,525.9	4,418.7	107.23	42.208	
4,724.4	4,655.1	4,623.1	4,623.1	16.4	92.2	111.29	1,439.4	4,076.5	4,527.7	4,419.9	107.80	42.001	
4,800.0	4,729.5	4,697.5	4,697.5	16.7	93.7	111.54	1,439.4	4,076.5	4,532.6	4,423.1	109.57	41.369	
4,822.8	4,752.1	4,720.1	4,720.1	16.7	94.2	111.61	1,439.4	4,076.5	4,534.0	4,423.9	110.09	41.183	
4,900.0	4,828.4	4,796.4	4,796.4	17.0	95.7	111.81	1,439.4	4,076.5	4,538.1	4,426.3	111.88	40.564	
4,921.2	4,849.5	4,817.5	4,817.5	17.0	96.1	111.86	1,439.4	4,076.5	4,539.1	4,426.8	112.36	40.399	
5,000.0	4,927.8	4,895.8	4,895.8	17.2	97.7	112.02	1,439.4	4,076.5	4,542.4	4,428.2	114.15	39.793	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,915.4	4,915.4	17.2	98.1	112.06	1,439.4	4,076.5	4,543.0	4,428.5	114.59	39.646	
5,100.0	5,027.5	4,995.5	4,995.5	17.4	99.7	112.17	1,439.4	4,076.5	4,545.3	4,428.9	116.38	39.055	
5,118.1	5,045.6	5,013.6	5,013.6	17.4	100.1	112.19	1,439.4	4,076.5	4,545.7	4,428.9	116.78	38.925	
5,200.0	5,127.4	5,095.4	5,095.4	17.6	101.7	112.25	1,439.4	4,076.5	4,546.9	4,428.4	118.57	38.348	
5,216.5	5,143.9	5,111.9	5,111.9	17.6	102.1	112.26	1,439.4	4,076.5	4,547.1	4,428.1	118.93	38.234	
5,273.4	5,200.8	5,168.8	5,168.8	17.7	103.2	79.58	1,439.4	4,076.5	4,547.3	4,430.8	116.50	39.032	
5,300.0	5,227.4	5,195.4	5,195.4	17.7	103.7	79.58	1,439.4	4,076.5	4,547.3	4,430.2	117.08	38.839	
5,314.9	5,242.3	5,210.3	5,210.3	17.7	104.0	79.58	1,439.4	4,076.5	4,547.3	4,429.9	117.41	38.730	
5,400.0	5,327.4	5,295.4	5,295.4	17.8	105.8	79.58	1,439.4	4,076.5	4,547.3	4,428.0	119.28	38.123	
5,413.4	5,340.8	5,308.8	5,308.8	17.9	106.0	79.58	1,439.4	4,076.5	4,547.3	4,427.7	119.57	38.029	
5,500.0	5,427.4	5,395.4	5,395.4	18.0	107.8	79.58	1,439.4	4,076.5	4,547.3	4,425.8	121.48	37.433	
5,511.8	5,439.2	5,407.2	5,407.2	18.0	108.0	79.58	1,439.4	4,076.5	4,547.3	4,425.6	121.74	37.353	
5,600.0	5,527.4	5,495.4	5,495.4	18.1	109.8	79.58	1,439.4	4,076.5	4,547.3	4,423.6	123.68	36.767	
5,610.2	5,537.6	5,505.6	5,505.6	18.1	110.0	79.58	1,439.4	4,076.5	4,547.3	4,423.4	123.90	36.700	
5,700.0	5,627.4	5,595.4	5,595.4	18.3	111.8	79.58	1,439.4	4,076.5	4,547.3	4,421.4	125.88	36.124	
5,708.6	5,636.0	5,604.0	5,604.0	18.3	112.0	79.58	1,439.4	4,076.5	4,547.3	4,421.2	126.07	36.069	
5,800.0	5,727.4	5,695.4	5,695.4	18.4	113.8	79.58	1,439.4	4,076.5	4,547.3	4,419.2	128.08	35.502	
5,807.1	5,734.5	5,702.5	5,702.5	18.4	113.9	79.58	1,439.4	4,076.5	4,547.3	4,419.0	128.24	35.459	
5,900.0	5,827.4	5,795.4	5,795.4	18.6	115.8	79.58	1,439.4	4,076.5	4,547.3	4,417.0	130.29	34.902	
5,905.5	5,832.9	5,800.9	5,800.9	18.6	115.9	79.58	1,439.4	4,076.5	4,547.3	4,416.9	130.41	34.869	
6,000.0	5,927.4	5,895.4	5,895.4	18.7	117.8	79.58	1,439.4	4,076.5	4,547.3	4,414.8	132.49	34.321	
6,003.9	5,931.3	5,899.3	5,899.3	18.7	117.9	79.58	1,439.4	4,076.5	4,547.3	4,414.7	132.58	34.298	
6,100.0	6,027.4	5,995.4	5,995.4	18.9	119.8	79.58	1,439.4	4,076.5	4,547.3	4,412.6	134.70	33.759	
6,102.3	6,029.7	5,997.7	5,997.7	18.9	119.9	79.58	1,439.4	4,076.5	4,547.3	4,412.5	134.75	33.746	
6,200.0	6,127.4	6,095.4	6,095.4	19.0	121.8	79.58	1,439.4	4,076.5	4,547.3	4,410.4	136.91	33.215	
6,200.8	6,128.2	6,096.2	6,096.2	19.0	121.9	79.58	1,439.4	4,076.5	4,547.3	4,410.4	136.92	33.211	
6,299.2	6,226.6	6,194.6	6,194.6	19.2	123.8	79.58	1,439.4	4,076.5	4,547.3	4,408.2	139.10	32.692	
6,301.4	6,228.8	6,196.8	6,196.8	19.2	123.9	79.58	1,439.4	4,076.5	4,547.3	4,408.1	139.14	32.680	
6,350.0	6,277.4	6,245.4	6,245.4	19.3	124.9	-10.45	1,439.4	4,076.5	4,545.7	4,402.6	143.08	31.769	
6,397.6	6,324.7	6,292.7	6,292.7	19.3	125.8	-10.53	1,439.4	4,076.5	4,540.9	4,397.8	143.15	31.721	
6,400.0	6,327.1	6,295.1	6,295.1	19.3	125.9	-10.53	1,439.4	4,076.5	4,540.6	4,397.5	143.14	31.721	
6,450.0	6,376.3	6,344.3	6,344.3	19.3	126.8	-10.68	1,439.4	4,076.5	4,532.2	4,389.7	142.51	31.802	
6,496.0	6,421.1	6,389.1	6,389.1	19.3	127.7	-10.87	1,439.4	4,076.5	4,521.4	4,380.1	141.32	31.994	
6,500.0	6,424.9	6,392.9	6,392.9	19.3	127.8	-10.89	1,439.4	4,076.5	4,520.4	4,379.2	141.19	32.016	
6,550.0	6,472.4	6,440.4	6,440.4	19.3	128.8	-11.17	1,439.4	4,076.5	4,505.3	4,366.1	139.18	32.370	
6,594.5	6,513.8	6,481.8	6,481.8	19.3	129.6	-11.48	1,439.4	4,076.5	4,489.1	4,352.3	136.83	32.808	
6,600.0	6,518.8	6,486.8	6,486.8	19.3	129.7	-11.53	1,439.4	4,076.5	4,487.0	4,350.5	136.50	32.871	
6,650.0	6,563.8	6,531.8	6,531.8	19.3	130.6	-11.97	1,439.4	4,076.5	4,465.5	4,332.3	133.17	33.532	
6,692.9	6,601.1	6,569.1	6,569.1	19.2	131.4	-12.43	1,439.4	4,076.5	4,444.7	4,314.9	129.82	34.236	
6,700.0	6,607.1	6,575.1	6,575.1	19.2	131.5	-12.52	1,439.4	4,076.5	4,441.0	4,311.8	129.23	34.365	
6,750.0	6,648.6	6,616.6	6,616.6	19.2	132.3	-13.18	1,439.4	4,076.5	4,413.6	4,288.9	124.73	35.385	
6,791.3	6,681.4	6,649.4	6,649.4	19.1	133.0	-13.83	1,439.4	4,076.5	4,388.9	4,268.3	120.66	36.376	
6,800.0	6,688.1	6,656.1	6,656.1	19.1	133.1	-13.98	1,439.4	4,076.5	4,383.5	4,263.7	119.76	36.601	
6,850.0	6,725.3	6,693.3	6,693.3	19.1	133.9	-14.96	1,439.4	4,076.5	4,350.7	4,236.3	114.44	38.018	
6,889.7	6,753.2	6,721.2	6,721.2	19.0	134.4	-15.88	1,439.4	4,076.5	4,322.9	4,212.8	110.07	39.276	
6,900.0	6,760.1	6,728.1	6,728.1	19.0	134.6	-16.15	1,439.4	4,076.5	4,315.5	4,206.5	108.93	39.616	
6,950.0	6,792.3	6,760.3	6,760.3	19.0	135.2	-17.61	1,439.4	4,076.5	4,277.9	4,174.4	103.50	41.334	
6,988.2	6,815.1	6,783.1	6,783.1	18.9	135.7	-18.96	1,439.4	4,076.5	4,247.9	4,148.2	99.63	42.637	
7,000.0	6,821.8	6,789.8	6,789.8	18.9	135.8	-19.43	1,439.4	4,076.5	4,238.3	4,139.8	98.52	43.021	
7,050.0	6,848.3	6,816.3	6,816.3	18.9	136.3	-21.72	1,439.4	4,076.5	4,196.8	4,102.2	94.56	44.381	
7,086.6	6,865.9	6,833.9	6,833.9	18.9	136.7	-23.79	1,439.4	4,076.5	4,165.3	4,072.5	92.79	44.892	
7,100.0	6,871.9	6,839.9	6,839.9	18.9	136.8	-24.66	1,439.4	4,076.5	4,153.6	4,061.1	92.46	44.922	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,860.3	6,860.3	18.8	137.2	-28.49	1,439.4	4,076.5	4,108.8	4,015.5	93.33	44.024	
7,185.0	6,904.7	6,872.7	6,872.7	18.8	137.5	-31.92	1,439.4	4,076.5	4,076.8	3,980.3	96.41	42.285	
7,200.0	6,909.5	6,877.5	6,877.5	18.9	137.6	-33.62	1,439.4	4,076.5	4,062.9	3,964.4	98.47	41.259	
7,250.0	6,923.4	6,891.4	6,891.4	19.3	137.8	-40.64	1,439.4	4,076.5	4,015.8	3,906.9	108.99	36.847	
7,283.4	6,930.8	6,898.8	6,898.8	19.8	138.0	-46.78	1,439.4	4,076.5	3,983.9	3,864.8	119.17	33.430	
7,300.0	6,933.9	6,901.9	6,901.9	20.0	138.1	-50.35	1,439.4	4,076.5	3,968.0	3,843.0	124.98	31.748	
7,350.0	6,940.9	6,908.9	6,908.9	20.8	138.2	-63.61	1,439.4	4,076.5	3,919.6	3,775.8	143.82	27.253	
7,381.9	6,943.6	6,911.6	6,911.6	21.4	138.3	-73.98	1,439.4	4,076.5	3,888.6	3,734.5	154.07	25.240	
7,400.0	6,944.5	6,912.5	6,912.5	21.7	138.3	-80.38	1,439.4	4,076.5	3,870.9	3,712.9	158.02	24.495	
7,432.4	6,945.0	6,913.0	6,913.0	22.3	138.3	-92.19	1,439.4	4,076.5	3,839.2	3,678.9	160.30	23.950	
7,480.3	6,944.6	6,912.6	6,912.6	23.2	138.3	-92.16	1,439.4	4,076.5	3,792.5	3,631.3	161.19	23.528	
7,500.0	6,944.4	6,912.4	6,912.4	23.6	138.3	-92.15	1,439.4	4,076.5	3,773.2	3,611.7	161.55	23.356	
7,578.7	6,943.7	6,911.7	6,911.7	25.2	138.3	-92.10	1,439.4	4,076.5	3,696.4	3,533.3	163.13	22.660	
7,600.0	6,943.6	6,911.6	6,911.6	25.6	138.3	-92.09	1,439.4	4,076.5	3,675.7	3,512.2	163.56	22.474	
7,677.1	6,942.9	6,910.9	6,910.9	27.3	138.2	-92.04	1,439.4	4,076.5	3,600.6	3,435.3	165.21	21.794	
7,700.0	6,942.7	6,910.7	6,910.7	27.8	138.2	-92.03	1,439.4	4,076.5	3,578.3	3,412.6	165.70	21.595	
7,775.6	6,942.1	6,910.1	6,910.1	29.5	138.2	-91.99	1,439.4	4,076.5	3,504.8	3,337.4	167.40	20.937	
7,800.0	6,941.9	6,909.9	6,909.9	30.1	138.2	-91.97	1,439.4	4,076.5	3,481.1	3,313.1	167.95	20.727	
7,874.0	6,941.3	6,909.3	6,909.3	31.8	138.2	-91.93	1,439.4	4,076.5	3,409.2	3,239.5	169.67	20.093	
7,900.0	6,941.1	6,909.1	6,909.1	32.4	138.2	-91.91	1,439.4	4,076.5	3,384.0	3,213.7	170.28	19.873	
7,972.4	6,940.4	6,908.4	6,908.4	34.2	138.2	-91.87	1,439.4	4,076.5	3,313.8	3,141.8	172.02	19.264	
8,000.0	6,940.2	6,908.2	6,908.2	34.9	138.2	-91.86	1,439.4	4,076.5	3,287.1	3,114.4	172.69	19.035	
8,070.8	6,939.6	6,907.6	6,907.6	36.6	138.2	-91.81	1,439.4	4,076.5	3,218.5	3,044.1	174.43	18.452	
8,100.0	6,939.4	6,907.4	6,907.4	37.3	138.2	-91.80	1,439.4	4,076.5	3,190.4	3,015.2	175.15	18.215	
8,169.3	6,938.8	6,906.8	6,906.8	39.1	138.2	-91.76	1,439.4	4,076.5	3,123.5	2,946.6	176.88	17.659	
8,200.0	6,938.5	6,906.5	6,906.5	39.8	138.2	-91.74	1,439.4	4,076.5	3,093.9	2,916.2	177.65	17.415	
8,267.7	6,938.0	6,906.0	6,906.0	41.6	138.1	-91.70	1,439.4	4,076.5	3,028.7	2,849.3	179.37	16.885	
8,300.0	6,937.7	6,905.7	6,905.7	42.4	138.1	-91.68	1,439.4	4,076.5	2,997.6	2,817.4	180.19	16.635	
8,366.1	6,937.2	6,905.2	6,905.2	44.1	138.1	-91.64	1,439.4	4,076.5	2,934.1	2,752.2	181.89	16.131	
8,400.0	6,936.9	6,904.9	6,904.9	45.0	138.1	-91.62	1,439.4	4,076.5	2,901.6	2,718.8	182.77	15.876	
8,464.5	6,936.3	6,904.3	6,904.3	46.6	138.1	-91.58	1,439.4	4,076.5	2,839.7	2,655.3	184.44	15.396	
8,500.0	6,936.0	6,904.0	6,904.0	47.6	138.1	-91.56	1,439.4	4,076.5	2,805.8	2,620.4	185.36	15.137	
8,563.0	6,935.5	6,903.5	6,903.5	49.2	138.1	-91.53	1,439.4	4,076.5	2,745.7	2,558.6	187.01	14.682	
8,600.0	6,935.2	6,903.2	6,903.2	50.2	138.1	-91.51	1,439.4	4,076.5	2,710.4	2,522.4	187.98	14.418	
8,661.4	6,934.7	6,902.7	6,902.7	51.8	138.1	-91.47	1,439.4	4,076.5	2,651.9	2,462.3	189.60	13.987	
8,700.0	6,934.4	6,902.4	6,902.4	52.8	138.1	-91.45	1,439.4	4,076.5	2,615.3	2,424.6	190.62	13.719	
8,759.8	6,933.9	6,901.9	6,901.9	54.4	138.1	-91.41	1,439.4	4,076.5	2,558.5	2,366.3	192.21	13.311	
8,800.0	6,933.5	6,901.5	6,901.5	55.5	138.1	-91.39	1,439.4	4,076.5	2,520.5	2,327.2	193.28	13.041	
8,858.2	6,933.0	6,901.0	6,901.0	57.1	138.0	-91.35	1,439.4	4,076.5	2,465.5	2,270.7	194.83	12.655	
8,900.0	6,932.7	6,900.7	6,900.7	58.2	138.0	-91.33	1,439.4	4,076.5	2,426.2	2,230.3	195.95	12.382	
8,956.7	6,932.2	6,900.2	6,900.2	59.7	138.0	-91.30	1,439.4	4,076.5	2,373.0	2,175.5	197.46	12.017	
9,000.0	6,931.8	6,899.8	6,899.8	60.9	138.0	-91.27	1,439.4	4,076.5	2,332.4	2,133.8	198.63	11.743	
9,055.1	6,931.4	6,899.4	6,899.4	62.4	138.0	-91.24	1,439.4	4,076.5	2,280.9	2,080.8	200.11	11.398	
9,100.0	6,931.0	6,899.0	6,899.0	63.6	138.0	-91.21	1,439.4	4,076.5	2,239.1	2,037.8	201.31	11.122	
9,153.5	6,930.6	6,898.6	6,898.6	65.0	138.0	-91.18	1,439.4	4,076.5	2,189.4	1,986.7	202.76	10.798	
9,200.0	6,930.2	6,898.2	6,898.2	66.3	138.0	-91.16	1,439.4	4,076.5	2,146.4	1,942.4	204.01	10.521	
9,251.9	6,929.7	6,897.7	6,897.7	67.7	138.0	-91.12	1,439.4	4,076.5	2,098.5	1,893.1	205.42	10.216	
9,300.0	6,929.3	6,897.3	6,897.3	69.0	138.0	-91.10	1,439.4	4,076.5	2,054.4	1,847.7	206.72	9.938	
9,350.4	6,928.9	6,896.9	6,896.9	70.4	138.0	-91.07	1,439.4	4,076.5	2,008.3	1,800.3	208.09	9.651	
9,400.0	6,928.5	6,896.5	6,896.5	71.7	137.9	-91.04	1,439.4	4,076.5	1,963.2	1,753.7	209.43	9.374	
9,448.8	6,928.1	6,896.1	6,896.1	73.0	137.9	-91.01	1,439.4	4,076.5	1,919.0	1,708.2	210.76	9.105	
9,500.0	6,927.7	6,895.7	6,895.7	74.4	137.9	-90.98	1,439.4	4,076.5	1,872.9	1,660.7	212.15	8.828	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,895.3	6,895.3	75.7	137.9	-90.95	1,439.4	4,076.5	1,830.5	1,617.1	213.44	8.576	
9,600.0	6,926.8	6,894.8	6,894.8	77.2	137.9	-90.92	1,439.4	4,076.5	1,783.6	1,568.7	214.88	8.300	
9,645.6	6,926.4	6,894.4	6,894.4	78.4	137.9	-90.90	1,439.4	4,076.5	1,743.2	1,527.1	216.13	8.066	
9,700.0	6,926.0	6,894.0	6,894.0	79.9	137.9	-90.86	1,439.4	4,076.5	1,695.5	1,477.9	217.61	7.791	
9,744.1	6,925.6	6,893.6	6,893.6	81.1	137.9	-90.84	1,439.4	4,076.5	1,657.1	1,438.2	218.81	7.573	
9,800.0	6,925.2	6,893.2	6,893.2	82.6	137.9	-90.81	1,439.4	4,076.5	1,608.8	1,388.4	220.34	7.301	
9,842.5	6,924.8	6,892.8	6,892.8	83.8	137.9	-90.78	1,439.4	4,076.5	1,572.4	1,350.9	221.51	7.099	
9,900.0	6,924.3	6,892.3	6,892.3	85.4	137.9	-90.75	1,439.4	4,076.5	1,523.7	1,300.6	223.08	6.830	
9,940.9	6,924.0	6,892.0	6,892.0	86.5	137.9	-90.72	1,439.4	4,076.5	1,489.4	1,265.2	224.20	6.643	
10,000.0	6,923.5	6,891.5	6,891.5	88.1	137.8	-90.69	1,439.4	4,076.5	1,440.5	1,214.7	225.82	6.379	
10,039.3	6,923.2	6,891.2	6,891.2	89.2	137.8	-90.67	1,439.4	4,076.5	1,408.4	1,181.5	226.90	6.207	
10,100.0	6,922.6	6,890.6	6,890.6	90.9	137.8	-90.63	1,439.4	4,076.5	1,359.6	1,131.1	228.57	5.948	
10,137.8	6,922.3	6,890.3	6,890.3	91.9	137.8	-90.61	1,439.4	4,076.5	1,329.7	1,100.1	229.61	5.791	
10,200.0	6,921.8	6,889.8	6,889.8	93.7	137.8	-90.57	1,439.4	4,076.5	1,281.4	1,050.1	231.32	5.540	
10,236.2	6,921.5	6,889.5	6,889.5	94.7	137.8	-90.55	1,439.4	4,076.5	1,253.9	1,021.6	232.31	5.397	
10,300.0	6,921.0	6,889.0	6,889.0	96.4	137.8	-90.51	1,439.4	4,076.5	1,206.5	972.4	234.07	5.154	
10,334.6	6,920.7	6,888.7	6,888.7	97.4	137.8	-90.49	1,439.4	4,076.5	1,181.4	946.3	235.02	5.027	
10,400.0	6,920.1	6,888.1	6,888.1	99.2	137.8	-90.46	1,439.4	4,076.5	1,135.4	898.5	236.82	4.794	
10,433.0	6,919.9	6,887.9	6,887.9	100.1	137.8	-90.44	1,439.4	4,076.5	1,112.8	875.1	237.73	4.681	
10,500.0	6,919.3	6,887.3	6,887.3	101.9	137.8	-90.40	1,439.4	4,076.5	1,068.9	829.3	239.58	4.462	
10,531.5	6,919.0	6,887.0	6,887.0	102.8	137.8	-90.38	1,439.4	4,076.5	1,049.1	808.6	240.45	4.363	
10,600.0	6,918.5	6,886.5	6,886.5	104.7	137.7	-90.34	1,439.4	4,076.5	1,008.0	765.6	242.33	4.159	
10,629.9	6,918.2	6,886.2	6,886.2	105.5	137.7	-90.32	1,439.4	4,076.5	991.0	747.8	243.16	4.075	
10,700.0	6,917.6	6,885.6	6,885.6	107.5	137.7	-90.28	1,439.4	4,076.5	953.7	708.6	245.09	3.891	
10,728.3	6,917.4	6,885.4	6,885.4	108.3	137.7	-90.26	1,439.4	4,076.5	939.7	693.8	245.88	3.822	
10,800.0	6,916.8	6,884.8	6,884.8	110.3	137.7	-90.22	1,439.4	4,076.5	907.2	659.3	247.85	3.660	
10,826.7	6,916.6	6,884.6	6,884.6	111.0	137.7	-90.21	1,439.4	4,076.5	896.2	647.6	248.59	3.605	
10,900.0	6,916.0	6,884.0	6,884.0	113.0	137.7	-90.16	1,439.4	4,076.5	869.7	619.1	250.62	3.470	
10,925.2	6,915.8	6,883.8	6,883.8	113.7	137.7	-90.15	1,439.4	4,076.5	861.9	610.6	251.31	3.430	
11,000.0	6,915.1	6,883.1	6,883.1	115.8	137.7	-90.11	1,439.4	4,076.5	842.6	589.2	253.38	3.325	
11,023.6	6,914.9	6,882.9	6,882.9	116.5	137.7	-90.09	1,439.4	4,076.5	837.8	583.7	254.03	3.298	
11,100.0	6,914.3	6,882.3	6,882.3	118.6	137.7	-90.05	1,439.4	4,076.5	826.7	570.5	256.15	3.227	
11,122.0	6,914.1	6,882.1	6,882.1	119.2	137.7	-90.04	1,439.4	4,076.5	824.8	568.0	256.76	3.212	
11,182.6	6,913.6	6,881.6	6,881.6	120.9	137.6	-90.00	1,439.4	4,076.5	822.6	564.1	258.43	3.183 CC	
11,200.0	6,913.5	6,881.5	6,881.5	121.4	137.6	-89.99	1,439.4	4,076.5	822.7	563.8	258.91	3.178 ES	
11,220.4	6,913.3	6,881.3	6,881.3	121.9	137.6	-89.98	1,439.4	4,076.5	823.4	563.9	259.48	3.173 SF	
11,300.0	6,912.6	6,880.6	6,880.6	124.1	137.6	-89.93	1,439.4	4,076.5	830.9	569.2	261.68	3.175	
11,318.9	6,912.5	6,880.5	6,880.5	124.7	137.6	-89.92	1,439.4	4,076.5	833.8	571.6	262.20	3.180	
11,400.0	6,911.8	6,879.8	6,879.8	126.9	137.6	-89.87	1,439.4	4,076.5	850.8	586.3	264.45	3.217	
11,417.3	6,911.6	6,879.6	6,879.6	127.4	137.6	-89.86	1,439.4	4,076.5	855.4	590.4	264.93	3.229	
11,500.0	6,911.0	6,879.0	6,879.0	129.7	137.6	-89.82	1,439.4	4,076.5	881.7	614.4	267.22	3.299	
11,515.7	6,910.8	6,878.8	6,878.8	130.2	137.6	-89.81	1,439.4	4,076.5	887.4	619.8	267.65	3.316	
11,600.0	6,910.1	6,878.1	6,878.1	132.5	137.6	-89.76	1,439.4	4,076.5	922.4	652.4	269.99	3.416	
11,614.1	6,910.0	6,878.0	6,878.0	132.9	137.6	-89.75	1,439.4	4,076.5	928.9	658.5	270.38	3.435	
11,700.0	6,909.3	6,877.3	6,877.3	135.3	137.6	-89.70	1,439.4	4,076.5	971.7	699.0	272.76	3.563	
11,712.6	6,909.2	6,877.2	6,877.2	135.6	137.6	-89.69	1,439.4	4,076.5	978.5	705.4	273.11	3.583	
11,800.0	6,908.5	6,876.5	6,876.5	138.1	137.5	-89.64	1,439.4	4,076.5	1,028.5	752.9	275.53	3.733	
11,811.0	6,908.4	6,876.4	6,876.4	138.4	137.5	-89.63	1,439.4	4,076.5	1,035.1	759.3	275.83	3.753	
11,900.0	6,907.6	6,875.6	6,875.6	140.9	137.5	-89.58	1,439.4	4,076.5	1,091.4	813.1	278.30	3.922	
11,909.4	6,907.5	6,875.5	6,875.5	141.1	137.5	-89.58	1,439.4	4,076.5	1,097.6	819.1	278.56	3.940	
12,000.0	6,906.8	6,874.8	6,874.8	143.6	137.5	-89.52	1,439.4	4,076.5	1,159.6	878.5	281.07	4.126	
12,007.8	6,906.7	6,874.7	6,874.7	143.9	137.5	-89.52	1,439.4	4,076.5	1,165.1	883.8	281.29	4.142	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT HSR LOEFFLER 8-27 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,100.0	6,905.9	6,873.9	6,873.9	146.4	137.5	-89.47	1,439.4	4,076.5	1,232.1	948.3	283.84	4.341	
12,106.3	6,905.9	6,873.9	6,873.9	146.6	137.5	-89.46	1,439.4	4,076.5	1,236.8	952.8	284.02	4.355	
12,200.0	6,905.1	6,873.1	6,873.1	149.2	137.5	-89.41	1,439.4	4,076.5	1,308.3	1,021.7	286.62	4.565	
12,204.7	6,905.1	6,873.1	6,873.1	149.4	137.5	-89.41	1,439.4	4,076.5	1,311.9	1,025.2	286.75	4.575	
12,300.0	6,904.3	6,872.3	6,872.3	152.0	137.5	-89.35	1,439.4	4,076.5	1,387.5	1,098.1	289.39	4.794	
12,303.1	6,904.3	6,872.3	6,872.3	152.1	137.5	-89.35	1,439.4	4,076.5	1,390.0	1,100.5	289.48	4.802	
12,400.0	6,903.4	6,871.4	6,871.4	154.8	137.4	-89.29	1,439.4	4,076.5	1,469.2	1,177.0	292.17	5.029	
12,401.5	6,903.4	6,871.4	6,871.4	154.8	137.4	-89.29	1,439.4	4,076.5	1,470.5	1,178.3	292.21	5.032	
12,500.0	6,902.6	6,870.6	6,870.6	157.6	137.4	-89.23	1,439.4	4,076.5	1,553.0	1,258.1	294.94	5.266	
12,598.4	6,901.8	6,869.8	6,869.8	160.3	137.4	-89.18	1,439.4	4,076.5	1,637.3	1,339.7	297.67	5.501	
12,600.0	6,901.8	6,869.8	6,869.8	160.4	137.4	-89.18	1,439.4	4,076.5	1,638.7	1,341.0	297.71	5.504	
12,696.8	6,901.0	6,869.0	6,869.0	163.1	137.4	-89.12	1,439.4	4,076.5	1,723.2	1,422.8	300.40	5.736	
12,700.0	6,900.9	6,868.9	6,868.9	163.2	137.4	-89.12	1,439.4	4,076.5	1,725.9	1,425.5	300.49	5.744	
12,795.2	6,900.1	6,868.1	6,868.1	165.8	137.4	-89.06	1,439.4	4,076.5	1,810.2	1,507.1	303.13	5.972	
12,800.0	6,900.1	6,868.1	6,868.1	166.0	137.4	-89.06	1,439.4	4,076.5	1,814.5	1,511.2	303.26	5.983	
12,893.7	6,899.3	6,867.3	6,867.3	168.6	137.4	-89.01	1,439.4	4,076.5	1,898.4	1,592.6	305.86	6.207	
12,900.0	6,899.3	6,867.3	6,867.3	168.8	137.4	-89.00	1,439.4	4,076.5	1,904.1	1,598.1	306.04	6.222	
12,992.1	6,898.5	6,866.5	6,866.5	171.3	137.3	-88.95	1,439.4	4,076.5	1,987.6	1,679.0	308.59	6.441	
13,000.0	6,898.4	6,866.4	6,866.4	171.6	137.3	-88.94	1,439.4	4,076.5	1,994.8	1,686.0	308.81	6.460	
13,090.5	6,897.7	6,865.7	6,865.7	174.1	137.3	-88.89	1,439.4	4,076.5	2,077.6	1,766.3	311.32	6.673	
13,100.0	6,897.6	6,865.6	6,865.6	174.4	137.3	-88.89	1,439.4	4,076.5	2,086.3	1,774.7	311.59	6.696	
13,188.9	6,896.9	6,864.9	6,864.9	176.8	137.3	-88.84	1,439.4	4,076.5	2,168.3	1,854.3	314.06	6.904	
13,200.0	6,896.8	6,864.8	6,864.8	177.2	137.3	-88.83	1,439.4	4,076.5	2,178.6	1,864.2	314.36	6.930	
13,287.4	6,896.0	6,864.0	6,864.0	179.6	137.3	-88.78	1,439.4	4,076.5	2,259.7	1,942.9	316.79	7.133	
13,300.0	6,895.9	6,863.9	6,863.9	180.0	137.3	-88.77	1,439.4	4,076.5	2,271.5	1,954.3	317.14	7.162	
13,385.8	6,895.2	6,863.2	6,863.2	182.4	137.3	-88.72	1,439.4	4,076.5	2,351.6	2,032.1	319.52	7.360	
13,400.0	6,895.1	6,863.1	6,863.1	182.7	137.3	-88.71	1,439.4	4,076.5	2,365.0	2,045.0	319.91	7.393	
13,484.2	6,894.4	6,862.4	6,862.4	185.1	137.3	-88.66	1,439.4	4,076.5	2,444.1	2,121.8	322.25	7.584	
13,500.0	6,894.3	6,862.3	6,862.3	185.5	137.3	-88.65	1,439.4	4,076.5	2,459.0	2,136.3	322.69	7.620	
13,582.6	6,893.6	6,861.6	6,861.6	187.9	137.2	-88.61	1,439.4	4,076.5	2,537.0	2,212.0	324.98	7.807	
13,600.0	6,893.4	6,861.4	6,861.4	188.3	137.2	-88.60	1,439.4	4,076.5	2,553.4	2,227.9	325.46	7.845	
13,681.1	6,892.8	6,860.8	6,860.8	190.6	137.2	-88.55	1,439.4	4,076.5	2,630.3	2,302.6	327.71	8.026	
13,700.0	6,892.6	6,860.6	6,860.6	191.1	137.2	-88.54	1,439.4	4,076.5	2,648.3	2,320.0	328.24	8.068	
13,779.5	6,891.9	6,859.9	6,859.9	193.4	137.2	-88.49	1,439.4	4,076.5	2,724.0	2,393.5	330.44	8.243	
13,800.0	6,891.8	6,859.8	6,859.8	193.9	137.2	-88.48	1,439.4	4,076.5	2,743.5	2,412.5	331.01	8.288	
13,877.9	6,891.1	6,859.1	6,859.1	196.1	137.2	-88.44	1,439.4	4,076.5	2,817.9	2,484.8	333.17	8.458	
13,900.0	6,890.9	6,858.9	6,858.9	196.7	137.2	-88.42	1,439.4	4,076.5	2,839.1	2,505.3	333.79	8.506	
13,976.3	6,890.3	6,858.3	6,858.3	198.9	137.2	-88.38	1,439.4	4,076.5	2,912.2	2,576.3	335.91	8.670	
14,000.0	6,890.1	6,858.1	6,858.1	199.5	137.2	-88.37	1,439.4	4,076.5	2,934.9	2,598.3	336.56	8.720	
14,074.8	6,889.5	6,857.5	6,857.5	201.6	137.2	-88.32	1,439.4	4,076.5	3,006.8	2,668.1	338.64	8.879	
14,100.0	6,889.3	6,857.3	6,857.3	202.3	137.2	-88.31	1,439.4	4,076.5	3,031.0	2,691.7	339.34	8.932	
14,173.2	6,888.7	6,856.7	6,856.7	204.4	137.1	-88.27	1,439.4	4,076.5	3,101.5	2,760.2	341.37	9.086	
14,200.0	6,888.4	6,856.4	6,856.4	205.1	137.1	-88.25	1,439.4	4,076.5	3,127.4	2,785.3	342.11	9.141	
14,271.6	6,887.8	6,855.8	6,855.8	207.1	137.1	-88.21	1,439.4	4,076.5	3,196.5	2,852.4	344.10	9.290	
14,300.0	6,887.6	6,855.6	6,855.6	207.9	137.1	-88.19	1,439.4	4,076.5	3,224.0	2,879.1	344.88	9.348	
14,370.0	6,887.0	6,855.0	6,855.0	209.9	137.1	-88.15	1,439.4	4,076.5	3,291.7	2,944.9	346.83	9.491	
14,400.0	6,886.8	6,854.8	6,854.8	210.7	137.1	-88.13	1,439.4	4,076.5	3,320.8	2,973.1	347.66	9.552	
14,468.5	6,886.2	6,854.2	6,854.2	212.6	137.1	-88.09	1,439.4	4,076.5	3,387.1	3,037.6	349.56	9.690	
14,500.0	6,885.9	6,853.9	6,853.9	213.5	137.1	-88.08	1,439.4	4,076.5	3,417.7	3,067.3	350.43	9.753	
14,566.9	6,885.4	6,853.4	6,853.4	215.4	137.1	-88.04	1,439.4	4,076.5	3,482.7	3,130.4	352.29	9.886	
14,600.0	6,885.1	6,853.1	6,853.1	216.3	137.1	-88.02	1,439.4	4,076.5	3,514.9	3,161.7	353.20	9.951	
14,613.0	6,885.0	6,853.0	6,853.0	216.7	137.1	-88.01	1,439.4	4,076.5	3,527.5	3,174.0	353.56	9.977	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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 +N/-S (usft)	+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	61.14	1,584.9	2,875.5	3,283.4				
98.4	98.4	81.4	81.4	0.1	0.4	61.14	1,584.9	2,875.5	3,283.4	3,282.9	0.49	6,757.780	
100.0	100.0	83.0	83.0	0.1	0.4	61.14	1,584.9	2,875.5	3,283.4	3,282.9	0.50	6,627.800	
196.8	196.8	179.8	179.8	0.3	2.5	61.14	1,584.9	2,875.5	3,283.4	3,280.6	2.78	1,182.730	
200.0	200.0	183.0	183.0	0.3	2.5	61.14	1,584.9	2,875.5	3,283.4	3,280.5	2.86	1,147.528	
295.3	295.3	278.3	278.3	0.5	4.6	61.14	1,584.9	2,875.5	3,283.4	3,278.3	5.12	640.798	
300.0	300.0	283.0	283.0	0.5	4.7	61.14	1,584.9	2,875.5	3,283.4	3,278.2	5.23	627.470	
393.7	393.7	376.7	376.7	0.7	6.6	61.14	1,584.9	2,875.5	3,283.4	3,276.0	7.36	446.041	
400.0	400.0	383.0	383.0	0.8	6.7	61.14	1,584.9	2,875.5	3,283.4	3,275.9	7.50	437.560	
492.1	492.1	475.1	475.1	1.0	8.6	61.14	1,584.9	2,875.5	3,283.4	3,273.8	9.58	342.719	
500.0	500.0	483.0	483.0	1.0	8.8	61.14	1,584.9	2,875.5	3,283.4	3,273.6	9.76	336.491	
590.5	590.5	573.5	573.5	1.2	10.6	61.14	1,584.9	2,875.5	3,283.4	3,271.6	11.79	278.433	
600.0	600.0	583.0	583.0	1.2	10.8	61.14	1,584.9	2,875.5	3,283.4	3,271.4	12.00	273.510	
689.0	689.0	672.0	672.0	1.4	12.6	61.14	1,584.9	2,875.5	3,283.4	3,269.4	14.00	234.517	
700.0	700.0	683.0	683.0	1.4	12.8	61.14	1,584.9	2,875.5	3,283.4	3,269.1	14.25	230.447	
787.4	787.4	770.4	770.4	1.6	14.6	61.14	1,584.9	2,875.5	3,283.4	3,267.2	16.21	202.593	
800.0	800.0	783.0	783.0	1.7	14.8	61.14	1,584.9	2,875.5	3,283.4	3,266.9	16.49	199.124	
885.8	885.8	868.8	868.8	1.9	16.6	61.14	1,584.9	2,875.5	3,283.4	3,265.0	18.41	178.333	
900.0	900.0	883.0	883.0	1.9	16.8	61.14	1,584.9	2,875.5	3,283.4	3,264.7	18.73	175.310	
984.2	984.2	967.2	967.2	2.1	18.5	61.14	1,584.9	2,875.5	3,283.4	3,262.8	20.62	159.269	
1,000.0	1,000.0	983.0	983.0	2.1	18.9	61.14	1,584.9	2,875.5	3,283.4	3,262.4	20.97	156.590	
1,082.7	1,082.7	1,065.7	1,065.7	2.3	20.5	61.14	1,584.9	2,875.5	3,283.4	3,260.6	22.82	143.891	
1,100.0	1,100.0	1,083.0	1,083.0	2.3	20.9	61.14	1,584.9	2,875.5	3,283.4	3,260.2	23.21	141.486	
1,150.0	1,150.0	1,133.0	1,133.0	2.4	21.9	61.14	1,584.9	2,875.5	3,283.4	3,259.1	24.33	134.978	
1,181.1	1,181.1	1,164.1	1,164.1	2.5	22.5	93.83	1,584.9	2,875.5	3,283.4	3,258.4	25.02	131.228	
1,200.0	1,200.0	1,183.0	1,183.0	2.6	22.9	93.83	1,584.9	2,875.5	3,283.4	3,258.0	25.44	129.050	
1,279.5	1,279.5	1,262.5	1,262.5	2.7	24.5	93.87	1,584.9	2,875.5	3,283.6	3,256.4	27.22	120.640	
1,300.0	1,299.9	1,282.9	1,282.9	2.8	24.9	93.89	1,584.9	2,875.5	3,283.6	3,256.0	27.67	118.652	
1,377.9	1,377.7	1,360.7	1,360.7	3.0	26.5	93.97	1,584.9	2,875.5	3,284.0	3,254.6	29.41	111.645	
1,400.0	1,399.7	1,382.7	1,382.7	3.0	26.9	94.00	1,584.9	2,875.5	3,284.1	3,254.2	29.91	109.813	
1,476.4	1,475.7	1,458.7	1,458.7	3.2	28.4	94.12	1,584.9	2,875.5	3,284.7	3,253.1	31.61	103.897	
1,500.0	1,499.1	1,482.1	1,482.1	3.2	28.9	94.17	1,584.9	2,875.5	3,284.9	3,252.7	32.14	102.197	
1,574.8	1,573.2	1,556.2	1,556.2	3.4	30.4	94.33	1,584.9	2,875.5	3,285.6	3,251.8	33.82	97.142	
1,600.0	1,598.2	1,581.2	1,581.2	3.5	30.9	94.39	1,584.9	2,875.5	3,285.9	3,251.5	34.39	95.553	
1,673.2	1,670.3	1,653.3	1,653.3	3.7	32.3	94.58	1,584.9	2,875.5	3,286.9	3,250.9	36.05	91.187	
1,700.0	1,696.6	1,679.6	1,679.6	3.8	32.9	94.65	1,584.9	2,875.5	3,287.3	3,250.7	36.65	89.693	
1,749.9	1,745.5	1,728.5	1,728.5	3.9	33.9	94.81	1,584.9	2,875.5	3,288.2	3,250.4	37.79	87.017	
1,771.6	1,766.8	1,749.8	1,749.8	4.0	34.3	94.88	1,584.9	2,875.5	3,288.5	3,250.3	38.29	85.892	
1,800.0	1,794.5	1,777.5	1,777.5	4.1	34.8	94.98	1,584.9	2,875.5	3,289.1	3,250.1	38.94	84.471	
1,870.1	1,863.1	1,846.1	1,846.1	4.3	36.2	95.23	1,584.9	2,875.5	3,290.4	3,249.8	40.55	81.134	
1,900.0	1,892.3	1,875.3	1,875.3	4.4	36.8	95.34	1,584.9	2,875.5	3,291.0	3,249.7	41.25	79.788	
1,968.5	1,959.4	1,942.4	1,942.4	4.7	38.2	95.58	1,584.9	2,875.5	3,292.4	3,249.5	42.84	76.853	
2,000.0	1,990.2	1,973.2	1,973.2	4.8	38.8	95.69	1,584.9	2,875.5	3,293.0	3,249.4	43.57	75.575	
2,066.9	2,055.6	2,038.6	2,038.6	5.1	40.1	95.92	1,584.9	2,875.5	3,294.5	3,249.3	45.14	72.986	
2,100.0	2,088.0	2,071.0	2,071.0	5.2	40.8	96.04	1,584.9	2,875.5	3,295.2	3,249.3	45.91	71.771	
2,165.3	2,151.9	2,134.9	2,134.9	5.4	42.0	96.27	1,584.9	2,875.5	3,296.7	3,249.2	47.45	69.479	
2,200.0	2,185.8	2,168.8	2,168.8	5.6	42.7	96.39	1,584.9	2,875.5	3,297.5	3,249.2	48.26	68.323	
2,263.8	2,248.2	2,231.2	2,231.2	5.8	44.0	96.62	1,584.9	2,875.5	3,299.0	3,249.3	49.77	66.289	
2,300.0	2,283.6	2,266.6	2,266.6	6.0	44.7	96.74	1,584.9	2,875.5	3,299.9	3,249.3	50.62	65.188	
2,362.2	2,344.5	2,327.5	2,327.5	6.2	45.9	96.96	1,584.9	2,875.5	3,301.5	3,249.4	52.09	63.378	
2,400.0	2,381.4	2,364.4	2,364.4	6.4	46.7	97.09	1,584.9	2,875.5	3,302.5	3,249.5	52.99	62.327	
2,460.6	2,440.7	2,423.7	2,423.7	6.6	47.8	97.31	1,584.9	2,875.5	3,304.1	3,249.7	54.42	60.711	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,462.2	2,462.2	6.8	48.6	97.44	1,584.9	2,875.5	3,305.2	3,249.8	55.36	59.707	
2,559.0	2,537.0	2,520.0	2,520.0	7.0	49.8	97.65	1,584.9	2,875.5	3,306.8	3,250.0	56.76	58.261	
2,600.0	2,577.1	2,560.1	2,560.1	7.2	50.6	97.79	1,584.9	2,875.5	3,308.0	3,250.2	57.73	57.300	
2,657.5	2,633.3	2,616.3	2,616.3	7.4	51.7	97.99	1,584.9	2,875.5	3,309.7	3,250.6	59.10	56.003	
2,700.0	2,674.9	2,657.9	2,657.9	7.6	52.6	98.14	1,584.9	2,875.5	3,310.9	3,250.8	60.11	55.082	
2,755.9	2,729.6	2,712.6	2,712.6	7.9	53.7	98.34	1,584.9	2,875.5	3,312.6	3,251.2	61.44	53.917	
2,800.0	2,772.7	2,755.7	2,755.7	8.0	54.5	98.49	1,584.9	2,875.5	3,314.0	3,251.5	62.49	53.033	
2,854.3	2,825.8	2,808.8	2,808.8	8.3	55.6	98.68	1,584.9	2,875.5	3,315.7	3,251.9	63.78	51.984	
2,900.0	2,870.5	2,853.5	2,853.5	8.5	56.5	98.84	1,584.9	2,875.5	3,317.2	3,252.3	64.87	51.135	
2,952.7	2,922.1	2,905.1	2,905.1	8.7	57.5	99.02	1,584.9	2,875.5	3,318.9	3,252.8	66.13	50.188	
3,000.0	2,968.3	2,951.3	2,951.3	8.9	58.5	99.18	1,584.9	2,875.5	3,320.5	3,253.3	67.26	49.372	
3,051.2	3,018.4	3,001.4	3,001.4	9.1	59.5	99.36	1,584.9	2,875.5	3,322.3	3,253.8	68.48	48.517	
3,100.0	3,066.1	3,049.1	3,049.1	9.3	60.4	99.53	1,584.9	2,875.5	3,324.0	3,254.3	69.64	47.730	
3,149.6	3,114.7	3,097.7	3,097.7	9.5	61.4	99.70	1,584.9	2,875.5	3,325.7	3,254.9	70.82	46.957	
3,200.0	3,164.0	3,147.0	3,147.0	9.8	62.4	99.88	1,584.9	2,875.5	3,327.6	3,255.5	72.03	46.199	
3,248.0	3,210.9	3,193.9	3,193.9	10.0	63.3	100.04	1,584.9	2,875.5	3,329.3	3,256.1	73.17	45.499	
3,300.0	3,261.8	3,244.8	3,244.8	10.2	64.4	100.22	1,584.9	2,875.5	3,331.3	3,256.8	74.41	44.767	
3,346.4	3,307.2	3,290.2	3,290.2	10.4	65.3	100.38	1,584.9	2,875.5	3,333.0	3,257.5	75.52	44.133	
3,400.0	3,359.6	3,342.6	3,342.6	10.6	66.3	100.56	1,584.9	2,875.5	3,335.1	3,258.3	76.80	43.425	
3,444.9	3,403.5	3,386.5	3,386.5	10.8	67.2	100.72	1,584.9	2,875.5	3,336.8	3,259.0	77.87	42.850	
3,500.0	3,457.4	3,440.4	3,440.4	11.1	68.3	100.91	1,584.9	2,875.5	3,339.0	3,259.9	79.19	42.166	
3,543.3	3,499.8	3,482.8	3,482.8	11.3	69.1	101.06	1,584.9	2,875.5	3,340.8	3,260.6	80.22	41.644	
3,600.0	3,555.2	3,538.2	3,538.2	11.5	70.3	101.25	1,584.9	2,875.5	3,343.1	3,261.5	81.58	40.982	
3,641.7	3,596.0	3,579.0	3,579.0	11.7	71.1	101.39	1,584.9	2,875.5	3,344.9	3,262.3	82.57	40.509	
3,700.0	3,653.0	3,636.0	3,636.0	11.9	72.2	101.59	1,584.9	2,875.5	3,347.3	3,263.4	83.96	39.867	
3,740.1	3,692.3	3,675.3	3,675.3	12.1	73.0	101.73	1,584.9	2,875.5	3,349.1	3,264.1	84.92	39.437	
3,800.0	3,750.8	3,733.8	3,733.8	12.4	74.2	101.93	1,584.9	2,875.5	3,351.7	3,265.3	86.35	38.815	
3,838.6	3,788.6	3,771.6	3,771.6	12.6	75.0	102.06	1,584.9	2,875.5	3,353.4	3,266.1	87.27	38.425	
3,900.0	3,848.7	3,831.7	3,831.7	12.8	76.2	102.27	1,584.9	2,875.5	3,356.1	3,267.4	88.74	37.821	
3,937.0	3,884.9	3,867.9	3,867.9	13.0	76.9	102.40	1,584.9	2,875.5	3,357.8	3,268.2	89.62	37.468	
4,000.0	3,946.5	3,929.5	3,929.5	13.3	78.1	102.61	1,584.9	2,875.5	3,360.7	3,269.6	91.12	36.881	
4,035.4	3,981.1	3,964.1	3,964.1	13.4	78.8	102.73	1,584.9	2,875.5	3,362.3	3,270.4	91.97	36.560	
4,100.0	4,044.3	4,027.3	4,027.3	13.7	80.1	102.95	1,584.9	2,875.5	3,365.4	3,271.9	93.51	35.991	
4,133.8	4,077.4	4,060.4	4,060.4	13.9	80.8	103.06	1,584.9	2,875.5	3,367.0	3,272.7	94.31	35.700	
4,200.0	4,142.1	4,125.1	4,125.1	14.2	82.1	103.29	1,584.9	2,875.5	3,370.2	3,274.3	95.89	35.146	
4,232.3	4,173.7	4,156.7	4,156.7	14.3	82.7	103.40	1,584.9	2,875.5	3,371.8	3,275.1	96.66	34.883	
4,300.0	4,239.9	4,222.9	4,222.9	14.6	84.0	103.62	1,584.9	2,875.5	3,375.1	3,276.9	98.27	34.344	
4,330.7	4,270.0	4,253.0	4,253.0	14.7	84.6	103.73	1,584.9	2,875.5	3,376.7	3,277.7	99.01	34.106	
4,400.0	4,337.7	4,320.7	4,320.7	15.0	86.0	103.96	1,584.9	2,875.5	3,380.2	3,279.5	100.66	33.581	
4,429.1	4,366.2	4,349.2	4,349.2	15.2	86.6	104.06	1,584.9	2,875.5	3,381.7	3,280.3	101.35	33.366	
4,500.0	4,435.6	4,418.6	4,418.6	15.5	88.0	104.29	1,584.9	2,875.5	3,385.4	3,282.3	103.04	32.855	
4,527.5	4,462.5	4,445.5	4,445.5	15.6	88.5	104.39	1,584.9	2,875.5	3,386.8	3,283.1	103.69	32.661	
4,600.0	4,533.4	4,516.4	4,516.4	15.9	89.9	104.63	1,584.9	2,875.5	3,390.7	3,285.3	105.42	32.164	
4,626.0	4,558.8	4,541.8	4,541.8	16.0	90.4	104.71	1,584.9	2,875.5	3,392.1	3,286.0	106.04	31.989	
4,673.6	4,605.3	4,588.3	4,588.3	16.3	91.4	104.87	1,584.9	2,875.5	3,394.6	3,287.5	107.17	31.675	
4,700.0	4,631.2	4,614.2	4,614.2	16.4	91.9	104.98	1,584.9	2,875.5	3,396.1	3,288.3	107.80	31.504	
4,724.4	4,655.1	4,638.1	4,638.1	16.4	92.4	105.09	1,584.9	2,875.5	3,397.3	3,289.0	108.36	31.352	
4,800.0	4,729.5	4,712.5	4,712.5	16.7	93.9	105.37	1,584.9	2,875.5	3,400.9	3,290.8	110.11	30.887	
4,822.8	4,752.1	4,735.1	4,735.1	16.7	94.3	105.45	1,584.9	2,875.5	3,401.9	3,291.2	110.63	30.751	
4,900.0	4,828.4	4,811.4	4,811.4	17.0	95.9	105.68	1,584.9	2,875.5	3,404.9	3,292.5	112.39	30.294	
4,921.2	4,849.5	4,832.5	4,832.5	17.0	96.3	105.74	1,584.9	2,875.5	3,405.6	3,292.7	112.87	30.172	
5,000.0	4,927.8	4,910.8	4,910.8	17.2	97.9	105.92	1,584.9	2,875.5	3,408.0	3,293.3	114.65	29.725	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,930.4	4,930.4	17.2	98.3	105.96	1,584.9	2,875.5	3,408.5	3,293.4	115.08	29.617	
5,100.0	5,027.5	5,010.5	5,010.5	17.4	99.9	106.09	1,584.9	2,875.5	3,410.1	3,293.2	116.87	29.179	
5,118.1	5,045.6	5,028.6	5,028.6	17.4	100.2	106.11	1,584.9	2,875.5	3,410.4	3,293.1	117.26	29.083	
5,200.0	5,127.4	5,110.4	5,110.4	17.6	101.9	106.18	1,584.9	2,875.5	3,411.3	3,292.3	119.05	28.655	
5,216.5	5,143.9	5,126.9	5,126.9	17.6	102.2	106.19	1,584.9	2,875.5	3,411.4	3,292.0	119.40	28.571	
5,273.4	5,200.8	5,183.8	5,183.8	17.7	103.4	73.51	1,584.9	2,875.5	3,411.6	3,295.3	116.23	29.352	
5,300.0	5,227.4	5,210.4	5,210.4	17.7	103.9	73.51	1,584.9	2,875.5	3,411.6	3,294.8	116.81	29.206	
5,314.9	5,242.3	5,225.3	5,225.3	17.7	104.2	73.51	1,584.9	2,875.5	3,411.6	3,294.4	117.14	29.124	
5,400.0	5,327.4	5,310.4	5,310.4	17.8	105.9	73.51	1,584.9	2,875.5	3,411.6	3,292.6	119.01	28.665	
5,413.4	5,340.8	5,323.8	5,323.8	17.9	106.2	73.51	1,584.9	2,875.5	3,411.6	3,292.3	119.31	28.595	
5,500.0	5,427.4	5,410.4	5,410.4	18.0	107.9	73.51	1,584.9	2,875.5	3,411.6	3,290.4	121.22	28.144	
5,511.8	5,439.2	5,422.2	5,422.2	18.0	108.2	73.51	1,584.9	2,875.5	3,411.6	3,290.1	121.48	28.084	
5,600.0	5,527.4	5,510.4	5,510.4	18.1	109.9	73.51	1,584.9	2,875.5	3,411.6	3,288.1	123.43	27.641	
5,610.2	5,537.6	5,520.6	5,520.6	18.1	110.1	73.51	1,584.9	2,875.5	3,411.6	3,287.9	123.65	27.590	
5,700.0	5,627.4	5,610.4	5,610.4	18.3	111.9	73.51	1,584.9	2,875.5	3,411.6	3,285.9	125.63	27.155	
5,708.6	5,636.0	5,619.0	5,619.0	18.3	112.1	73.51	1,584.9	2,875.5	3,411.6	3,285.7	125.82	27.114	
5,800.0	5,727.4	5,710.4	5,710.4	18.4	113.9	73.51	1,584.9	2,875.5	3,411.6	3,283.7	127.84	26.686	
5,807.1	5,734.5	5,717.5	5,717.5	18.4	114.1	73.51	1,584.9	2,875.5	3,411.6	3,283.6	128.00	26.654	
5,900.0	5,827.4	5,810.4	5,810.4	18.6	116.0	73.51	1,584.9	2,875.5	3,411.6	3,281.5	130.05	26.233	
5,905.5	5,832.9	5,815.9	5,815.9	18.6	116.1	73.51	1,584.9	2,875.5	3,411.6	3,281.4	130.17	26.209	
6,000.0	5,927.4	5,910.4	5,910.4	18.7	118.0	73.51	1,584.9	2,875.5	3,411.6	3,279.3	132.26	25.795	
6,003.9	5,931.3	5,914.3	5,914.3	18.7	118.0	73.51	1,584.9	2,875.5	3,411.6	3,279.2	132.35	25.778	
6,100.0	6,027.4	6,010.4	6,010.4	18.9	120.0	73.51	1,584.9	2,875.5	3,411.6	3,277.1	134.47	25.371	
6,102.3	6,029.7	6,012.7	6,012.7	18.9	120.0	73.51	1,584.9	2,875.5	3,411.6	3,277.1	134.52	25.361	
6,200.0	6,127.4	6,110.4	6,110.4	19.0	122.0	73.51	1,584.9	2,875.5	3,411.6	3,274.9	136.68	24.960	
6,200.8	6,128.2	6,111.2	6,111.2	19.0	122.0	73.51	1,584.9	2,875.5	3,411.6	3,274.9	136.70	24.957	
6,299.2	6,226.6	6,209.6	6,209.6	19.2	124.0	73.51	1,584.9	2,875.5	3,411.6	3,272.7	138.87	24.566	
6,301.4	6,228.8	6,211.8	6,211.8	19.2	124.0	73.51	1,584.9	2,875.5	3,411.6	3,272.6	138.92	24.557	
6,350.0	6,277.4	6,260.4	6,260.4	19.3	125.0	-16.53	1,584.9	2,875.5	3,410.0	3,266.4	143.56	23.753	
6,397.6	6,324.7	6,307.7	6,307.7	19.3	126.0	-16.66	1,584.9	2,875.5	3,405.4	3,261.7	143.68	23.701	
6,400.0	6,327.1	6,310.1	6,310.1	19.3	126.0	-16.67	1,584.9	2,875.5	3,405.1	3,261.4	143.67	23.701	
6,450.0	6,376.3	6,359.3	6,359.3	19.3	127.0	-16.90	1,584.9	2,875.5	3,396.8	3,253.7	143.13	23.733	
6,496.0	6,421.1	6,404.1	6,404.1	19.3	127.9	-17.21	1,584.9	2,875.5	3,386.4	3,244.3	142.05	23.839	
6,500.0	6,424.9	6,407.9	6,407.9	19.3	128.0	-17.24	1,584.9	2,875.5	3,385.3	3,243.4	141.94	23.851	
6,550.0	6,472.4	6,455.4	6,455.4	19.3	128.9	-17.69	1,584.9	2,875.5	3,370.6	3,230.5	140.12	24.056	
6,594.5	6,513.8	6,496.8	6,496.8	19.3	129.8	-18.19	1,584.9	2,875.5	3,354.9	3,216.9	137.99	24.313	
6,600.0	6,518.8	6,501.8	6,501.8	19.3	129.9	-18.26	1,584.9	2,875.5	3,352.8	3,215.1	137.69	24.350	
6,650.0	6,563.8	6,546.8	6,546.8	19.3	130.8	-18.96	1,584.9	2,875.5	3,331.9	3,197.2	134.71	24.734	
6,692.9	6,601.1	6,584.1	6,584.1	19.2	131.5	-19.69	1,584.9	2,875.5	3,311.6	3,179.9	131.76	25.133	
6,700.0	6,607.1	6,590.1	6,590.1	19.2	131.6	-19.82	1,584.9	2,875.5	3,308.1	3,176.8	131.24	25.205	
6,750.0	6,648.6	6,631.6	6,631.6	19.2	132.5	-20.86	1,584.9	2,875.5	3,281.4	3,154.0	127.39	25.758	
6,791.3	6,681.4	6,664.4	6,664.4	19.1	133.1	-21.88	1,584.9	2,875.5	3,257.4	3,133.4	124.02	26.265	
6,800.0	6,688.1	6,671.1	6,671.1	19.1	133.3	-22.12	1,584.9	2,875.5	3,252.1	3,128.8	123.30	26.376	
6,850.0	6,725.3	6,708.3	6,708.3	19.1	134.0	-23.62	1,584.9	2,875.5	3,220.3	3,101.1	119.17	27.023	
6,889.7	6,753.2	6,736.2	6,736.2	19.0	134.6	-25.04	1,584.9	2,875.5	3,193.2	3,077.2	116.03	27.521	
6,900.0	6,760.1	6,743.1	6,743.1	19.0	134.7	-25.44	1,584.9	2,875.5	3,186.1	3,070.8	115.26	27.641	
6,950.0	6,792.3	6,775.3	6,775.3	19.0	135.4	-27.62	1,584.9	2,875.5	3,149.6	3,037.7	111.97	28.129	
6,988.2	6,815.1	6,798.1	6,798.1	18.9	135.8	-29.60	1,584.9	2,875.5	3,120.5	3,010.3	110.17	28.325	
7,000.0	6,821.8	6,804.8	6,804.8	18.9	136.0	-30.28	1,584.9	2,875.5	3,111.2	3,001.5	109.78	28.341	
7,050.0	6,848.3	6,831.3	6,831.3	18.9	136.5	-33.51	1,584.9	2,875.5	3,071.0	2,961.8	109.26	28.107	
7,086.6	6,865.9	6,848.9	6,848.9	18.9	136.8	-36.32	1,584.9	2,875.5	3,040.6	2,930.3	110.31	27.563	
7,100.0	6,871.9	6,854.9	6,854.9	18.9	137.0	-37.46	1,584.9	2,875.5	3,029.2	2,918.2	111.05	27.279	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,150.0	6,892.3	6,875.3	6,875.3	18.8	137.4	-42.32	1,584.9	2,875.5	2,986.0	2,870.4	115.62	25.825	
7,185.0	6,904.7	6,887.7	6,887.7	18.8	137.6	-46.36	1,584.9	2,875.5	2,955.1	2,834.5	120.59	24.505	
7,200.0	6,909.5	6,892.5	6,892.5	18.9	137.7	-48.27	1,584.9	2,875.5	2,941.7	2,818.5	123.13	23.891	
7,250.0	6,923.4	6,906.4	6,906.4	19.3	138.0	-55.49	1,584.9	2,875.5	2,896.3	2,763.3	133.04	21.771	
7,283.4	6,930.8	6,913.8	6,913.8	19.8	138.1	-61.08	1,584.9	2,875.5	2,865.6	2,725.3	140.36	20.416	
7,300.0	6,933.9	6,916.9	6,916.9	20.0	138.2	-64.07	1,584.9	2,875.5	2,850.3	2,706.4	143.95	19.801	
7,350.0	6,940.9	6,923.9	6,923.9	20.8	138.4	-73.86	1,584.9	2,875.5	2,803.8	2,650.2	153.59	18.255	
7,381.9	6,943.6	6,926.6	6,926.6	21.4	138.4	-80.53	1,584.9	2,875.5	2,774.0	2,616.1	157.92	17.566	
7,400.0	6,944.5	6,927.5	6,927.5	21.7	138.4	-84.39	1,584.9	2,875.5	2,757.1	2,597.6	159.49	17.287	
7,432.4	6,945.0	6,928.0	6,928.0	22.3	138.4	-91.26	1,584.9	2,875.5	2,726.8	2,566.2	160.56	16.983	
7,480.3	6,944.6	6,927.6	6,927.6	23.2	138.4	-91.24	1,584.9	2,875.5	2,682.1	2,520.6	161.44	16.613	
7,500.0	6,944.4	6,927.4	6,927.4	23.6	138.4	-91.23	1,584.9	2,875.5	2,663.7	2,501.9	161.81	16.462	
7,578.7	6,943.7	6,926.7	6,926.7	25.2	138.4	-91.19	1,584.9	2,875.5	2,590.5	2,427.1	163.38	15.855	
7,600.0	6,943.6	6,926.6	6,926.6	25.6	138.4	-91.18	1,584.9	2,875.5	2,570.8	2,407.0	163.81	15.694	
7,677.1	6,942.9	6,925.9	6,925.9	27.3	138.4	-91.14	1,584.9	2,875.5	2,499.5	2,334.0	165.46	15.106	
7,700.0	6,942.7	6,925.7	6,925.7	27.8	138.4	-91.13	1,584.9	2,875.5	2,478.4	2,312.5	165.95	14.935	
7,775.6	6,942.1	6,925.1	6,925.1	29.5	138.4	-91.09	1,584.9	2,875.5	2,409.1	2,241.4	167.65	14.370	
7,800.0	6,941.9	6,924.9	6,924.9	30.1	138.4	-91.08	1,584.9	2,875.5	2,386.7	2,218.5	168.19	14.190	
7,874.0	6,941.3	6,924.3	6,924.3	31.8	138.4	-91.04	1,584.9	2,875.5	2,319.3	2,149.4	169.92	13.649	
7,900.0	6,941.1	6,924.1	6,924.1	32.4	138.4	-91.03	1,584.9	2,875.5	2,295.7	2,125.1	170.53	13.462	
7,972.4	6,940.4	6,923.4	6,923.4	34.2	138.3	-91.00	1,584.9	2,875.5	2,230.2	2,057.9	172.27	12.946	
8,000.0	6,940.2	6,923.2	6,923.2	34.9	138.3	-90.98	1,584.9	2,875.5	2,205.4	2,032.5	172.93	12.753	
8,070.8	6,939.6	6,922.6	6,922.6	36.6	138.3	-90.95	1,584.9	2,875.5	2,142.0	1,967.3	174.67	12.263	
8,100.0	6,939.4	6,922.4	6,922.4	37.3	138.3	-90.93	1,584.9	2,875.5	2,116.0	1,940.6	175.39	12.065	
8,169.3	6,938.8	6,921.8	6,921.8	39.1	138.3	-90.90	1,584.9	2,875.5	2,054.7	1,877.5	177.12	11.600	
8,200.0	6,938.5	6,921.5	6,921.5	39.8	138.3	-90.88	1,584.9	2,875.5	2,027.6	1,849.7	177.89	11.398	
8,267.7	6,938.0	6,921.0	6,921.0	41.6	138.3	-90.85	1,584.9	2,875.5	1,968.4	1,788.8	179.61	10.959	
8,300.0	6,937.7	6,920.7	6,920.7	42.4	138.3	-90.83	1,584.9	2,875.5	1,940.3	1,759.9	180.43	10.754	
8,366.1	6,937.2	6,920.2	6,920.2	44.1	138.3	-90.80	1,584.9	2,875.5	1,883.3	1,701.2	182.13	10.341	
8,400.0	6,936.9	6,919.9	6,919.9	45.0	138.3	-90.78	1,584.9	2,875.5	1,854.3	1,671.4	183.00	10.133	
8,464.5	6,936.3	6,919.3	6,919.3	46.6	138.3	-90.75	1,584.9	2,875.5	1,799.6	1,614.9	184.67	9.745	
8,500.0	6,936.0	6,919.0	6,919.0	47.6	138.3	-90.73	1,584.9	2,875.5	1,769.8	1,584.2	185.59	9.536	
8,563.0	6,935.5	6,918.5	6,918.5	49.2	138.2	-90.70	1,584.9	2,875.5	1,717.5	1,530.2	187.24	9.172	
8,600.0	6,935.2	6,918.2	6,918.2	50.2	138.2	-90.68	1,584.9	2,875.5	1,687.0	1,498.8	188.21	8.963	
8,661.4	6,934.7	6,917.7	6,917.7	51.8	138.2	-90.65	1,584.9	2,875.5	1,637.1	1,447.3	189.83	8.624	
8,700.0	6,934.4	6,917.4	6,917.4	52.8	138.2	-90.63	1,584.9	2,875.5	1,606.1	1,415.3	190.85	8.416	
8,759.8	6,933.9	6,916.9	6,916.9	54.4	138.2	-90.61	1,584.9	2,875.5	1,558.8	1,366.4	192.43	8.101	
8,800.0	6,933.5	6,916.5	6,916.5	55.5	138.2	-90.59	1,584.9	2,875.5	1,527.5	1,334.0	193.50	7.894	
8,858.2	6,933.0	6,916.0	6,916.0	57.1	138.2	-90.56	1,584.9	2,875.5	1,482.9	1,287.9	195.05	7.603	
8,900.0	6,932.7	6,915.7	6,915.7	58.2	138.2	-90.54	1,584.9	2,875.5	1,451.6	1,255.4	196.16	7.400	
8,956.7	6,932.2	6,915.2	6,915.2	59.7	138.2	-90.51	1,584.9	2,875.5	1,409.9	1,212.2	197.68	7.132	
9,000.0	6,931.8	6,914.8	6,914.8	60.9	138.2	-90.49	1,584.9	2,875.5	1,378.7	1,179.8	198.84	6.934	
9,055.1	6,931.4	6,914.4	6,914.4	62.4	138.2	-90.46	1,584.9	2,875.5	1,340.0	1,139.7	200.32	6.689	
9,100.0	6,931.0	6,914.0	6,914.0	63.6	138.2	-90.44	1,584.9	2,875.5	1,309.4	1,107.8	201.53	6.497	
9,153.5	6,930.6	6,913.6	6,913.6	65.0	138.1	-90.41	1,584.9	2,875.5	1,273.9	1,071.0	202.97	6.277	
9,200.0	6,930.2	6,913.2	6,913.2	66.3	138.1	-90.39	1,584.9	2,875.5	1,244.2	1,040.0	204.22	6.093	
9,251.9	6,929.7	6,912.7	6,912.7	67.7	138.1	-90.36	1,584.9	2,875.5	1,212.3	1,006.7	205.63	5.896	
9,300.0	6,929.3	6,912.3	6,912.3	69.0	138.1	-90.34	1,584.9	2,875.5	1,184.0	977.1	206.93	5.722	
9,350.4	6,928.9	6,911.9	6,911.9	70.4	138.1	-90.31	1,584.9	2,875.5	1,155.7	947.4	208.29	5.549	
9,400.0	6,928.5	6,911.5	6,911.5	71.7	138.1	-90.29	1,584.9	2,875.5	1,129.4	919.7	209.64	5.387	
9,448.8	6,928.1	6,911.1	6,911.1	73.0	138.1	-90.26	1,584.9	2,875.5	1,105.0	894.1	210.96	5.238	
9,500.0	6,927.7	6,910.7	6,910.7	74.4	138.1	-90.24	1,584.9	2,875.5	1,081.3	868.9	212.35	5.092	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,910.3	6,910.3	75.7	138.1	-90.21	1,584.9	2,875.5	1,061.1	847.5	213.64	4.967	
9,600.0	6,926.8	6,909.8	6,909.8	77.2	138.1	-90.19	1,584.9	2,875.5	1,040.6	825.5	215.08	4.838	
9,645.6	6,926.4	6,909.4	6,909.4	78.4	138.1	-90.17	1,584.9	2,875.5	1,024.7	808.4	216.32	4.737	
9,700.0	6,926.0	6,909.0	6,909.0	79.9	138.1	-90.14	1,584.9	2,875.5	1,008.2	790.4	217.80	4.629	
9,744.1	6,925.6	6,908.6	6,908.6	81.1	138.0	-90.12	1,584.9	2,875.5	996.8	777.8	219.01	4.552	
9,800.0	6,925.2	6,908.2	6,908.2	82.6	138.0	-90.09	1,584.9	2,875.5	985.0	764.5	220.54	4.466	
9,842.5	6,924.8	6,907.8	6,907.8	83.8	138.0	-90.07	1,584.9	2,875.5	978.1	756.4	221.70	4.412	
9,900.0	6,924.3	6,907.3	6,907.3	85.4	138.0	-90.04	1,584.9	2,875.5	971.5	748.3	223.27	4.351	
9,940.9	6,924.0	6,907.0	6,907.0	86.5	138.0	-90.02	1,584.9	2,875.5	969.0	744.6	224.39	4.318	
9,981.6	6,923.6	6,906.6	6,906.6	87.6	138.0	-90.00	1,584.9	2,875.5	968.1	742.6	225.51	4.293 CC	
10,000.0	6,923.5	6,906.5	6,906.5	88.1	138.0	-89.99	1,584.9	2,875.5	968.3	742.3	226.01	4.284 ES	
10,039.3	6,923.2	6,906.2	6,906.2	89.2	138.0	-89.97	1,584.9	2,875.5	969.8	742.7	227.09	4.271	
10,100.0	6,922.6	6,905.6	6,905.6	90.9	138.0	-89.94	1,584.9	2,875.5	975.3	746.6	228.75	4.264 SF	
10,137.8	6,922.3	6,905.3	6,905.3	91.9	138.0	-89.92	1,584.9	2,875.5	980.6	750.8	229.79	4.267	
10,200.0	6,921.8	6,904.8	6,904.8	93.7	138.0	-89.89	1,584.9	2,875.5	992.4	760.9	231.50	4.287	
10,236.2	6,921.5	6,904.5	6,904.5	94.7	138.0	-89.87	1,584.9	2,875.5	1,001.0	768.5	232.49	4.306	
10,300.0	6,921.0	6,904.0	6,904.0	96.4	137.9	-89.84	1,584.9	2,875.5	1,019.1	784.9	234.25	4.351	
10,334.6	6,920.7	6,903.7	6,903.7	97.4	137.9	-89.83	1,584.9	2,875.5	1,030.5	795.3	235.20	4.381	
10,400.0	6,920.1	6,903.1	6,903.1	99.2	137.9	-89.79	1,584.9	2,875.5	1,054.6	817.6	237.00	4.450	
10,433.0	6,919.9	6,902.9	6,902.9	100.1	137.9	-89.78	1,584.9	2,875.5	1,068.2	830.3	237.91	4.490	
10,500.0	6,919.3	6,902.3	6,902.3	101.9	137.9	-89.74	1,584.9	2,875.5	1,098.1	858.4	239.75	4.580	
10,531.5	6,919.0	6,902.0	6,902.0	102.8	137.9	-89.73	1,584.9	2,875.5	1,113.3	872.7	240.62	4.627	
10,600.0	6,918.5	6,901.5	6,901.5	104.7	137.9	-89.69	1,584.9	2,875.5	1,148.7	906.2	242.51	4.737	
10,629.9	6,918.2	6,901.2	6,901.2	105.5	137.9	-89.68	1,584.9	2,875.5	1,165.1	921.8	243.33	4.788	
10,700.0	6,917.6	6,900.6	6,900.6	107.5	137.9	-89.64	1,584.9	2,875.5	1,205.5	960.2	245.26	4.915	
10,728.3	6,917.4	6,900.4	6,900.4	108.3	137.9	-89.63	1,584.9	2,875.5	1,222.6	976.6	246.04	4.969	
10,800.0	6,916.8	6,899.8	6,899.8	110.3	137.9	-89.60	1,584.9	2,875.5	1,267.6	1,019.6	248.02	5.111	
10,826.7	6,916.6	6,899.6	6,899.6	111.0	137.9	-89.58	1,584.9	2,875.5	1,285.1	1,036.3	248.76	5.166	
10,900.0	6,916.0	6,899.0	6,899.0	113.0	137.8	-89.55	1,584.9	2,875.5	1,334.4	1,083.6	250.78	5.321	
10,925.2	6,915.8	6,898.8	6,898.8	113.7	137.8	-89.53	1,584.9	2,875.5	1,351.8	1,100.4	251.47	5.376	
11,000.0	6,915.1	6,898.1	6,898.1	115.8	137.8	-89.50	1,584.9	2,875.5	1,405.1	1,151.5	253.54	5.542	
11,023.6	6,914.9	6,897.9	6,897.9	116.5	137.8	-89.48	1,584.9	2,875.5	1,422.3	1,168.1	254.19	5.595	
11,100.0	6,914.3	6,897.3	6,897.3	118.6	137.8	-89.45	1,584.9	2,875.5	1,479.2	1,222.9	256.30	5.771	
11,122.0	6,914.1	6,897.1	6,897.1	119.2	137.8	-89.44	1,584.9	2,875.5	1,495.9	1,239.0	256.91	5.823	
11,200.0	6,913.5	6,896.5	6,896.5	121.4	137.8	-89.40	1,584.9	2,875.5	1,556.1	1,297.1	259.07	6.007	
11,220.4	6,913.3	6,896.3	6,896.3	121.9	137.8	-89.39	1,584.9	2,875.5	1,572.2	1,312.6	259.63	6.055	
11,300.0	6,912.6	6,895.6	6,895.6	124.1	137.8	-89.35	1,584.9	2,875.5	1,635.6	1,373.8	261.83	6.247	
11,318.9	6,912.5	6,895.5	6,895.5	124.7	137.8	-89.34	1,584.9	2,875.5	1,650.9	1,388.5	262.35	6.293	
11,400.0	6,911.8	6,894.8	6,894.8	126.9	137.8	-89.30	1,584.9	2,875.5	1,717.2	1,452.6	264.60	6.490	
11,417.3	6,911.6	6,894.6	6,894.6	127.4	137.8	-89.29	1,584.9	2,875.5	1,731.5	1,466.5	265.08	6.532	
11,500.0	6,911.0	6,894.0	6,894.0	129.7	137.7	-89.25	1,584.9	2,875.5	1,800.7	1,533.3	267.36	6.735	
11,515.7	6,910.8	6,893.8	6,893.8	130.2	137.7	-89.24	1,584.9	2,875.5	1,814.0	1,546.2	267.80	6.774	
11,600.0	6,910.1	6,893.1	6,893.1	132.5	137.7	-89.20	1,584.9	2,875.5	1,885.8	1,615.7	270.13	6.981	
11,614.1	6,910.0	6,893.0	6,893.0	132.9	137.7	-89.19	1,584.9	2,875.5	1,897.9	1,627.4	270.52	7.016	
11,700.0	6,909.3	6,892.3	6,892.3	135.3	137.7	-89.15	1,584.9	2,875.5	1,972.3	1,699.4	272.90	7.227	
11,712.6	6,909.2	6,892.2	6,892.2	135.6	137.7	-89.14	1,584.9	2,875.5	1,983.2	1,710.0	273.25	7.258	
11,800.0	6,908.5	6,891.5	6,891.5	138.1	137.7	-89.10	1,584.9	2,875.5	2,060.0	1,784.3	275.67	7.473	
11,811.0	6,908.4	6,891.4	6,891.4	138.4	137.7	-89.10	1,584.9	2,875.5	2,069.7	1,793.7	275.97	7.500	
11,900.0	6,907.6	6,890.6	6,890.6	140.9	137.7	-89.05	1,584.9	2,875.5	2,148.7	1,870.3	278.44	7.717	
11,909.4	6,907.5	6,890.5	6,890.5	141.1	137.7	-89.05	1,584.9	2,875.5	2,157.2	1,878.5	278.70	7.740	
12,000.0	6,906.8	6,889.8	6,889.8	143.6	137.7	-89.00	1,584.9	2,875.5	2,238.5	1,957.3	281.21	7.960	
12,007.8	6,906.7	6,889.7	6,889.7	143.9	137.7	-89.00	1,584.9	2,875.5	2,245.6	1,964.1	281.42	7.979	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT JOHN ALLES 1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,100.0	6,905.9	6,888.9	6,888.9	146.4	137.6	-88.95	1,584.9	2,875.5	2,329.0	2,045.1	283.98	8.201	
12,106.3	6,905.9	6,888.9	6,888.9	146.6	137.6	-88.95	1,584.9	2,875.5	2,334.7	2,050.6	284.15	8.217	
12,200.0	6,905.1	6,888.1	6,888.1	149.2	137.6	-88.90	1,584.9	2,875.5	2,420.3	2,133.6	286.75	8.441	
12,204.7	6,905.1	6,888.1	6,888.1	149.4	137.6	-88.90	1,584.9	2,875.5	2,424.7	2,137.8	286.88	8.452	
12,300.0	6,904.3	6,887.3	6,887.3	152.0	137.6	-88.86	1,584.9	2,875.5	2,512.3	2,222.8	289.52	8.678	
12,303.1	6,904.3	6,887.3	6,887.3	152.1	137.6	-88.85	1,584.9	2,875.5	2,515.2	2,225.6	289.61	8.685	
12,400.0	6,903.4	6,886.4	6,886.4	154.8	137.6	-88.81	1,584.9	2,875.5	2,604.9	2,312.6	292.29	8.912	
12,401.5	6,903.4	6,886.4	6,886.4	154.8	137.6	-88.81	1,584.9	2,875.5	2,606.3	2,314.0	292.33	8.916	
12,500.0	6,902.6	6,885.6	6,885.6	157.6	137.6	-88.76	1,584.9	2,875.5	2,698.0	2,402.9	295.06	9.144	
12,598.4	6,901.8	6,884.8	6,884.8	160.3	137.6	-88.71	1,584.9	2,875.5	2,790.0	2,492.2	297.79	9.369	
12,600.0	6,901.8	6,884.8	6,884.8	160.4	137.6	-88.71	1,584.9	2,875.5	2,791.5	2,493.7	297.84	9.373	
12,696.8	6,901.0	6,884.0	6,884.0	163.1	137.5	-88.66	1,584.9	2,875.5	2,882.5	2,582.0	300.52	9.592	
12,700.0	6,900.9	6,883.9	6,883.9	163.2	137.5	-88.66	1,584.9	2,875.5	2,885.5	2,584.9	300.61	9.599	
12,795.2	6,900.1	6,883.1	6,883.1	165.8	137.5	-88.61	1,584.9	2,875.5	2,975.4	2,672.2	303.25	9.812	
12,800.0	6,900.1	6,883.1	6,883.1	166.0	137.5	-88.61	1,584.9	2,875.5	2,979.9	2,676.5	303.38	9.822	
12,893.7	6,899.3	6,882.3	6,882.3	168.6	137.5	-88.56	1,584.9	2,875.5	3,068.7	2,762.7	305.98	10.029	
12,900.0	6,899.3	6,882.3	6,882.3	168.8	137.5	-88.56	1,584.9	2,875.5	3,074.7	2,768.5	306.15	10.043	
12,992.1	6,898.5	6,881.5	6,881.5	171.3	137.5	-88.51	1,584.9	2,875.5	3,162.2	2,853.5	308.71	10.243	
13,000.0	6,898.4	6,881.4	6,881.4	171.6	137.5	-88.51	1,584.9	2,875.5	3,169.7	2,860.8	308.93	10.260	
13,090.5	6,897.7	6,880.7	6,880.7	174.1	137.5	-88.47	1,584.9	2,875.5	3,256.0	2,944.6	311.44	10.455	
13,100.0	6,897.6	6,880.6	6,880.6	174.4	137.5	-88.46	1,584.9	2,875.5	3,265.1	2,953.4	311.70	10.475	
13,188.9	6,896.9	6,879.9	6,879.9	176.8	137.5	-88.42	1,584.9	2,875.5	3,350.1	3,036.0	314.17	10.664	
13,200.0	6,896.8	6,879.8	6,879.8	177.2	137.5	-88.41	1,584.9	2,875.5	3,360.7	3,046.2	314.47	10.687	
13,287.4	6,896.0	6,879.0	6,879.0	179.6	137.4	-88.37	1,584.9	2,875.5	3,444.5	3,127.6	316.90	10.869	
13,300.0	6,895.9	6,878.9	6,878.9	180.0	137.4	-88.36	1,584.9	2,875.5	3,456.6	3,139.3	317.25	10.896	
13,385.8	6,895.2	6,878.2	6,878.2	182.4	137.4	-88.32	1,584.9	2,875.5	3,539.0	3,219.4	319.63	11.072	
13,400.0	6,895.1	6,878.1	6,878.1	182.7	137.4	-88.31	1,584.9	2,875.5	3,552.7	3,232.7	320.02	11.101	
13,484.2	6,894.4	6,877.4	6,877.4	185.1	137.4	-88.27	1,584.9	2,875.5	3,633.8	3,311.4	322.36	11.273	
13,500.0	6,894.3	6,877.3	6,877.3	185.5	137.4	-88.27	1,584.9	2,875.5	3,649.0	3,326.2	322.79	11.304	
13,582.6	6,893.6	6,876.6	6,876.6	187.9	137.4	-88.22	1,584.9	2,875.5	3,728.8	3,403.7	325.09	11.470	
13,600.0	6,893.4	6,876.4	6,876.4	188.3	137.4	-88.22	1,584.9	2,875.5	3,745.5	3,420.0	325.57	11.505	
13,681.1	6,892.8	6,875.8	6,875.8	190.6	137.4	-88.18	1,584.9	2,875.5	3,823.9	3,496.1	327.82	11.665	
13,700.0	6,892.6	6,875.6	6,875.6	191.1	137.4	-88.17	1,584.9	2,875.5	3,842.2	3,513.9	328.34	11.702	
13,779.5	6,891.9	6,874.9	6,874.9	193.4	137.4	-88.13	1,584.9	2,875.5	3,919.2	3,588.6	330.55	11.857	
13,800.0	6,891.8	6,874.8	6,874.8	193.9	137.4	-88.12	1,584.9	2,875.5	3,939.1	3,607.9	331.11	11.896	
13,877.9	6,891.1	6,874.1	6,874.1	196.1	137.3	-88.08	1,584.9	2,875.5	4,014.6	3,681.4	333.28	12.046	
13,900.0	6,890.9	6,873.9	6,873.9	196.7	137.3	-88.07	1,584.9	2,875.5	4,036.1	3,702.2	333.89	12.088	
13,976.3	6,890.3	6,873.3	6,873.3	198.9	137.3	-88.03	1,584.9	2,875.5	4,110.2	3,774.2	336.01	12.233	
14,000.0	6,890.1	6,873.1	6,873.1	199.5	137.3	-88.02	1,584.9	2,875.5	4,133.2	3,796.5	336.66	12.277	
14,074.8	6,889.5	6,872.5	6,872.5	201.6	137.3	-87.98	1,584.9	2,875.5	4,205.9	3,867.2	338.74	12.417	
14,100.0	6,889.3	6,872.3	6,872.3	202.3	137.3	-87.97	1,584.9	2,875.5	4,230.5	3,891.1	339.43	12.463	
14,173.2	6,888.7	6,871.7	6,871.7	204.4	137.3	-87.93	1,584.9	2,875.5	4,301.8	3,960.3	341.46	12.598	
14,200.0	6,888.4	6,871.4	6,871.4	205.1	137.3	-87.92	1,584.9	2,875.5	4,327.9	3,985.7	342.21	12.647	
14,271.6	6,887.8	6,870.8	6,870.8	207.1	137.3	-87.89	1,584.9	2,875.5	4,397.7	4,053.5	344.19	12.777	
14,300.0	6,887.6	6,870.6	6,870.6	207.9	137.3	-87.87	1,584.9	2,875.5	4,425.4	4,080.4	344.98	12.828	
14,370.0	6,887.0	6,870.0	6,870.0	209.9	137.3	-87.84	1,584.9	2,875.5	4,493.8	4,146.9	346.92	12.953	
14,400.0	6,886.8	6,869.8	6,869.8	210.7	137.3	-87.82	1,584.9	2,875.5	4,523.0	4,175.3	347.75	13.006	
14,468.5	6,886.2	6,869.2	6,869.2	212.6	137.3	-87.79	1,584.9	2,875.5	4,589.9	4,240.3	349.65	13.127	
14,500.0	6,885.9	6,868.9	6,868.9	213.5	137.2	-87.77	1,584.9	2,875.5	4,620.8	4,270.2	350.53	13.182	
14,566.9	6,885.4	6,868.4	6,868.4	215.4	137.2	-87.74	1,584.9	2,875.5	4,686.2	4,333.8	352.38	13.299	
14,600.0	6,885.1	6,868.1	6,868.1	216.3	137.2	-87.73	1,584.9	2,875.5	4,718.6	4,365.3	353.30	13.356	
14,613.0	6,885.0	6,868.0	6,868.0	216.7	137.2	-87.72	1,584.9	2,875.5	4,731.3	4,377.7	353.66	13.378	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+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	82.01	1,331.2	9,481.0	9,574.0				
98.4	98.4	71.4	71.4	0.1	0.4	82.01	1,331.2	9,481.0	9,574.0	9,573.4	0.53	N/A	
100.0	100.0	73.0	73.0	0.1	0.5	82.01	1,331.2	9,481.0	9,574.0	9,573.4	0.54	N/A	
196.8	196.8	169.8	169.8	0.3	2.3	82.01	1,331.2	9,481.0	9,574.0	9,571.3	2.63	3,636.956	
200.0	200.0	173.0	173.0	0.3	2.4	82.01	1,331.2	9,481.0	9,574.0	9,571.3	2.72	3,524.678	
295.3	295.3	268.3	268.3	0.5	4.5	82.01	1,331.2	9,481.0	9,574.0	9,569.0	5.01	1,911.258	
300.0	300.0	273.0	273.0	0.5	4.6	82.01	1,331.2	9,481.0	9,574.0	9,568.9	5.12	1,870.575	
393.7	393.7	366.7	366.7	0.7	6.5	82.01	1,331.2	9,481.0	9,574.0	9,566.7	7.25	1,320.160	
400.0	400.0	373.0	373.0	0.8	6.6	82.01	1,331.2	9,481.0	9,574.0	9,566.6	7.39	1,294.675	
492.1	492.1	465.1	465.1	1.0	8.5	82.01	1,331.2	9,481.0	9,574.0	9,564.5	9.47	1,010.581	
500.0	500.0	473.0	473.0	1.0	8.7	82.01	1,331.2	9,481.0	9,574.0	9,564.3	9.65	992.005	
590.5	590.5	563.5	563.5	1.2	10.5	82.01	1,331.2	9,481.0	9,574.0	9,562.3	11.69	819.196	
600.0	600.0	573.0	573.0	1.2	10.7	82.01	1,331.2	9,481.0	9,574.0	9,562.1	11.90	804.580	
689.0	689.0	662.0	662.0	1.4	12.5	82.01	1,331.2	9,481.0	9,574.0	9,560.1	13.90	688.965	
700.0	700.0	673.0	673.0	1.4	12.7	82.01	1,331.2	9,481.0	9,574.0	9,559.8	14.14	676.917	
787.4	787.4	760.4	760.4	1.6	14.5	82.01	1,331.2	9,481.0	9,574.0	9,557.9	16.10	594.550	
800.0	800.0	773.0	773.0	1.7	14.7	82.01	1,331.2	9,481.0	9,574.0	9,557.6	16.39	584.303	
885.8	885.8	858.8	858.8	1.9	16.5	82.01	1,331.2	9,481.0	9,574.0	9,555.7	18.31	522.936	
900.0	900.0	873.0	873.0	1.9	16.7	82.01	1,331.2	9,481.0	9,574.0	9,555.3	18.63	514.022	
984.2	984.2	957.2	957.2	2.1	18.4	82.01	1,331.2	9,481.0	9,574.0	9,553.5	20.51	466.744	
1,000.0	1,000.0	973.0	973.0	2.1	18.8	82.01	1,331.2	9,481.0	9,574.0	9,553.1	20.86	458.855	
1,082.7	1,082.7	1,055.7	1,055.7	2.3	20.4	82.01	1,331.2	9,481.0	9,574.0	9,551.3	22.72	421.469	
1,100.0	1,100.0	1,073.0	1,073.0	2.3	20.8	82.01	1,331.2	9,481.0	9,574.0	9,550.9	23.10	414.394	
1,150.0	1,150.0	1,123.0	1,123.0	2.4	21.8	82.01	1,331.2	9,481.0	9,574.0	9,549.8	24.22	395.249	
1,181.1	1,181.1	1,154.1	1,154.1	2.5	22.4	114.70	1,331.2	9,481.0	9,574.0	9,549.1	24.92	384.228	
1,200.0	1,200.0	1,173.0	1,173.0	2.6	22.8	114.69	1,331.2	9,481.0	9,574.2	9,548.8	25.34	377.833	
1,279.5	1,279.5	1,252.5	1,252.5	2.7	24.4	114.69	1,331.2	9,481.0	9,575.2	9,548.1	27.11	353.192	
1,300.0	1,299.9	1,272.9	1,272.9	2.8	24.8	114.69	1,331.2	9,481.0	9,575.6	9,548.1	27.57	347.378	
1,377.9	1,377.7	1,350.7	1,350.7	3.0	26.4	114.68	1,331.2	9,481.0	9,577.8	9,548.5	29.30	326.939	
1,400.0	1,399.7	1,372.7	1,372.7	3.0	26.8	114.67	1,331.2	9,481.0	9,578.5	9,548.8	29.78	321.609	
1,476.4	1,475.7	1,448.7	1,448.7	3.2	28.3	114.66	1,331.2	9,481.0	9,581.7	9,550.3	31.47	304.435	
1,500.0	1,499.1	1,472.1	1,472.1	3.2	28.8	114.65	1,331.2	9,481.0	9,582.9	9,550.9	31.99	299.513	
1,574.8	1,573.2	1,546.2	1,546.2	3.4	30.3	114.63	1,331.2	9,481.0	9,587.2	9,553.5	33.65	284.912	
1,600.0	1,598.2	1,571.2	1,571.2	3.5	30.8	114.62	1,331.2	9,481.0	9,588.8	9,554.6	34.20	280.335	
1,673.2	1,670.3	1,643.3	1,643.3	3.7	32.2	114.59	1,331.2	9,481.0	9,594.0	9,558.2	35.83	267.788	
1,700.0	1,696.6	1,669.6	1,669.6	3.8	32.8	114.58	1,331.2	9,481.0	9,596.1	9,559.7	36.42	263.505	
1,749.9	1,745.5	1,718.5	1,718.5	3.9	33.8	114.55	1,331.2	9,481.0	9,600.3	9,562.8	37.52	255.853	
1,771.6	1,766.8	1,739.8	1,739.8	4.0	34.2	114.58	1,331.2	9,481.0	9,602.2	9,564.2	38.02	252.576	
1,800.0	1,794.5	1,767.5	1,767.5	4.1	34.7	114.61	1,331.2	9,481.0	9,604.7	9,566.0	38.66	248.439	
1,870.1	1,863.1	1,836.1	1,836.1	4.3	36.1	114.69	1,331.2	9,481.0	9,610.9	9,570.6	40.26	238.724	
1,900.0	1,892.3	1,865.3	1,865.3	4.4	36.7	114.72	1,331.2	9,481.0	9,613.5	9,572.6	40.94	234.806	
1,968.5	1,959.4	1,932.4	1,932.4	4.7	38.1	114.80	1,331.2	9,481.0	9,619.6	9,577.1	42.52	226.255	
2,000.0	1,990.2	1,963.2	1,963.2	4.8	38.7	114.83	1,331.2	9,481.0	9,622.4	9,579.2	43.24	222.533	
2,066.9	2,055.6	2,028.6	2,028.6	5.1	40.0	114.90	1,331.2	9,481.0	9,628.4	9,583.6	44.79	214.989	
2,100.0	2,088.0	2,061.0	2,061.0	5.2	40.7	114.94	1,331.2	9,481.0	9,631.3	9,585.8	45.55	211.444	
2,165.3	2,151.9	2,124.9	2,124.9	5.4	41.9	115.01	1,331.2	9,481.0	9,637.2	9,590.1	47.07	204.759	
2,200.0	2,185.8	2,158.8	2,158.8	5.6	42.6	115.05	1,331.2	9,481.0	9,640.3	9,592.4	47.87	201.386	
2,263.8	2,248.2	2,221.2	2,221.2	5.8	43.9	115.12	1,331.2	9,481.0	9,646.0	9,596.6	49.35	195.446	
2,300.0	2,283.6	2,256.6	2,256.6	6.0	44.6	115.16	1,331.2	9,481.0	9,649.2	9,599.0	50.20	192.228	
2,362.2	2,344.5	2,317.5	2,317.5	6.2	45.8	115.23	1,331.2	9,481.0	9,654.8	9,603.2	51.65	186.935	
2,400.0	2,381.4	2,354.4	2,354.4	6.4	46.6	115.27	1,331.2	9,481.0	9,658.2	9,605.7	52.53	183.861	
2,460.6	2,440.7	2,413.7	2,413.7	6.6	47.7	115.34	1,331.2	9,481.0	9,663.7	9,609.8	53.95	179.131	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,452.2	2,452.2	6.8	48.5	115.38	1,331.2	9,481.0	9,667.3	9,612.4	54.87	176.190	
2,559.0	2,537.0	2,510.0	2,510.0	7.0	49.7	115.44	1,331.2	9,481.0	9,672.7	9,616.4	56.25	171.953	
2,600.0	2,577.1	2,550.1	2,550.1	7.2	50.5	115.49	1,331.2	9,481.0	9,676.4	9,619.2	57.21	169.135	
2,657.5	2,633.3	2,606.3	2,606.3	7.4	51.6	115.55	1,331.2	9,481.0	9,681.6	9,623.1	58.56	165.330	
2,700.0	2,674.9	2,647.9	2,647.9	7.6	52.5	115.60	1,331.2	9,481.0	9,685.5	9,626.0	59.56	162.626	
2,755.9	2,729.6	2,702.6	2,702.6	7.9	53.6	115.66	1,331.2	9,481.0	9,690.6	9,629.8	60.87	159.203	
2,800.0	2,772.7	2,745.7	2,745.7	8.0	54.4	115.71	1,331.2	9,481.0	9,694.7	9,632.8	61.91	156.605	
2,854.3	2,825.8	2,798.8	2,798.8	8.3	55.5	115.77	1,331.2	9,481.0	9,699.7	9,636.5	63.18	153.518	
2,900.0	2,870.5	2,843.5	2,843.5	8.5	56.4	115.81	1,331.2	9,481.0	9,703.9	9,639.6	64.26	151.019	
2,952.7	2,922.1	2,895.1	2,895.1	8.7	57.4	115.87	1,331.2	9,481.0	9,708.7	9,643.2	65.50	148.231	
3,000.0	2,968.3	2,941.3	2,941.3	8.9	58.4	115.92	1,331.2	9,481.0	9,713.1	9,646.5	66.61	145.823	
3,051.2	3,018.4	2,991.4	2,991.4	9.1	59.4	115.98	1,331.2	9,481.0	9,717.8	9,650.0	67.81	143.302	
3,100.0	3,066.1	3,039.1	3,039.1	9.3	60.3	116.03	1,331.2	9,481.0	9,722.4	9,653.4	68.96	140.980	
3,149.6	3,114.7	3,087.7	3,087.7	9.5	61.3	116.09	1,331.2	9,481.0	9,727.0	9,656.9	70.13	138.697	
3,200.0	3,164.0	3,137.0	3,137.0	9.8	62.3	116.14	1,331.2	9,481.0	9,731.7	9,660.4	71.32	136.454	
3,248.0	3,210.9	3,183.9	3,183.9	10.0	63.2	116.19	1,331.2	9,481.0	9,736.2	9,663.7	72.45	134.385	
3,300.0	3,261.8	3,234.8	3,234.8	10.2	64.3	116.25	1,331.2	9,481.0	9,741.0	9,667.3	73.67	132.217	
3,346.4	3,307.2	3,280.2	3,280.2	10.4	65.2	116.30	1,331.2	9,481.0	9,745.4	9,670.6	74.77	130.339	
3,400.0	3,359.6	3,332.6	3,332.6	10.6	66.2	116.35	1,331.2	9,481.0	9,750.4	9,674.4	76.03	128.241	
3,444.9	3,403.5	3,376.5	3,376.5	10.8	67.1	116.40	1,331.2	9,481.0	9,754.6	9,677.5	77.09	126.536	
3,500.0	3,457.4	3,430.4	3,430.4	11.1	68.2	116.46	1,331.2	9,481.0	9,759.8	9,681.4	78.39	124.504	
3,543.3	3,499.8	3,472.8	3,472.8	11.3	69.0	116.51	1,331.2	9,481.0	9,763.9	9,684.5	79.41	122.955	
3,600.0	3,555.2	3,528.2	3,528.2	11.5	70.2	116.57	1,331.2	9,481.0	9,769.2	9,688.5	80.75	120.985	
3,641.7	3,596.0	3,569.0	3,569.0	11.7	71.0	116.61	1,331.2	9,481.0	9,773.2	9,691.5	81.73	119.576	
3,700.0	3,653.0	3,626.0	3,626.0	11.9	72.1	116.68	1,331.2	9,481.0	9,778.7	9,695.6	83.11	117.665	
3,740.1	3,692.3	3,665.3	3,665.3	12.1	72.9	116.72	1,331.2	9,481.0	9,782.5	9,698.5	84.05	116.385	
3,800.0	3,750.8	3,723.8	3,723.8	12.4	74.1	116.78	1,331.2	9,481.0	9,788.2	9,702.8	85.47	114.529	
3,838.6	3,788.6	3,761.6	3,761.6	12.6	74.9	116.82	1,331.2	9,481.0	9,791.9	9,705.5	86.38	113.365	
3,900.0	3,848.7	3,821.7	3,821.7	12.8	76.1	116.89	1,331.2	9,481.0	9,797.8	9,710.0	87.82	111.561	
3,937.0	3,884.9	3,857.9	3,857.9	13.0	76.8	116.93	1,331.2	9,481.0	9,801.3	9,712.6	88.70	110.503	
4,000.0	3,946.5	3,919.5	3,919.5	13.3	78.0	117.00	1,331.2	9,481.0	9,807.4	9,717.2	90.18	108.749	
4,035.4	3,981.1	3,954.1	3,954.1	13.4	78.7	117.03	1,331.2	9,481.0	9,810.8	9,719.8	91.02	107.788	
4,100.0	4,044.3	4,017.3	4,017.3	13.7	80.0	117.10	1,331.2	9,481.0	9,817.0	9,724.4	92.54	106.081	
4,133.8	4,077.4	4,050.4	4,050.4	13.9	80.7	117.14	1,331.2	9,481.0	9,820.3	9,726.9	93.34	105.208	
4,200.0	4,142.1	4,115.1	4,115.1	14.2	82.0	117.21	1,331.2	9,481.0	9,826.6	9,731.7	94.90	103.546	
4,232.3	4,173.7	4,146.7	4,146.7	14.3	82.6	117.24	1,331.2	9,481.0	9,829.8	9,734.1	95.66	102.754	
4,300.0	4,239.9	4,212.9	4,212.9	14.6	83.9	117.31	1,331.2	9,481.0	9,836.3	9,739.1	97.26	101.134	
4,330.7	4,270.0	4,243.0	4,243.0	14.7	84.5	117.35	1,331.2	9,481.0	9,839.3	9,741.3	97.98	100.417	
4,400.0	4,337.7	4,310.7	4,310.7	15.0	85.9	117.42	1,331.2	9,481.0	9,846.1	9,746.4	99.62	98.837	
4,429.1	4,366.2	4,339.2	4,339.2	15.2	86.5	117.45	1,331.2	9,481.0	9,848.9	9,748.6	100.31	98.188	
4,500.0	4,435.6	4,408.6	4,408.6	15.5	87.9	117.53	1,331.2	9,481.0	9,855.8	9,753.8	101.98	96.646	
4,527.5	4,462.5	4,435.5	4,435.5	15.6	88.4	117.55	1,331.2	9,481.0	9,858.5	9,755.9	102.63	96.060	
4,600.0	4,533.4	4,506.4	4,506.4	15.9	89.8	117.63	1,331.2	9,481.0	9,865.6	9,761.3	104.34	94.555	
4,626.0	4,558.8	4,531.8	4,531.8	16.0	90.3	117.66	1,331.2	9,481.0	9,868.2	9,763.2	104.95	94.028	
4,673.6	4,605.3	4,578.3	4,578.3	16.3	91.3	117.71	1,331.2	9,481.0	9,872.8	9,766.8	106.07	93.077	
4,700.0	4,631.2	4,604.2	4,604.2	16.4	91.8	117.78	1,331.2	9,481.0	9,875.4	9,768.7	106.72	92.538	
4,724.4	4,655.1	4,628.1	4,628.1	16.4	92.3	117.84	1,331.2	9,481.0	9,877.6	9,770.3	107.30	92.058	
4,800.0	4,729.5	4,702.5	4,702.5	16.7	93.8	118.03	1,331.2	9,481.0	9,884.0	9,774.9	109.10	90.597	
4,822.8	4,752.1	4,725.1	4,725.1	16.7	94.2	118.07	1,331.2	9,481.0	9,885.7	9,776.1	109.63	90.170	
4,900.0	4,828.4	4,801.4	4,801.4	17.0	95.8	118.22	1,331.2	9,481.0	9,891.0	9,779.5	111.44	88.753	
4,921.2	4,849.5	4,822.5	4,822.5	17.0	96.2	118.26	1,331.2	9,481.0	9,892.3	9,780.3	111.93	88.376	
5,000.0	4,927.8	4,900.8	4,900.8	17.2	97.8	118.38	1,331.2	9,481.0	9,896.4	9,782.6	113.75	87.004	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,920.4	4,920.4	17.2	98.2	118.40	1,331.2	9,481.0	9,897.2	9,783.0	114.19	86.673	
5,100.0	5,027.5	5,000.5	5,000.5	17.4	99.8	118.48	1,331.2	9,481.0	9,900.1	9,784.1	116.00	85.346	
5,118.1	5,045.6	5,018.6	5,018.6	17.4	100.1	118.49	1,331.2	9,481.0	9,900.6	9,784.2	116.40	85.057	
5,200.0	5,127.4	5,100.4	5,100.4	17.6	101.8	118.54	1,331.2	9,481.0	9,902.1	9,783.9	118.20	83.775	
5,216.5	5,143.9	5,116.9	5,116.9	17.6	102.1	118.54	1,331.2	9,481.0	9,902.3	9,783.8	118.56	83.524	
5,273.4	5,200.8	5,173.8	5,173.8	17.7	103.3	85.86	1,331.2	9,481.0	9,902.6	9,785.5	117.07	84.587	
5,300.0	5,227.4	5,200.4	5,200.4	17.7	103.8	85.86	1,331.2	9,481.0	9,902.6	9,784.9	117.65	84.171	
5,314.9	5,242.3	5,215.3	5,215.3	17.7	104.1	85.86	1,331.2	9,481.0	9,902.6	9,784.6	117.98	83.938	
5,400.0	5,327.4	5,300.4	5,300.4	17.8	105.8	85.86	1,331.2	9,481.0	9,902.6	9,782.7	119.84	82.632	
5,413.4	5,340.8	5,313.8	5,313.8	17.9	106.1	85.86	1,331.2	9,481.0	9,902.6	9,782.4	120.13	82.430	
5,500.0	5,427.4	5,400.4	5,400.4	18.0	107.8	85.86	1,331.2	9,481.0	9,902.6	9,780.5	122.03	81.146	
5,511.8	5,439.2	5,412.2	5,412.2	18.0	108.0	85.86	1,331.2	9,481.0	9,902.6	9,780.3	122.29	80.974	
5,600.0	5,527.4	5,500.4	5,500.4	18.1	109.8	85.86	1,331.2	9,481.0	9,902.6	9,778.4	124.23	79.713	
5,610.2	5,537.6	5,510.6	5,510.6	18.1	110.0	85.86	1,331.2	9,481.0	9,902.6	9,778.1	124.45	79.569	
5,700.0	5,627.4	5,600.4	5,600.4	18.3	111.8	85.86	1,331.2	9,481.0	9,902.6	9,776.2	126.42	78.328	
5,708.6	5,636.0	5,609.0	5,609.0	18.3	112.0	85.86	1,331.2	9,481.0	9,902.6	9,776.0	126.61	78.210	
5,800.0	5,727.4	5,700.4	5,700.4	18.4	113.8	85.86	1,331.2	9,481.0	9,902.6	9,774.0	128.62	76.990	
5,807.1	5,734.5	5,707.5	5,707.5	18.4	114.0	85.86	1,331.2	9,481.0	9,902.6	9,773.8	128.78	76.897	
5,900.0	5,827.4	5,800.4	5,800.4	18.6	115.9	85.86	1,331.2	9,481.0	9,902.6	9,771.8	130.82	75.696	
5,905.5	5,832.9	5,805.9	5,805.9	18.6	116.0	85.86	1,331.2	9,481.0	9,902.6	9,771.6	130.94	75.626	
6,000.0	5,927.4	5,900.4	5,900.4	18.7	117.9	85.86	1,331.2	9,481.0	9,902.6	9,769.6	133.02	74.445	
6,003.9	5,931.3	5,904.3	5,904.3	18.7	117.9	85.86	1,331.2	9,481.0	9,902.6	9,769.5	133.11	74.397	
6,100.0	6,027.4	6,000.4	6,000.4	18.9	119.9	85.86	1,331.2	9,481.0	9,902.6	9,767.4	135.22	73.234	
6,102.3	6,029.7	6,002.7	6,002.7	18.9	119.9	85.86	1,331.2	9,481.0	9,902.6	9,767.3	135.27	73.206	
6,200.0	6,127.4	6,100.4	6,100.4	19.0	121.9	85.86	1,331.2	9,481.0	9,902.6	9,765.2	137.42	72.061	
6,200.8	6,128.2	6,101.2	6,101.2	19.0	121.9	85.86	1,331.2	9,481.0	9,902.6	9,765.1	137.44	72.052	
6,299.2	6,226.6	6,199.6	6,199.6	19.2	123.9	85.86	1,331.2	9,481.0	9,902.6	9,763.0	139.60	70.933	
6,301.4	6,228.8	6,201.8	6,201.8	19.2	123.9	85.86	1,331.2	9,481.0	9,902.6	9,762.9	139.65	70.909	
6,350.0	6,277.4	6,250.4	6,250.4	19.3	124.9	-4.15	1,331.2	9,481.0	9,900.9	9,758.2	142.73	69.368	
6,397.6	6,324.7	6,297.7	6,297.7	19.3	125.9	-4.18	1,331.2	9,481.0	9,896.1	9,753.4	142.77	69.317	
6,400.0	6,327.1	6,300.1	6,300.1	19.3	125.9	-4.18	1,331.2	9,481.0	9,895.8	9,753.1	142.75	69.322	
6,450.0	6,376.3	6,349.3	6,349.3	19.3	126.9	-4.23	1,331.2	9,481.0	9,887.3	9,745.2	142.07	69.597	
6,496.0	6,421.1	6,394.1	6,394.1	19.3	127.8	-4.31	1,331.2	9,481.0	9,876.4	9,735.6	140.80	70.145	
6,500.0	6,424.9	6,397.9	6,397.9	19.3	127.9	-4.31	1,331.2	9,481.0	9,875.3	9,734.6	140.66	70.206	
6,550.0	6,472.4	6,445.4	6,445.4	19.3	128.8	-4.42	1,331.2	9,481.0	9,860.0	9,721.4	138.54	71.171	
6,594.5	6,513.8	6,486.8	6,486.8	19.3	129.7	-4.53	1,331.2	9,481.0	9,843.6	9,707.6	136.05	72.354	
6,600.0	6,518.8	6,491.8	6,491.8	19.3	129.8	-4.55	1,331.2	9,481.0	9,841.4	9,705.7	135.70	72.523	
6,650.0	6,563.8	6,536.8	6,536.8	19.3	130.7	-4.72	1,331.2	9,481.0	9,819.6	9,687.5	132.15	74.305	
6,692.9	6,601.1	6,574.1	6,574.1	19.2	131.4	-4.89	1,331.2	9,481.0	9,798.5	9,669.9	128.56	76.219	
6,700.0	6,607.1	6,580.1	6,580.1	19.2	131.5	-4.92	1,331.2	9,481.0	9,794.8	9,666.9	127.91	76.573	
6,750.0	6,648.6	6,621.6	6,621.6	19.2	132.4	-5.17	1,331.2	9,481.0	9,767.0	9,644.0	123.01	79.401	
6,791.3	6,681.4	6,654.4	6,654.4	19.1	133.0	-5.42	1,331.2	9,481.0	9,741.9	9,623.4	118.47	82.227	
6,800.0	6,688.1	6,661.1	6,661.1	19.1	133.2	-5.48	1,331.2	9,481.0	9,736.4	9,618.9	117.47	82.884	
6,850.0	6,725.3	6,698.3	6,698.3	19.1	133.9	-5.85	1,331.2	9,481.0	9,703.1	9,591.7	111.35	87.144	
6,889.7	6,753.2	6,726.2	6,726.2	19.0	134.5	-6.20	1,331.2	9,481.0	9,674.8	9,568.7	106.10	91.187	
6,900.0	6,760.1	6,733.1	6,733.1	19.0	134.6	-6.31	1,331.2	9,481.0	9,667.3	9,562.6	104.70	92.337	
6,950.0	6,792.3	6,765.3	6,765.3	19.0	135.3	-6.87	1,331.2	9,481.0	9,629.2	9,531.6	97.61	98.651	
6,988.2	6,815.1	6,788.1	6,788.1	18.9	135.7	-7.40	1,331.2	9,481.0	9,598.6	9,506.6	91.98	104.358	
7,000.0	6,821.8	6,794.8	6,794.8	18.9	135.9	-7.59	1,331.2	9,481.0	9,588.9	9,498.7	90.21	106.298	
7,050.0	6,848.3	6,821.3	6,821.3	18.9	136.4	-8.51	1,331.2	9,481.0	9,546.7	9,464.0	82.69	115.456	
7,086.6	6,865.9	6,838.9	6,838.9	18.9	136.7	-9.36	1,331.2	9,481.0	9,514.6	9,437.4	77.28	123.112	
7,100.0	6,871.9	6,844.9	6,844.9	18.9	136.9	-9.72	1,331.2	9,481.0	9,502.7	9,427.3	75.37	126.081	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,150.0	6,892.3	6,865.3	6,865.3	18.8	137.3	-11.38	1,331.2	9,481.0	9,457.2	9,388.3	68.85	137.355		
7,185.0	6,904.7	6,877.7	6,877.7	18.8	137.5	-12.95	1,331.2	9,481.0	9,424.5	9,359.2	65.35	144.208		
7,200.0	6,909.5	6,882.5	6,882.5	18.9	137.6	-13.76	1,331.2	9,481.0	9,410.4	9,346.1	64.31	146.332		
7,250.0	6,923.4	6,896.4	6,896.4	19.3	137.9	-17.42	1,331.2	9,481.0	9,362.5	9,298.4	64.09	146.082		
7,283.4	6,930.8	6,903.8	6,903.8	19.8	138.0	-21.17	1,331.2	9,481.0	9,330.0	9,261.5	68.44	136.314		
7,300.0	6,933.9	6,906.9	6,906.9	20.0	138.1	-23.66	1,331.2	9,481.0	9,313.8	9,241.2	72.62	128.257		
7,350.0	6,940.9	6,913.9	6,913.9	20.8	138.2	-35.99	1,331.2	9,481.0	9,264.4	9,166.7	97.70	94.828		
7,381.9	6,943.6	6,916.6	6,916.6	21.4	138.3	-51.32	1,331.2	9,481.0	9,232.8	9,106.0	126.80	72.812		
7,400.0	6,944.5	6,917.5	6,917.5	21.7	138.3	-64.64	1,331.2	9,481.0	9,214.7	9,069.0	145.74	63.229		
7,432.4	6,945.0	6,918.0	6,918.0	22.3	138.3	-96.13	1,331.2	9,481.0	9,182.4	9,023.0	159.44	57.592		
7,480.3	6,944.6	6,917.6	6,917.6	23.2	138.3	-96.10	1,331.2	9,481.0	9,134.7	8,974.3	160.33	56.975		
7,500.0	6,944.4	6,917.4	6,917.4	23.6	138.3	-96.08	1,331.2	9,481.0	9,115.0	8,954.3	160.69	56.723		
7,578.7	6,943.7	6,916.7	6,916.7	25.2	138.3	-96.03	1,331.2	9,481.0	9,036.5	8,874.3	162.28	55.687		
7,600.0	6,943.6	6,916.6	6,916.6	25.6	138.3	-96.02	1,331.2	9,481.0	9,015.3	8,852.6	162.70	55.410		
7,677.1	6,942.9	6,915.9	6,915.9	27.3	138.3	-95.96	1,331.2	9,481.0	8,938.4	8,774.1	164.36	54.383		
7,700.0	6,942.7	6,915.7	6,915.7	27.8	138.3	-95.95	1,331.2	9,481.0	8,915.7	8,750.8	164.85	54.083		
7,775.6	6,942.1	6,915.1	6,915.1	29.5	138.3	-95.90	1,331.2	9,481.0	8,840.3	8,673.8	166.55	53.078		
7,800.0	6,941.9	6,914.9	6,914.9	30.1	138.3	-95.88	1,331.2	9,481.0	8,816.0	8,648.9	167.10	52.758		
7,874.0	6,941.3	6,914.3	6,914.3	31.8	138.3	-95.83	1,331.2	9,481.0	8,742.2	8,573.4	168.84	51.780		
7,900.0	6,941.1	6,914.1	6,914.1	32.4	138.3	-95.81	1,331.2	9,481.0	8,716.3	8,546.9	169.44	51.441		
7,972.4	6,940.4	6,913.4	6,913.4	34.2	138.2	-95.77	1,331.2	9,481.0	8,644.2	8,473.0	171.19	50.495		
8,000.0	6,940.2	6,913.2	6,913.2	34.9	138.2	-95.75	1,331.2	9,481.0	8,616.7	8,444.8	171.85	50.139		
8,070.8	6,939.6	6,912.6	6,912.6	36.6	138.2	-95.70	1,331.2	9,481.0	8,546.1	8,372.5	173.60	49.228		
8,100.0	6,939.4	6,912.4	6,912.4	37.3	138.2	-95.68	1,331.2	9,481.0	8,517.0	8,342.7	174.32	48.859		
8,169.3	6,938.8	6,911.8	6,911.8	39.1	138.2	-95.63	1,331.2	9,481.0	8,448.0	8,271.9	176.06	47.984		
8,200.0	6,938.5	6,911.5	6,911.5	39.8	138.2	-95.61	1,331.2	9,481.0	8,417.4	8,240.6	176.83	47.602		
8,267.7	6,938.0	6,911.0	6,911.0	41.6	138.2	-95.57	1,331.2	9,481.0	8,349.9	8,171.4	178.55	46.764		
8,300.0	6,937.7	6,910.7	6,910.7	42.4	138.2	-95.55	1,331.2	9,481.0	8,317.8	8,138.4	179.38	46.370		
8,366.1	6,937.2	6,910.2	6,910.2	44.1	138.2	-95.50	1,331.2	9,481.0	8,251.9	8,070.8	181.08	45.570		
8,400.0	6,936.9	6,909.9	6,909.9	45.0	138.2	-95.48	1,331.2	9,481.0	8,218.1	8,036.2	181.96	45.165		
8,464.5	6,936.3	6,909.3	6,909.3	46.6	138.2	-95.44	1,331.2	9,481.0	8,153.8	7,970.2	183.64	44.402		
8,500.0	6,936.0	6,909.0	6,909.0	47.6	138.2	-95.41	1,331.2	9,481.0	8,118.5	7,934.0	184.56	43.988		
8,563.0	6,935.5	6,908.5	6,908.5	49.2	138.1	-95.37	1,331.2	9,481.0	8,055.8	7,869.6	186.21	43.261		
8,600.0	6,935.2	6,908.2	6,908.2	50.2	138.1	-95.35	1,331.2	9,481.0	8,018.9	7,831.7	187.19	42.839		
8,661.4	6,934.7	6,907.7	6,907.7	51.8	138.1	-95.30	1,331.2	9,481.0	7,957.8	7,768.9	188.81	42.147		
8,700.0	6,934.4	6,907.4	6,907.4	52.8	138.1	-95.28	1,331.2	9,481.0	7,919.3	7,729.5	189.83	41.717		
8,759.8	6,933.9	6,906.9	6,906.9	54.4	138.1	-95.24	1,331.2	9,481.0	7,859.7	7,668.3	191.42	41.059		
8,800.0	6,933.5	6,906.5	6,906.5	55.5	138.1	-95.21	1,331.2	9,481.0	7,819.7	7,627.2	192.49	40.623		
8,858.2	6,933.0	6,906.0	6,906.0	57.1	138.1	-95.17	1,331.2	9,481.0	7,761.7	7,567.7	194.05	39.998		
8,900.0	6,932.7	6,905.7	6,905.7	58.2	138.1	-95.14	1,331.2	9,481.0	7,720.2	7,525.0	195.17	39.557		
8,956.7	6,932.2	6,905.2	6,905.2	59.7	138.1	-95.11	1,331.2	9,481.0	7,663.7	7,467.0	196.69	38.963		
9,000.0	6,931.8	6,904.8	6,904.8	60.9	138.1	-95.08	1,331.2	9,481.0	7,620.6	7,422.7	197.85	38.516		
9,055.1	6,931.4	6,904.4	6,904.4	62.4	138.1	-95.04	1,331.2	9,481.0	7,565.7	7,366.4	199.34	37.954		
9,100.0	6,931.0	6,904.0	6,904.0	63.6	138.1	-95.01	1,331.2	9,481.0	7,521.0	7,320.5	200.55	37.502		
9,153.5	6,930.6	6,903.6	6,903.6	65.0	138.0	-94.98	1,331.2	9,481.0	7,467.8	7,265.8	202.00	36.969		
9,200.0	6,930.2	6,903.2	6,903.2	66.3	138.0	-94.94	1,331.2	9,481.0	7,421.5	7,218.3	203.26	36.513		
9,251.9	6,929.7	6,902.7	6,902.7	67.7	138.0	-94.91	1,331.2	9,481.0	7,369.8	7,165.1	204.67	36.009		
9,300.0	6,929.3	6,902.3	6,902.3	69.0	138.0	-94.88	1,331.2	9,481.0	7,322.0	7,116.0	205.97	35.548		
9,350.4	6,928.9	6,901.9	6,901.9	70.4	138.0	-94.84	1,331.2	9,481.0	7,271.9	7,064.5	207.34	35.072		
9,400.0	6,928.5	6,901.5	6,901.5	71.7	138.0	-94.81	1,331.2	9,481.0	7,222.5	7,013.8	208.69	34.608		
9,448.8	6,928.1	6,901.1	6,901.1	73.0	138.0	-94.78	1,331.2	9,481.0	7,173.9	6,963.9	210.02	34.157		
9,500.0	6,927.7	6,900.7	6,900.7	74.4	138.0	-94.74	1,331.2	9,481.0	7,123.0	6,911.6	211.42	33.691		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,900.3	6,900.3	75.7	138.0	-94.71	1,331.2	9,481.0	7,076.0	6,863.3	212.71	33.265	
9,600.0	6,926.8	6,899.8	6,899.8	77.2	138.0	-94.68	1,331.2	9,481.0	7,023.5	6,809.3	214.16	32.796	
9,645.6	6,926.4	6,899.4	6,899.4	78.4	138.0	-94.65	1,331.2	9,481.0	6,978.1	6,762.7	215.41	32.395	
9,700.0	6,926.0	6,899.0	6,899.0	79.9	137.9	-94.61	1,331.2	9,481.0	6,924.0	6,707.1	216.89	31.923	
9,744.1	6,925.6	6,898.6	6,898.6	81.1	137.9	-94.58	1,331.2	9,481.0	6,880.2	6,662.1	218.10	31.545	
9,800.0	6,925.2	6,898.2	6,898.2	82.6	137.9	-94.54	1,331.2	9,481.0	6,824.6	6,604.9	219.64	31.072	
9,842.5	6,924.8	6,897.8	6,897.8	83.8	137.9	-94.51	1,331.2	9,481.0	6,782.3	6,561.5	220.81	30.716	
9,900.0	6,924.3	6,897.3	6,897.3	85.4	137.9	-94.47	1,331.2	9,481.0	6,725.1	6,502.7	222.39	30.241	
9,940.9	6,924.0	6,897.0	6,897.0	86.5	137.9	-94.45	1,331.2	9,481.0	6,684.4	6,460.9	223.51	29.906	
10,000.0	6,923.5	6,896.5	6,896.5	88.1	137.9	-94.41	1,331.2	9,481.0	6,625.7	6,400.6	225.14	29.429	
10,039.3	6,923.2	6,896.2	6,896.2	89.2	137.9	-94.38	1,331.2	9,481.0	6,586.6	6,360.4	226.22	29.116	
10,100.0	6,922.6	6,895.6	6,895.6	90.9	137.9	-94.34	1,331.2	9,481.0	6,526.3	6,298.4	227.89	28.637	
10,137.8	6,922.3	6,895.3	6,895.3	91.9	137.9	-94.32	1,331.2	9,481.0	6,488.8	6,259.8	228.94	28.343	
10,200.0	6,921.8	6,894.8	6,894.8	93.7	137.9	-94.27	1,331.2	9,481.0	6,426.9	6,196.3	230.65	27.864	
10,236.2	6,921.5	6,894.5	6,894.5	94.7	137.9	-94.25	1,331.2	9,481.0	6,390.9	6,159.3	231.65	27.589	
10,300.0	6,921.0	6,894.0	6,894.0	96.4	137.8	-94.21	1,331.2	9,481.0	6,327.5	6,094.1	233.41	27.109	
10,334.6	6,920.7	6,893.7	6,893.7	97.4	137.8	-94.18	1,331.2	9,481.0	6,293.1	6,058.8	234.37	26.851	
10,400.0	6,920.1	6,893.1	6,893.1	99.2	137.8	-94.14	1,331.2	9,481.0	6,228.2	5,992.0	236.18	26.371	
10,433.0	6,919.9	6,892.9	6,892.9	100.1	137.8	-94.12	1,331.2	9,481.0	6,195.4	5,958.3	237.09	26.131	
10,500.0	6,919.3	6,892.3	6,892.3	101.9	137.8	-94.07	1,331.2	9,481.0	6,128.9	5,889.9	238.94	25.650	
10,531.5	6,919.0	6,892.0	6,892.0	102.8	137.8	-94.05	1,331.2	9,481.0	6,097.6	5,857.8	239.82	25.426	
10,600.0	6,918.5	6,891.5	6,891.5	104.7	137.8	-94.01	1,331.2	9,481.0	6,029.6	5,787.9	241.71	24.945	
10,629.9	6,918.2	6,891.2	6,891.2	105.5	137.8	-93.99	1,331.2	9,481.0	5,999.9	5,757.3	242.54	24.737	
10,700.0	6,917.6	6,890.6	6,890.6	107.5	137.8	-93.94	1,331.2	9,481.0	5,930.3	5,685.8	244.48	24.256	
10,728.3	6,917.4	6,890.4	6,890.4	108.3	137.8	-93.92	1,331.2	9,481.0	5,902.2	5,656.9	245.27	24.064	
10,800.0	6,916.8	6,889.8	6,889.8	110.3	137.8	-93.87	1,331.2	9,481.0	5,831.0	5,583.8	247.26	23.583	
10,826.7	6,916.6	6,889.6	6,889.6	111.0	137.8	-93.85	1,331.2	9,481.0	5,804.5	5,556.5	248.00	23.405	
10,900.0	6,916.0	6,889.0	6,889.0	113.0	137.7	-93.80	1,331.2	9,481.0	5,731.8	5,481.8	250.03	22.924	
10,925.2	6,915.8	6,888.8	6,888.8	113.7	137.7	-93.79	1,331.2	9,481.0	5,706.8	5,456.1	250.73	22.761	
11,000.0	6,915.1	6,888.1	6,888.1	115.8	137.7	-93.74	1,331.2	9,481.0	5,632.6	5,379.8	252.81	22.280	
11,023.6	6,914.9	6,887.9	6,887.9	116.5	137.7	-93.72	1,331.2	9,481.0	5,609.2	5,355.7	253.46	22.130	
11,100.0	6,914.3	6,887.3	6,887.3	118.6	137.7	-93.67	1,331.2	9,481.0	5,533.4	5,277.8	255.59	21.650	
11,122.0	6,914.1	6,887.1	6,887.1	119.2	137.7	-93.66	1,331.2	9,481.0	5,511.6	5,255.4	256.20	21.513	
11,200.0	6,913.5	6,886.5	6,886.5	121.4	137.7	-93.60	1,331.2	9,481.0	5,434.3	5,175.9	258.37	21.033	
11,220.4	6,913.3	6,886.3	6,886.3	121.9	137.7	-93.59	1,331.2	9,481.0	5,414.0	5,155.1	258.94	20.909	
11,300.0	6,912.6	6,885.6	6,885.6	124.1	137.7	-93.54	1,331.2	9,481.0	5,335.2	5,074.0	261.15	20.430	
11,318.9	6,912.5	6,885.5	6,885.5	124.7	137.7	-93.52	1,331.2	9,481.0	5,316.5	5,054.8	261.67	20.317	
11,400.0	6,911.8	6,884.8	6,884.8	126.9	137.7	-93.47	1,331.2	9,481.0	5,236.1	4,972.2	263.93	19.839	
11,417.3	6,911.6	6,884.6	6,884.6	127.4	137.7	-93.46	1,331.2	9,481.0	5,218.9	4,954.5	264.41	19.738	
11,500.0	6,911.0	6,884.0	6,884.0	129.7	137.6	-93.40	1,331.2	9,481.0	5,137.0	4,870.3	266.71	19.261	
11,515.7	6,910.8	6,883.8	6,883.8	130.2	137.6	-93.39	1,331.2	9,481.0	5,121.5	4,854.3	267.15	19.171	
11,600.0	6,910.1	6,883.1	6,883.1	132.5	137.6	-93.34	1,331.2	9,481.0	5,038.0	4,768.5	269.50	18.694	
11,614.1	6,910.0	6,883.0	6,883.0	132.9	137.6	-93.33	1,331.2	9,481.0	5,024.0	4,754.1	269.89	18.615	
11,700.0	6,909.3	6,882.3	6,882.3	135.3	137.6	-93.27	1,331.2	9,481.0	4,939.1	4,666.8	272.28	18.140	
11,712.6	6,909.2	6,882.2	6,882.2	135.6	137.6	-93.26	1,331.2	9,481.0	4,926.6	4,654.0	272.63	18.071	
11,800.0	6,908.5	6,881.5	6,881.5	138.1	137.6	-93.20	1,331.2	9,481.0	4,840.1	4,565.1	275.07	17.596	
11,811.0	6,908.4	6,881.4	6,881.4	138.4	137.6	-93.19	1,331.2	9,481.0	4,829.3	4,553.9	275.37	17.537	
11,900.0	6,907.6	6,880.6	6,880.6	140.9	137.6	-93.13	1,331.2	9,481.0	4,741.3	4,463.4	277.85	17.064	
11,909.4	6,907.5	6,880.5	6,880.5	141.1	137.6	-93.13	1,331.2	9,481.0	4,732.0	4,453.8	278.12	17.014	
12,000.0	6,906.8	6,879.8	6,879.8	143.6	137.6	-93.07	1,331.2	9,481.0	4,642.4	4,361.8	280.64	16.542	
12,007.8	6,906.7	6,879.7	6,879.7	143.9	137.6	-93.06	1,331.2	9,481.0	4,634.7	4,353.8	280.86	16.502	
12,100.0	6,905.9	6,878.9	6,878.9	146.4	137.5	-93.00	1,331.2	9,481.0	4,543.7	4,260.2	283.43	16.031	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KEATON #8-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,878.9	6,878.9	146.6	137.5	-93.00	1,331.2	9,481.0	4,537.5	4,253.9	283.61	15.999	
12,200.0	6,905.1	6,878.1	6,878.1	149.2	137.5	-92.93	1,331.2	9,481.0	4,444.9	4,158.7	286.22	15.530	
12,204.7	6,905.1	6,878.1	6,878.1	149.4	137.5	-92.93	1,331.2	9,481.0	4,440.3	4,153.9	286.35	15.506	
12,300.0	6,904.3	6,877.3	6,877.3	152.0	137.5	-92.87	1,331.2	9,481.0	4,346.3	4,057.3	289.01	15.038	
12,303.1	6,904.3	6,877.3	6,877.3	152.1	137.5	-92.86	1,331.2	9,481.0	4,343.2	4,054.1	289.10	15.023	
12,400.0	6,903.4	6,876.4	6,876.4	154.8	137.5	-92.80	1,331.2	9,481.0	4,247.7	3,955.9	291.80	14.557	
12,401.5	6,903.4	6,876.4	6,876.4	154.8	137.5	-92.80	1,331.2	9,481.0	4,246.1	3,954.3	291.84	14.549	
12,500.0	6,902.6	6,875.6	6,875.6	157.6	137.5	-92.73	1,331.2	9,481.0	4,149.1	3,854.5	294.59	14.084	
12,598.4	6,901.8	6,874.8	6,874.8	160.3	137.5	-92.67	1,331.2	9,481.0	4,052.2	3,754.9	297.34	13.628	
12,600.0	6,901.8	6,874.8	6,874.8	160.4	137.5	-92.67	1,331.2	9,481.0	4,050.7	3,753.3	297.38	13.621	
12,696.8	6,901.0	6,874.0	6,874.0	163.1	137.4	-92.60	1,331.2	9,481.0	3,955.4	3,655.3	300.09	13.181	
12,700.0	6,900.9	6,873.9	6,873.9	163.2	137.4	-92.60	1,331.2	9,481.0	3,952.3	3,652.1	300.17	13.167	
12,795.2	6,900.1	6,873.1	6,873.1	165.8	137.4	-92.53	1,331.2	9,481.0	3,858.6	3,555.8	302.83	12.742	
12,800.0	6,900.1	6,873.1	6,873.1	166.0	137.4	-92.53	1,331.2	9,481.0	3,854.0	3,551.0	302.97	12.721	
12,893.7	6,899.3	6,872.3	6,872.3	168.6	137.4	-92.47	1,331.2	9,481.0	3,762.0	3,456.4	305.58	12.311	
12,900.0	6,899.3	6,872.3	6,872.3	168.8	137.4	-92.46	1,331.2	9,481.0	3,755.7	3,450.0	305.76	12.283	
12,992.1	6,898.5	6,871.5	6,871.5	171.3	137.4	-92.40	1,331.2	9,481.0	3,665.4	3,357.0	308.33	11.888	
13,000.0	6,898.4	6,871.4	6,871.4	171.6	137.4	-92.40	1,331.2	9,481.0	3,657.6	3,349.1	308.55	11.854	
13,090.5	6,897.7	6,870.7	6,870.7	174.1	137.4	-92.34	1,331.2	9,481.0	3,568.9	3,257.8	311.08	11.473	
13,100.0	6,897.6	6,870.6	6,870.6	174.4	137.4	-92.33	1,331.2	9,481.0	3,559.6	3,248.3	311.35	11.433	
13,188.9	6,896.9	6,869.9	6,869.9	176.8	137.4	-92.27	1,331.2	9,481.0	3,472.5	3,158.7	313.83	11.065	
13,200.0	6,896.8	6,869.8	6,869.8	177.2	137.4	-92.26	1,331.2	9,481.0	3,461.7	3,147.6	314.14	11.020	
13,287.4	6,896.0	6,869.0	6,869.0	179.6	137.3	-92.21	1,331.2	9,481.0	3,376.3	3,059.7	316.58	10.665	
13,300.0	6,895.9	6,868.9	6,868.9	180.0	137.3	-92.20	1,331.2	9,481.0	3,363.9	3,047.0	316.93	10.614	
13,385.8	6,895.2	6,868.2	6,868.2	182.4	137.3	-92.14	1,331.2	9,481.0	3,280.1	2,960.8	319.33	10.272	
13,400.0	6,895.1	6,868.1	6,868.1	182.7	137.3	-92.13	1,331.2	9,481.0	3,266.3	2,946.5	319.73	10.216	
13,484.2	6,894.4	6,867.4	6,867.4	185.1	137.3	-92.07	1,331.2	9,481.0	3,184.1	2,862.1	322.08	9.886	
13,500.0	6,894.3	6,867.3	6,867.3	185.5	137.3	-92.06	1,331.2	9,481.0	3,168.8	2,846.2	322.52	9.825	
13,582.6	6,893.6	6,866.6	6,866.6	187.9	137.3	-92.01	1,331.2	9,481.0	3,088.3	2,763.5	324.83	9.507	
13,600.0	6,893.4	6,866.4	6,866.4	188.3	137.3	-92.00	1,331.2	9,481.0	3,071.4	2,746.1	325.32	9.441	
13,681.1	6,892.8	6,865.8	6,865.8	190.6	137.3	-91.94	1,331.2	9,481.0	2,992.6	2,665.1	327.58	9.136	
13,700.0	6,892.6	6,865.6	6,865.6	191.1	137.3	-91.93	1,331.2	9,481.0	2,974.3	2,646.2	328.11	9.065	
13,779.5	6,891.9	6,864.9	6,864.9	193.4	137.3	-91.88	1,331.2	9,481.0	2,897.2	2,566.8	330.33	8.770	
13,800.0	6,891.8	6,864.8	6,864.8	193.9	137.3	-91.86	1,331.2	9,481.0	2,877.3	2,546.4	330.91	8.695	
13,877.9	6,891.1	6,864.1	6,864.1	196.1	137.2	-91.81	1,331.2	9,481.0	2,801.9	2,468.8	333.08	8.412	
13,900.0	6,890.9	6,863.9	6,863.9	196.7	137.2	-91.80	1,331.2	9,481.0	2,780.5	2,446.8	333.70	8.332	
13,976.3	6,890.3	6,863.3	6,863.3	198.9	137.2	-91.74	1,331.2	9,481.0	2,706.8	2,371.0	335.83	8.060	
14,000.0	6,890.1	6,863.1	6,863.1	199.5	137.2	-91.73	1,331.2	9,481.0	2,684.0	2,347.5	336.49	7.976	
14,074.8	6,889.5	6,862.5	6,862.5	201.6	137.2	-91.68	1,331.2	9,481.0	2,612.0	2,273.4	338.58	7.715	
14,100.0	6,889.3	6,862.3	6,862.3	202.3	137.2	-91.66	1,331.2	9,481.0	2,587.8	2,248.5	339.29	7.627	
14,173.2	6,888.7	6,861.7	6,861.7	204.4	137.2	-91.61	1,331.2	9,481.0	2,517.5	2,176.2	341.34	7.375	
14,200.0	6,888.4	6,861.4	6,861.4	205.1	137.2	-91.59	1,331.2	9,481.0	2,491.8	2,149.7	342.08	7.284	
14,271.6	6,887.8	6,860.8	6,860.8	207.1	137.2	-91.55	1,331.2	9,481.0	2,423.3	2,079.2	344.09	7.043	
14,300.0	6,887.6	6,860.6	6,860.6	207.9	137.2	-91.53	1,331.2	9,481.0	2,396.2	2,051.3	344.88	6.948	
14,370.0	6,887.0	6,860.0	6,860.0	209.9	137.2	-91.48	1,331.2	9,481.0	2,329.4	1,982.6	346.84	6.716	
14,400.0	6,886.8	6,859.8	6,859.8	210.7	137.2	-91.46	1,331.2	9,481.0	2,300.9	1,953.3	347.67	6.618	
14,468.5	6,886.2	6,859.2	6,859.2	212.6	137.1	-91.41	1,331.2	9,481.0	2,235.9	1,886.4	349.59	6.396	
14,500.0	6,885.9	6,858.9	6,858.9	213.5	137.1	-91.39	1,331.2	9,481.0	2,206.1	1,855.6	350.47	6.295	
14,566.9	6,885.4	6,858.4	6,858.4	215.4	137.1	-91.35	1,331.2	9,481.0	2,142.9	1,790.6	352.34	6.082	
14,600.0	6,885.1	6,858.1	6,858.1	216.3	137.1	-91.33	1,331.2	9,481.0	2,111.7	1,758.5	353.26	5.978	
14,613.0	6,885.0	6,858.0	6,858.0	216.7	137.1	-91.32	1,331.2	9,481.0	2,099.5	1,745.9	353.63	5.937 CC, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	93.65	-385.4	6,049.7	6,062.0				
98.4	98.4	75.4	75.4	0.1	0.4	93.65	-385.4	6,049.7	6,061.9	6,061.4	0.52	N/A	
100.0	100.0	77.0	77.0	0.1	0.4	93.65	-385.4	6,049.7	6,061.9	6,061.4	0.53	N/A	
196.8	196.8	173.8	173.8	0.3	2.4	93.65	-385.4	6,049.7	6,061.9	6,059.3	2.69	2,254.665	
200.0	200.0	177.0	177.0	0.3	2.5	93.65	-385.4	6,049.7	6,061.9	6,059.2	2.77	2,186.068	
295.3	295.3	272.3	272.3	0.5	4.5	93.65	-385.4	6,049.7	6,061.9	6,056.9	5.05	1,199.219	
300.0	300.0	277.0	277.0	0.5	4.6	93.65	-385.4	6,049.7	6,061.9	6,056.8	5.16	1,173.926	
393.7	393.7	370.7	370.7	0.7	6.5	93.65	-385.4	6,049.7	6,061.9	6,054.6	7.30	830.901	
400.0	400.0	377.0	377.0	0.8	6.7	93.65	-385.4	6,049.7	6,061.9	6,054.5	7.44	814.959	
492.1	492.1	469.1	469.1	1.0	8.5	93.65	-385.4	6,049.7	6,061.9	6,052.4	9.52	637.006	
500.0	500.0	477.0	477.0	1.0	8.7	93.65	-385.4	6,049.7	6,061.9	6,052.2	9.69	625.351	
590.5	590.5	567.5	567.5	1.2	10.5	93.65	-385.4	6,049.7	6,061.9	6,050.2	11.73	516.830	
600.0	600.0	577.0	577.0	1.2	10.7	93.65	-385.4	6,049.7	6,061.9	6,050.0	11.94	507.642	
689.0	689.0	666.0	666.0	1.4	12.5	93.65	-385.4	6,049.7	6,061.9	6,048.0	13.94	434.925	
700.0	700.0	677.0	677.0	1.4	12.8	93.65	-385.4	6,049.7	6,061.9	6,047.8	14.19	427.343	
787.4	787.4	764.4	764.4	1.6	14.5	93.65	-385.4	6,049.7	6,061.9	6,045.8	16.14	375.483	
800.0	800.0	777.0	777.0	1.7	14.8	93.65	-385.4	6,049.7	6,061.9	6,045.5	16.43	369.028	
885.8	885.8	862.8	862.8	1.9	16.5	93.65	-385.4	6,049.7	6,061.9	6,043.6	18.35	330.361	
900.0	900.0	877.0	877.0	1.9	16.8	93.65	-385.4	6,049.7	6,061.9	6,043.3	18.67	324.742	
984.2	984.2	961.2	961.2	2.1	18.5	93.65	-385.4	6,049.7	6,061.9	6,041.4	20.55	294.935	
1,000.0	1,000.0	977.0	977.0	2.1	18.8	93.65	-385.4	6,049.7	6,061.9	6,041.0	20.91	289.960	
1,082.7	1,082.7	1,059.7	1,059.7	2.3	20.5	93.65	-385.4	6,049.7	6,061.9	6,039.2	22.76	266.379	
1,100.0	1,100.0	1,077.0	1,077.0	2.3	20.8	93.65	-385.4	6,049.7	6,061.9	6,038.8	23.14	261.916	
1,150.0	1,150.0	1,127.0	1,127.0	2.4	21.8	93.65	-385.4	6,049.7	6,061.9	6,037.7	24.26	249.836	
1,181.1	1,181.1	1,158.1	1,158.1	2.5	22.4	126.33	-385.4	6,049.7	6,062.0	6,037.1	24.96	242.886	
1,200.0	1,200.0	1,177.0	1,177.0	2.6	22.8	126.33	-385.4	6,049.7	6,062.2	6,036.8	25.38	238.858	
1,279.5	1,279.5	1,256.5	1,256.5	2.7	24.4	126.33	-385.4	6,049.7	6,063.7	6,036.5	27.15	223.368	
1,300.0	1,299.9	1,276.9	1,276.9	2.8	24.8	126.33	-385.4	6,049.7	6,064.3	6,036.7	27.60	219.722	
1,377.9	1,377.7	1,354.7	1,354.7	3.0	26.4	126.32	-385.4	6,049.7	6,067.3	6,038.0	29.32	206.938	
1,400.0	1,399.7	1,376.7	1,376.7	3.0	26.8	126.31	-385.4	6,049.7	6,068.4	6,038.6	29.80	203.613	
1,476.4	1,475.7	1,452.7	1,452.7	3.2	28.4	126.30	-385.4	6,049.7	6,073.0	6,041.5	31.48	192.935	
1,500.0	1,499.1	1,476.1	1,476.1	3.2	28.8	126.29	-385.4	6,049.7	6,074.6	6,042.6	31.99	189.884	
1,574.8	1,573.2	1,550.2	1,550.2	3.4	30.3	126.27	-385.4	6,049.7	6,080.6	6,047.0	33.62	180.867	
1,600.0	1,598.2	1,575.2	1,575.2	3.5	30.8	126.26	-385.4	6,049.7	6,082.9	6,048.7	34.16	178.051	
1,673.2	1,670.3	1,647.3	1,647.3	3.7	32.3	126.24	-385.4	6,049.7	6,090.3	6,054.5	35.75	170.362	
1,700.0	1,696.6	1,673.6	1,673.6	3.8	32.8	126.22	-385.4	6,049.7	6,093.3	6,057.0	36.32	167.748	
1,749.9	1,745.5	1,722.5	1,722.5	3.9	33.8	126.20	-385.4	6,049.7	6,099.2	6,061.8	37.40	163.094	
1,771.6	1,766.8	1,743.8	1,743.8	4.0	34.2	126.24	-385.4	6,049.7	6,101.9	6,064.1	37.89	161.061	
1,800.0	1,794.5	1,771.5	1,771.5	4.1	34.8	126.28	-385.4	6,049.7	6,105.5	6,067.0	38.52	158.495	
1,870.1	1,863.1	1,840.1	1,840.1	4.3	36.2	126.39	-385.4	6,049.7	6,114.2	6,074.1	40.10	152.468	
1,900.0	1,892.3	1,869.3	1,869.3	4.4	36.8	126.43	-385.4	6,049.7	6,118.0	6,077.2	40.78	150.039	
1,968.5	1,959.4	1,936.4	1,936.4	4.7	38.1	126.54	-385.4	6,049.7	6,126.6	6,084.2	42.33	144.736	
2,000.0	1,990.2	1,967.2	1,967.2	4.8	38.7	126.59	-385.4	6,049.7	6,130.5	6,087.5	43.04	142.428	
2,066.9	2,055.6	2,032.6	2,032.6	5.1	40.0	126.69	-385.4	6,049.7	6,138.9	6,094.4	44.57	137.749	
2,100.0	2,088.0	2,065.0	2,065.0	5.2	40.7	126.74	-385.4	6,049.7	6,143.1	6,097.8	45.32	135.550	
2,165.3	2,151.9	2,128.9	2,128.9	5.4	42.0	126.84	-385.4	6,049.7	6,151.4	6,104.5	46.81	131.402	
2,200.0	2,185.8	2,162.8	2,162.8	5.6	42.7	126.90	-385.4	6,049.7	6,155.7	6,108.1	47.61	129.309	
2,263.8	2,248.2	2,225.2	2,225.2	5.8	43.9	126.99	-385.4	6,049.7	6,163.8	6,114.8	49.07	125.622	
2,300.0	2,283.6	2,260.6	2,260.6	6.0	44.6	127.05	-385.4	6,049.7	6,168.4	6,118.5	49.90	123.624	
2,362.2	2,344.5	2,321.5	2,321.5	6.2	45.8	127.14	-385.4	6,049.7	6,176.3	6,125.0	51.32	120.338	
2,400.0	2,381.4	2,358.4	2,358.4	6.4	46.6	127.20	-385.4	6,049.7	6,181.1	6,128.9	52.19	118.429	
2,460.6	2,440.7	2,417.7	2,417.7	6.6	47.8	127.29	-385.4	6,049.7	6,188.9	6,135.3	53.59	115.491	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KERBEL 12-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,456.2	2,456.2	6.8	48.6	127.35	-385.4	6,049.7	6,193.9	6,139.4	54.49	113.663	
2,559.0	2,537.0	2,514.0	2,514.0	7.0	49.7	127.44	-385.4	6,049.7	6,201.5	6,145.6	55.85	111.030	
2,600.0	2,577.1	2,554.1	2,554.1	7.2	50.5	127.50	-385.4	6,049.7	6,206.7	6,149.9	56.80	109.279	
2,657.5	2,633.3	2,610.3	2,610.3	7.4	51.7	127.59	-385.4	6,049.7	6,214.1	6,156.0	58.12	106.913	
2,700.0	2,674.9	2,651.9	2,651.9	7.6	52.5	127.65	-385.4	6,049.7	6,219.6	6,160.5	59.10	105.232	
2,755.9	2,729.6	2,706.6	2,706.6	7.9	53.6	127.73	-385.4	6,049.7	6,226.8	6,166.4	60.39	103.103	
2,800.0	2,772.7	2,749.7	2,749.7	8.0	54.5	127.80	-385.4	6,049.7	6,232.5	6,171.0	61.41	101.487	
2,854.3	2,825.8	2,802.8	2,802.8	8.3	55.5	127.88	-385.4	6,049.7	6,239.5	6,176.8	62.67	99.567	
2,900.0	2,870.5	2,847.5	2,847.5	8.5	56.4	127.95	-385.4	6,049.7	6,245.4	6,181.7	63.72	98.011	
2,952.7	2,922.1	2,899.1	2,899.1	8.7	57.5	128.03	-385.4	6,049.7	6,252.2	6,187.3	64.94	96.276	
3,000.0	2,968.3	2,945.3	2,945.3	8.9	58.4	128.10	-385.4	6,049.7	6,258.4	6,192.3	66.03	94.777	
3,051.2	3,018.4	2,995.4	2,995.4	9.1	59.4	128.17	-385.4	6,049.7	6,265.0	6,197.8	67.22	93.208	
3,100.0	3,066.1	3,043.1	3,043.1	9.3	60.4	128.24	-385.4	6,049.7	6,271.4	6,203.0	68.34	91.762	
3,149.6	3,114.7	3,091.7	3,091.7	9.5	61.3	128.32	-385.4	6,049.7	6,277.9	6,208.4	69.49	90.340	
3,200.0	3,164.0	3,141.0	3,141.0	9.8	62.3	128.39	-385.4	6,049.7	6,284.5	6,213.8	70.66	88.943	
3,248.0	3,210.9	3,187.9	3,187.9	10.0	63.3	128.46	-385.4	6,049.7	6,290.7	6,219.0	71.77	87.654	
3,300.0	3,261.8	3,238.8	3,238.8	10.2	64.3	128.54	-385.4	6,049.7	6,297.6	6,224.6	72.97	86.303	
3,346.4	3,307.2	3,284.2	3,284.2	10.4	65.2	128.60	-385.4	6,049.7	6,303.7	6,229.6	74.04	85.133	
3,400.0	3,359.6	3,336.6	3,336.6	10.6	66.3	128.68	-385.4	6,049.7	6,310.7	6,235.4	75.28	83.826	
3,444.9	3,403.5	3,380.5	3,380.5	10.8	67.1	128.75	-385.4	6,049.7	6,316.6	6,240.3	76.32	82.763	
3,500.0	3,457.4	3,434.4	3,434.4	11.1	68.2	128.83	-385.4	6,049.7	6,323.9	6,246.3	77.60	81.497	
3,543.3	3,499.8	3,476.8	3,476.8	11.3	69.1	128.89	-385.4	6,049.7	6,329.6	6,251.0	78.60	80.531	
3,600.0	3,555.2	3,532.2	3,532.2	11.5	70.2	128.97	-385.4	6,049.7	6,337.1	6,257.2	79.91	79.303	
3,641.7	3,596.0	3,573.0	3,573.0	11.7	71.0	129.03	-385.4	6,049.7	6,342.6	6,261.8	80.88	78.424	
3,700.0	3,653.0	3,630.0	3,630.0	11.9	72.2	129.12	-385.4	6,049.7	6,350.4	6,268.2	82.22	77.233	
3,740.1	3,692.3	3,669.3	3,669.3	12.1	73.0	129.17	-385.4	6,049.7	6,355.7	6,272.6	83.15	76.434	
3,800.0	3,750.8	3,727.8	3,727.8	12.4	74.1	129.26	-385.4	6,049.7	6,363.7	6,279.2	84.54	75.277	
3,838.6	3,788.6	3,765.6	3,765.6	12.6	74.9	129.31	-385.4	6,049.7	6,368.8	6,283.4	85.43	74.551	
3,900.0	3,848.7	3,825.7	3,825.7	12.8	76.1	129.40	-385.4	6,049.7	6,377.0	6,290.2	86.85	73.425	
3,937.0	3,884.9	3,861.9	3,861.9	13.0	76.8	129.45	-385.4	6,049.7	6,382.0	6,294.3	87.71	72.765	
4,000.0	3,946.5	3,923.5	3,923.5	13.3	78.1	129.54	-385.4	6,049.7	6,390.4	6,301.3	89.16	71.671	
4,035.4	3,981.1	3,958.1	3,958.1	13.4	78.8	129.59	-385.4	6,049.7	6,395.2	6,305.2	89.98	71.071	
4,100.0	4,044.3	4,021.3	4,021.3	13.7	80.0	129.69	-385.4	6,049.7	6,403.9	6,312.4	91.48	70.006	
4,133.8	4,077.4	4,054.4	4,054.4	13.9	80.7	129.73	-385.4	6,049.7	6,408.4	6,316.2	92.26	69.462	
4,200.0	4,142.1	4,119.1	4,119.1	14.2	82.0	129.83	-385.4	6,049.7	6,417.3	6,323.5	93.79	68.424	
4,232.3	4,173.7	4,150.7	4,150.7	14.3	82.6	129.87	-385.4	6,049.7	6,421.7	6,327.1	94.53	67.930	
4,300.0	4,239.9	4,216.9	4,216.9	14.6	84.0	129.97	-385.4	6,049.7	6,430.8	6,334.7	96.10	66.919	
4,330.7	4,270.0	4,247.0	4,247.0	14.7	84.6	130.01	-385.4	6,049.7	6,435.0	6,338.2	96.81	66.471	
4,400.0	4,337.7	4,314.7	4,314.7	15.0	85.9	130.11	-385.4	6,049.7	6,444.4	6,346.0	98.41	65.485	
4,429.1	4,366.2	4,343.2	4,343.2	15.2	86.5	130.15	-385.4	6,049.7	6,448.3	6,349.2	99.08	65.080	
4,500.0	4,435.6	4,412.6	4,412.6	15.5	87.9	130.25	-385.4	6,049.7	6,458.0	6,357.2	100.72	64.118	
4,527.5	4,462.5	4,439.5	4,439.5	15.6	88.4	130.28	-385.4	6,049.7	6,461.7	6,360.3	101.36	63.752	
4,600.0	4,533.4	4,510.4	4,510.4	15.9	89.9	130.38	-385.4	6,049.7	6,471.6	6,368.5	103.03	62.812	
4,626.0	4,558.8	4,535.8	4,535.8	16.0	90.4	130.42	-385.4	6,049.7	6,475.1	6,371.5	103.63	62.483	
4,673.6	4,605.3	4,582.3	4,582.3	16.3	91.3	130.49	-385.4	6,049.7	6,481.6	6,376.9	104.73	61.890	
4,700.0	4,631.2	4,608.2	4,608.2	16.4	91.8	130.58	-385.4	6,049.7	6,485.2	6,379.8	105.40	61.531	
4,724.4	4,655.1	4,632.1	4,632.1	16.4	92.3	130.66	-385.4	6,049.7	6,488.3	6,382.3	106.00	61.210	
4,800.0	4,729.5	4,706.5	4,706.5	16.7	93.8	130.88	-385.4	6,049.7	6,497.1	6,389.3	107.86	60.235	
4,822.8	4,752.1	4,729.1	4,729.1	16.7	94.3	130.94	-385.4	6,049.7	6,499.5	6,391.1	108.42	59.950	
4,900.0	4,828.4	4,805.4	4,805.4	17.0	95.8	131.12	-385.4	6,049.7	6,506.8	6,396.6	110.28	59.003	
4,921.2	4,849.5	4,826.5	4,826.5	17.0	96.2	131.17	-385.4	6,049.7	6,508.6	6,397.8	110.78	58.750	
5,000.0	4,927.8	4,904.8	4,904.8	17.2	97.8	131.31	-385.4	6,049.7	6,514.3	6,401.7	112.64	57.833	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,924.4	4,924.4	17.2	98.2	131.34	-385.4	6,049.7	6,515.5	6,402.4	113.10	57.611	
5,100.0	5,027.5	5,004.5	5,004.5	17.4	99.8	131.44	-385.4	6,049.7	6,519.5	6,404.5	114.94	56.723	
5,118.1	5,045.6	5,022.6	5,022.6	17.4	100.2	131.46	-385.4	6,049.7	6,520.1	6,404.8	115.34	56.529	
5,200.0	5,127.4	5,104.4	5,104.4	17.6	101.8	131.51	-385.4	6,049.7	6,522.3	6,405.1	117.16	55.671	
5,216.5	5,143.9	5,120.9	5,120.9	17.6	102.2	131.52	-385.4	6,049.7	6,522.6	6,405.0	117.52	55.503	
5,273.4	5,200.8	5,177.8	5,177.8	17.7	103.3	98.84	-385.4	6,049.7	6,522.9	6,404.6	118.30	55.137	
5,300.0	5,227.4	5,204.4	5,204.4	17.7	103.8	98.84	-385.4	6,049.7	6,522.9	6,404.1	118.88	54.870	
5,314.9	5,242.3	5,219.3	5,219.3	17.7	104.1	98.84	-385.4	6,049.7	6,522.9	6,403.7	119.20	54.720	
5,400.0	5,327.4	5,304.4	5,304.4	17.8	105.8	98.84	-385.4	6,049.7	6,522.9	6,401.9	121.06	53.883	
5,413.4	5,340.8	5,317.8	5,317.8	17.9	106.1	98.84	-385.4	6,049.7	6,522.9	6,401.6	121.35	53.753	
5,500.0	5,427.4	5,404.4	5,404.4	18.0	107.9	98.84	-385.4	6,049.7	6,522.9	6,399.7	123.24	52.930	
5,511.8	5,439.2	5,416.2	5,416.2	18.0	108.1	98.84	-385.4	6,049.7	6,522.9	6,399.4	123.50	52.819	
5,600.0	5,527.4	5,504.4	5,504.4	18.1	109.9	98.84	-385.4	6,049.7	6,522.9	6,397.5	125.42	52.009	
5,610.2	5,537.6	5,514.6	5,514.6	18.1	110.1	98.84	-385.4	6,049.7	6,522.9	6,397.3	125.64	51.917	
5,700.0	5,627.4	5,604.4	5,604.4	18.3	111.9	98.84	-385.4	6,049.7	6,522.9	6,395.3	127.60	51.119	
5,708.6	5,636.0	5,613.0	5,613.0	18.3	112.0	98.84	-385.4	6,049.7	6,522.9	6,395.1	127.79	51.044	
5,800.0	5,727.4	5,704.4	5,704.4	18.4	113.9	98.84	-385.4	6,049.7	6,522.9	6,393.1	129.79	50.259	
5,807.1	5,734.5	5,711.5	5,711.5	18.4	114.0	98.84	-385.4	6,049.7	6,522.9	6,393.0	129.94	50.199	
5,900.0	5,827.4	5,804.4	5,804.4	18.6	115.9	98.84	-385.4	6,049.7	6,522.9	6,391.0	131.97	49.427	
5,905.5	5,832.9	5,809.9	5,809.9	18.6	116.0	98.84	-385.4	6,049.7	6,522.9	6,390.8	132.09	49.382	
6,000.0	5,927.4	5,904.4	5,904.4	18.7	117.9	98.84	-385.4	6,049.7	6,522.9	6,388.8	134.16	48.621	
6,003.9	5,931.3	5,908.3	5,908.3	18.7	118.0	98.84	-385.4	6,049.7	6,522.9	6,388.7	134.24	48.590	
6,100.0	6,027.4	6,004.4	6,004.4	18.9	119.9	98.84	-385.4	6,049.7	6,522.9	6,386.6	136.35	47.841	
6,102.3	6,029.7	6,006.7	6,006.7	18.9	120.0	98.84	-385.4	6,049.7	6,522.9	6,386.5	136.40	47.823	
6,200.0	6,127.4	6,104.4	6,104.4	19.0	121.9	98.84	-385.4	6,049.7	6,522.9	6,384.4	138.54	47.085	
6,200.8	6,128.2	6,105.2	6,105.2	19.0	121.9	98.84	-385.4	6,049.7	6,522.9	6,384.4	138.55	47.079	
6,299.2	6,226.6	6,203.6	6,203.6	19.2	123.9	98.84	-385.4	6,049.7	6,522.9	6,382.2	140.71	46.358	
6,301.4	6,228.8	6,205.8	6,205.8	19.2	124.0	98.84	-385.4	6,049.7	6,522.9	6,382.2	140.76	46.342	
6,350.0	6,277.4	6,254.4	6,254.4	19.3	124.9	8.86	-385.4	6,049.7	6,521.3	6,379.5	141.78	45.996	
6,397.6	6,324.7	6,301.7	6,301.7	19.3	125.9	8.93	-385.4	6,049.7	6,516.6	6,374.7	141.82	45.949	
6,400.0	6,327.1	6,304.1	6,304.1	19.3	125.9	8.93	-385.4	6,049.7	6,516.2	6,374.4	141.81	45.952	
6,450.0	6,376.3	6,353.3	6,353.3	19.3	126.9	9.05	-385.4	6,049.7	6,507.8	6,366.6	141.14	46.109	
6,496.0	6,421.1	6,398.1	6,398.1	19.3	127.8	9.21	-385.4	6,049.7	6,497.0	6,357.1	139.90	46.439	
6,500.0	6,424.9	6,401.9	6,401.9	19.3	127.9	9.22	-385.4	6,049.7	6,495.9	6,356.1	139.77	46.476	
6,550.0	6,472.4	6,449.4	6,449.4	19.3	128.9	9.45	-385.4	6,049.7	6,480.7	6,343.0	137.70	47.063	
6,594.5	6,513.8	6,490.8	6,490.8	19.3	129.7	9.71	-385.4	6,049.7	6,464.5	6,329.2	135.28	47.785	
6,600.0	6,518.8	6,495.8	6,495.8	19.3	129.8	9.74	-385.4	6,049.7	6,462.3	6,327.4	134.94	47.889	
6,650.0	6,563.8	6,540.8	6,540.8	19.3	130.7	10.11	-385.4	6,049.7	6,440.8	6,309.2	131.51	48.974	
6,692.9	6,601.1	6,578.1	6,578.1	19.2	131.5	10.48	-385.4	6,049.7	6,419.8	6,291.8	128.06	50.133	
6,700.0	6,607.1	6,584.1	6,584.1	19.2	131.6	10.55	-385.4	6,049.7	6,416.2	6,288.7	127.44	50.347	
6,750.0	6,648.6	6,625.6	6,625.6	19.2	132.4	11.09	-385.4	6,049.7	6,388.6	6,265.9	122.76	52.040	
6,791.3	6,681.4	6,658.4	6,658.4	19.1	133.1	11.63	-385.4	6,049.7	6,363.8	6,245.3	118.49	53.706	
6,800.0	6,688.1	6,665.1	6,665.1	19.1	133.2	11.75	-385.4	6,049.7	6,358.3	6,240.8	117.55	54.089	
6,850.0	6,725.3	6,702.3	6,702.3	19.1	134.0	12.55	-385.4	6,049.7	6,325.3	6,213.5	111.90	56.529	
6,889.7	6,753.2	6,730.2	6,730.2	19.0	134.5	13.32	-385.4	6,049.7	6,297.4	6,190.2	107.17	58.761	
6,900.0	6,760.1	6,737.1	6,737.1	19.0	134.7	13.53	-385.4	6,049.7	6,289.9	6,184.0	105.93	59.380	
6,950.0	6,792.3	6,769.3	6,769.3	19.0	135.3	14.74	-385.4	6,049.7	6,252.2	6,152.3	99.85	62.618	
6,988.2	6,815.1	6,792.1	6,792.1	18.9	135.8	15.86	-385.4	6,049.7	6,221.9	6,126.6	95.31	65.279	
7,000.0	6,821.8	6,798.8	6,798.8	18.9	135.9	16.25	-385.4	6,049.7	6,212.3	6,118.4	93.96	66.118	
7,050.0	6,848.3	6,825.3	6,825.3	18.9	136.4	18.16	-385.4	6,049.7	6,170.5	6,081.8	88.74	69.533	
7,086.6	6,865.9	6,842.9	6,842.9	18.9	136.8	19.91	-385.4	6,049.7	6,138.8	6,053.1	85.78	71.567	
7,100.0	6,871.9	6,848.9	6,848.9	18.9	136.9	20.64	-385.4	6,049.7	6,127.0	6,042.1	84.96	72.120	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,869.3	6,869.3	18.8	137.3	23.93	-385.4	6,049.7	6,082.0	5,998.3	83.74	72.627	
7,185.0	6,904.7	6,881.7	6,881.7	18.8	137.6	26.93	-385.4	6,049.7	6,049.7	5,964.4	85.27	70.945	
7,200.0	6,909.5	6,886.5	6,886.5	18.9	137.7	28.44	-385.4	6,049.7	6,035.7	5,949.0	86.70	69.617	
7,250.0	6,923.4	6,900.4	6,900.4	19.3	137.9	34.85	-385.4	6,049.7	5,988.4	5,892.7	95.69	62.581	
7,283.4	6,930.8	6,907.8	6,907.8	19.8	138.1	40.72	-385.4	6,049.7	5,956.2	5,850.3	105.88	56.255	
7,300.0	6,933.9	6,910.9	6,910.9	20.0	138.1	44.27	-385.4	6,049.7	5,940.2	5,828.0	112.22	52.933	
7,350.0	6,940.9	6,917.9	6,917.9	20.8	138.3	58.33	-385.4	6,049.7	5,891.4	5,756.1	135.35	43.528	
7,381.9	6,943.6	6,920.6	6,920.6	21.4	138.3	70.30	-385.4	6,049.7	5,860.1	5,710.1	149.98	39.073	
7,400.0	6,944.5	6,921.5	6,921.5	21.7	138.4	78.05	-385.4	6,049.7	5,842.3	5,686.1	156.23	37.396	
7,432.4	6,945.0	6,922.0	6,922.0	22.3	138.4	92.74	-385.4	6,049.7	5,810.4	5,649.9	160.49	36.204	
7,480.3	6,944.6	6,921.6	6,921.6	23.2	138.4	92.72	-385.4	6,049.7	5,763.2	5,601.8	161.38	35.713	
7,500.0	6,944.4	6,921.4	6,921.4	23.6	138.4	92.71	-385.4	6,049.7	5,743.8	5,582.1	161.74	35.513	
7,578.7	6,943.7	6,920.7	6,920.7	25.2	138.3	92.67	-385.4	6,049.7	5,666.3	5,503.0	163.31	34.696	
7,600.0	6,943.6	6,920.6	6,920.6	25.6	138.3	92.66	-385.4	6,049.7	5,645.4	5,481.6	163.74	34.478	
7,677.1	6,942.9	6,919.9	6,919.9	27.3	138.3	92.62	-385.4	6,049.7	5,569.5	5,404.1	165.39	33.675	
7,700.0	6,942.7	6,919.7	6,919.7	27.8	138.3	92.61	-385.4	6,049.7	5,547.0	5,381.1	165.88	33.441	
7,775.6	6,942.1	6,919.1	6,919.1	29.5	138.3	92.57	-385.4	6,049.7	5,472.7	5,305.1	167.57	32.659	
7,800.0	6,941.9	6,918.9	6,918.9	30.1	138.3	92.56	-385.4	6,049.7	5,448.7	5,280.5	168.12	32.410	
7,874.0	6,941.3	6,918.3	6,918.3	31.8	138.3	92.53	-385.4	6,049.7	5,375.9	5,206.1	169.84	31.653	
7,900.0	6,941.1	6,918.1	6,918.1	32.4	138.3	92.51	-385.4	6,049.7	5,350.4	5,180.0	170.45	31.390	
7,972.4	6,940.4	6,917.4	6,917.4	34.2	138.3	92.48	-385.4	6,049.7	5,279.3	5,107.1	172.19	30.661	
8,000.0	6,940.2	6,917.2	6,917.2	34.9	138.3	92.47	-385.4	6,049.7	5,252.2	5,079.4	172.85	30.387	
8,070.8	6,939.6	6,916.6	6,916.6	36.6	138.3	92.43	-385.4	6,049.7	5,182.7	5,008.1	174.59	29.686	
8,100.0	6,939.4	6,916.4	6,916.4	37.3	138.3	92.42	-385.4	6,049.7	5,154.1	4,978.8	175.30	29.401	
8,169.3	6,938.8	6,915.8	6,915.8	39.1	138.2	92.39	-385.4	6,049.7	5,086.2	4,909.1	177.03	28.730	
8,200.0	6,938.5	6,915.5	6,915.5	39.8	138.2	92.37	-385.4	6,049.7	5,056.0	4,878.2	177.80	28.436	
8,267.7	6,938.0	6,915.0	6,915.0	41.6	138.2	92.34	-385.4	6,049.7	4,989.7	4,810.2	179.52	27.795	
8,300.0	6,937.7	6,914.7	6,914.7	42.4	138.2	92.32	-385.4	6,049.7	4,958.1	4,777.7	180.34	27.493	
8,366.1	6,937.2	6,914.2	6,914.2	44.1	138.2	92.29	-385.4	6,049.7	4,893.3	4,711.3	182.04	26.881	
8,400.0	6,936.9	6,913.9	6,913.9	45.0	138.2	92.27	-385.4	6,049.7	4,860.2	4,677.3	182.91	26.572	
8,464.5	6,936.3	6,913.3	6,913.3	46.6	138.2	92.24	-385.4	6,049.7	4,797.0	4,612.5	184.58	25.989	
8,500.0	6,936.0	6,913.0	6,913.0	47.6	138.2	92.23	-385.4	6,049.7	4,762.4	4,576.9	185.50	25.673	
8,563.0	6,935.5	6,912.5	6,912.5	49.2	138.2	92.20	-385.4	6,049.7	4,700.8	4,513.7	187.15	25.118	
8,600.0	6,935.2	6,912.2	6,912.2	50.2	138.2	92.18	-385.4	6,049.7	4,664.7	4,476.5	188.12	24.797	
8,661.4	6,934.7	6,911.7	6,911.7	51.8	138.2	92.15	-385.4	6,049.7	4,604.7	4,415.0	189.74	24.269	
8,700.0	6,934.4	6,911.4	6,911.4	52.8	138.2	92.13	-385.4	6,049.7	4,567.1	4,376.3	190.75	23.942	
8,759.8	6,933.9	6,910.9	6,910.9	54.4	138.1	92.10	-385.4	6,049.7	4,508.7	4,316.4	192.34	23.442	
8,800.0	6,933.5	6,910.5	6,910.5	55.5	138.1	92.08	-385.4	6,049.7	4,469.6	4,276.1	193.40	23.110	
8,858.2	6,933.0	6,910.0	6,910.0	57.1	138.1	92.05	-385.4	6,049.7	4,412.8	4,217.9	194.95	22.635	
8,900.0	6,932.7	6,909.7	6,909.7	58.2	138.1	92.03	-385.4	6,049.7	4,372.2	4,176.1	196.07	22.299	
8,956.7	6,932.2	6,909.2	6,909.2	59.7	138.1	92.01	-385.4	6,049.7	4,317.0	4,119.4	197.58	21.849	
9,000.0	6,931.8	6,908.8	6,908.8	60.9	138.1	91.99	-385.4	6,049.7	4,274.9	4,076.1	198.74	21.510	
9,055.1	6,931.4	6,908.4	6,908.4	62.4	138.1	91.96	-385.4	6,049.7	4,221.3	4,021.1	200.22	21.083	
9,100.0	6,931.0	6,908.0	6,908.0	63.6	138.1	91.94	-385.4	6,049.7	4,177.7	3,976.3	201.43	20.740	
9,153.5	6,930.6	6,907.6	6,907.6	65.0	138.1	91.91	-385.4	6,049.7	4,125.8	3,922.9	202.87	20.337	
9,200.0	6,930.2	6,907.2	6,907.2	66.3	138.1	91.89	-385.4	6,049.7	4,080.7	3,876.6	204.13	19.991	
9,251.9	6,929.7	6,906.7	6,906.7	67.7	138.1	91.87	-385.4	6,049.7	4,030.4	3,824.9	205.53	19.610	
9,300.0	6,929.3	6,906.3	6,906.3	69.0	138.1	91.84	-385.4	6,049.7	3,983.9	3,777.0	206.83	19.262	
9,350.4	6,928.9	6,905.9	6,905.9	70.4	138.0	91.82	-385.4	6,049.7	3,935.1	3,727.0	208.20	18.901	
9,400.0	6,928.5	6,905.5	6,905.5	71.7	138.0	91.80	-385.4	6,049.7	3,887.2	3,677.6	209.54	18.551	
9,448.8	6,928.1	6,905.1	6,905.1	73.0	138.0	91.77	-385.4	6,049.7	3,840.1	3,629.2	210.87	18.211	
9,500.0	6,927.7	6,904.7	6,904.7	74.4	138.0	91.75	-385.4	6,049.7	3,790.7	3,578.4	212.26	17.859	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KERBEL 12-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,904.3	6,904.3	75.7	138.0	91.72	-385.4	6,049.7	3,745.1	3,531.6	213.54	17.538	
9,600.0	6,926.8	6,903.8	6,903.8	77.2	138.0	91.70	-385.4	6,049.7	3,694.3	3,479.3	214.98	17.184	
9,645.6	6,926.4	6,903.4	6,903.4	78.4	138.0	91.68	-385.4	6,049.7	3,650.4	3,434.2	216.23	16.882	
9,700.0	6,926.0	6,903.0	6,903.0	79.9	138.0	91.65	-385.4	6,049.7	3,598.2	3,380.5	217.71	16.527	
9,744.1	6,925.6	6,902.6	6,902.6	81.1	138.0	91.63	-385.4	6,049.7	3,555.9	3,336.9	218.91	16.243	
9,800.0	6,925.2	6,902.2	6,902.2	82.6	138.0	91.60	-385.4	6,049.7	3,502.2	3,281.8	220.44	15.887	
9,842.5	6,924.8	6,901.8	6,901.8	83.8	138.0	91.58	-385.4	6,049.7	3,461.5	3,239.9	221.60	15.620	
9,900.0	6,924.3	6,901.3	6,901.3	85.4	138.0	91.56	-385.4	6,049.7	3,406.5	3,183.4	223.18	15.264	
9,940.9	6,924.0	6,901.0	6,901.0	86.5	137.9	91.54	-385.4	6,049.7	3,367.5	3,143.2	224.30	15.013	
10,000.0	6,923.5	6,900.5	6,900.5	88.1	137.9	91.51	-385.4	6,049.7	3,311.1	3,085.2	225.92	14.656	
10,039.3	6,923.2	6,900.2	6,900.2	89.2	137.9	91.49	-385.4	6,049.7	3,273.6	3,046.6	227.00	14.421	
10,100.0	6,922.6	6,899.6	6,899.6	90.9	137.9	91.46	-385.4	6,049.7	3,215.9	2,987.3	228.66	14.064	
10,137.8	6,922.3	6,899.3	6,899.3	91.9	137.9	91.44	-385.4	6,049.7	3,180.1	2,950.4	229.70	13.844	
10,200.0	6,921.8	6,898.8	6,898.8	93.7	137.9	91.41	-385.4	6,049.7	3,121.1	2,889.7	231.41	13.487	
10,236.2	6,921.5	6,898.5	6,898.5	94.7	137.9	91.39	-385.4	6,049.7	3,086.8	2,854.4	232.40	13.282	
10,300.0	6,921.0	6,898.0	6,898.0	96.4	137.9	91.36	-385.4	6,049.7	3,026.5	2,792.4	234.16	12.925	
10,334.6	6,920.7	6,897.7	6,897.7	97.4	137.9	91.35	-385.4	6,049.7	2,993.9	2,758.8	235.11	12.734	
10,400.0	6,920.1	6,897.1	6,897.1	99.2	137.9	91.32	-385.4	6,049.7	2,932.4	2,695.5	236.91	12.378	
10,433.0	6,919.9	6,896.9	6,896.9	100.1	137.9	91.30	-385.4	6,049.7	2,901.3	2,663.5	237.82	12.200	
10,500.0	6,919.3	6,896.3	6,896.3	101.9	137.9	91.27	-385.4	6,049.7	2,838.6	2,598.9	239.66	11.844	
10,531.5	6,919.0	6,896.0	6,896.0	102.8	137.8	91.25	-385.4	6,049.7	2,809.2	2,568.7	240.53	11.679	
10,600.0	6,918.5	6,895.5	6,895.5	104.7	137.8	91.22	-385.4	6,049.7	2,745.3	2,502.9	242.42	11.324	
10,629.9	6,918.2	6,895.2	6,895.2	105.5	137.8	91.21	-385.4	6,049.7	2,717.5	2,474.2	243.25	11.172	
10,700.0	6,917.6	6,894.6	6,894.6	107.5	137.8	91.17	-385.4	6,049.7	2,652.4	2,407.3	245.18	10.818	
10,728.3	6,917.4	6,894.4	6,894.4	108.3	137.8	91.16	-385.4	6,049.7	2,626.2	2,380.3	245.96	10.677	
10,800.0	6,916.8	6,893.8	6,893.8	110.3	137.8	91.12	-385.4	6,049.7	2,560.1	2,312.2	247.94	10.326	
10,826.7	6,916.6	6,893.6	6,893.6	111.0	137.8	91.11	-385.4	6,049.7	2,535.5	2,286.9	248.68	10.196	
10,900.0	6,916.0	6,893.0	6,893.0	113.0	137.8	91.08	-385.4	6,049.7	2,468.4	2,217.7	250.70	9.846	
10,925.2	6,915.8	6,892.8	6,892.8	113.7	137.8	91.07	-385.4	6,049.7	2,445.4	2,194.0	251.40	9.727	
11,000.0	6,915.1	6,892.1	6,892.1	115.8	137.8	91.03	-385.4	6,049.7	2,377.4	2,123.9	253.47	9.380	
11,023.6	6,914.9	6,891.9	6,891.9	116.5	137.8	91.02	-385.4	6,049.7	2,356.0	2,101.9	254.12	9.271	
11,100.0	6,914.3	6,891.3	6,891.3	118.6	137.8	90.98	-385.4	6,049.7	2,287.1	2,030.9	256.23	8.926	
11,122.0	6,914.1	6,891.1	6,891.1	119.2	137.8	90.97	-385.4	6,049.7	2,267.3	2,010.5	256.84	8.828	
11,200.0	6,913.5	6,890.5	6,890.5	121.4	137.7	90.93	-385.4	6,049.7	2,197.7	1,938.7	259.00	8.485	
11,220.4	6,913.3	6,890.3	6,890.3	121.9	137.7	90.92	-385.4	6,049.7	2,179.5	1,919.9	259.56	8.397	
11,300.0	6,912.6	6,889.6	6,889.6	124.1	137.7	90.89	-385.4	6,049.7	2,109.2	1,847.4	261.76	8.057	
11,318.9	6,912.5	6,889.5	6,889.5	124.7	137.7	90.88	-385.4	6,049.7	2,092.6	1,830.3	262.29	7.978	
11,400.0	6,911.8	6,888.8	6,888.8	126.9	137.7	90.84	-385.4	6,049.7	2,021.7	1,757.2	264.53	7.643	
11,417.3	6,911.6	6,888.6	6,888.6	127.4	137.7	90.83	-385.4	6,049.7	2,006.7	1,741.7	265.01	7.572	
11,500.0	6,911.0	6,888.0	6,888.0	129.7	137.7	90.79	-385.4	6,049.7	1,935.5	1,668.2	267.30	7.241	
11,515.7	6,910.8	6,887.8	6,887.8	130.2	137.7	90.78	-385.4	6,049.7	1,922.1	1,654.4	267.74	7.179	
11,600.0	6,910.1	6,887.1	6,887.1	132.5	137.7	90.74	-385.4	6,049.7	1,850.7	1,580.6	270.07	6.853	
11,614.1	6,910.0	6,887.0	6,887.0	132.9	137.7	90.74	-385.4	6,049.7	1,838.8	1,568.4	270.46	6.799	
11,700.0	6,909.3	6,886.3	6,886.3	135.3	137.7	90.69	-385.4	6,049.7	1,767.5	1,494.6	272.84	6.478	
11,712.6	6,909.2	6,886.2	6,886.2	135.6	137.7	90.69	-385.4	6,049.7	1,757.1	1,483.9	273.19	6.432	
11,800.0	6,908.5	6,885.5	6,885.5	138.1	137.6	90.65	-385.4	6,049.7	1,686.1	1,410.4	275.62	6.117	
11,811.0	6,908.4	6,885.4	6,885.4	138.4	137.6	90.64	-385.4	6,049.7	1,677.2	1,401.3	275.92	6.079	
11,900.0	6,907.6	6,884.6	6,884.6	140.9	137.6	90.60	-385.4	6,049.7	1,606.7	1,328.4	278.39	5.772	
11,909.4	6,907.5	6,884.5	6,884.5	141.1	137.6	90.59	-385.4	6,049.7	1,599.4	1,320.7	278.65	5.740	
12,000.0	6,906.8	6,883.8	6,883.8	143.6	137.6	90.55	-385.4	6,049.7	1,529.9	1,248.7	281.16	5.441	
12,007.8	6,906.7	6,883.7	6,883.7	143.9	137.6	90.55	-385.4	6,049.7	1,523.9	1,242.6	281.38	5.416	
12,100.0	6,905.9	6,882.9	6,882.9	146.4	137.6	90.50	-385.4	6,049.7	1,455.8	1,171.8	283.94	5.127	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KERBEL 12-26 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,882.9	6,882.9	146.6	137.6	90.50	-385.4	6,049.7	1,451.2	1,167.1	284.11	5.108	
12,200.0	6,905.1	6,882.1	6,882.1	149.2	137.6	90.46	-385.4	6,049.7	1,385.0	1,098.3	286.71	4.831	
12,204.7	6,905.1	6,882.1	6,882.1	149.4	137.6	90.45	-385.4	6,049.7	1,381.7	1,094.9	286.84	4.817	
12,300.0	6,904.3	6,881.3	6,881.3	152.0	137.6	90.41	-385.4	6,049.7	1,317.9	1,028.5	289.49	4.553	
12,303.1	6,904.3	6,881.3	6,881.3	152.1	137.6	90.41	-385.4	6,049.7	1,315.9	1,026.3	289.57	4.544	
12,400.0	6,903.4	6,880.4	6,880.4	154.8	137.5	90.36	-385.4	6,049.7	1,255.3	963.1	292.26	4.295	
12,401.5	6,903.4	6,880.4	6,880.4	154.8	137.5	90.36	-385.4	6,049.7	1,254.4	962.1	292.30	4.291	
12,500.0	6,902.6	6,879.6	6,879.6	157.6	137.5	90.31	-385.4	6,049.7	1,197.8	902.7	295.04	4.060	
12,598.4	6,901.8	6,878.8	6,878.8	160.3	137.5	90.27	-385.4	6,049.7	1,146.8	849.1	297.77	3.851	
12,600.0	6,901.8	6,878.8	6,878.8	160.4	137.5	90.27	-385.4	6,049.7	1,146.1	848.3	297.81	3.848	
12,696.8	6,901.0	6,878.0	6,878.0	163.1	137.5	90.22	-385.4	6,049.7	1,102.4	801.9	300.50	3.668	
12,700.0	6,900.9	6,877.9	6,877.9	163.2	137.5	90.22	-385.4	6,049.7	1,101.1	800.5	300.59	3.663	
12,795.2	6,900.1	6,877.1	6,877.1	165.8	137.5	90.17	-385.4	6,049.7	1,065.1	761.9	303.24	3.513	
12,800.0	6,900.1	6,877.1	6,877.1	166.0	137.5	90.17	-385.4	6,049.7	1,063.6	760.2	303.37	3.506	
12,893.7	6,899.3	6,876.3	6,876.3	168.6	137.5	90.13	-385.4	6,049.7	1,036.0	730.0	305.97	3.386	
12,900.0	6,899.3	6,876.3	6,876.3	168.8	137.5	90.12	-385.4	6,049.7	1,034.4	728.2	306.15	3.379	
12,992.1	6,898.5	6,875.5	6,875.5	171.3	137.4	90.08	-385.4	6,049.7	1,015.5	706.8	308.70	3.290	
13,000.0	6,898.4	6,875.4	6,875.4	171.6	137.4	90.07	-385.4	6,049.7	1,014.3	705.4	308.92	3.283	
13,090.5	6,897.7	6,874.7	6,874.7	174.1	137.4	90.03	-385.4	6,049.7	1,004.4	692.9	311.44	3.225	
13,100.0	6,897.6	6,874.6	6,874.6	174.4	137.4	90.03	-385.4	6,049.7	1,003.8	692.1	311.70	3.220	
13,155.9	6,897.1	6,874.1	6,874.1	175.9	137.4	90.00	-385.4	6,049.7	1,002.2	689.0	313.26	3.199 CC	
13,188.9	6,896.9	6,873.9	6,873.9	176.8	137.4	89.98	-385.4	6,049.7	1,002.8	688.6	314.17	3.192 ES	
13,200.0	6,896.8	6,873.8	6,873.8	177.2	137.4	89.98	-385.4	6,049.7	1,003.2	688.7	314.48	3.190	
13,287.4	6,896.0	6,873.0	6,873.0	179.6	137.4	89.94	-385.4	6,049.7	1,010.8	693.9	316.91	3.190 SF	
13,300.0	6,895.9	6,872.9	6,872.9	180.0	137.4	89.93	-385.4	6,049.7	1,012.6	695.3	317.26	3.192	
13,385.8	6,895.2	6,872.2	6,872.2	182.4	137.4	89.89	-385.4	6,049.7	1,028.3	708.6	319.64	3.217	
13,400.0	6,895.1	6,872.1	6,872.1	182.7	137.4	89.88	-385.4	6,049.7	1,031.5	711.5	320.04	3.223	
13,484.2	6,894.4	6,871.4	6,871.4	185.1	137.4	89.84	-385.4	6,049.7	1,054.7	732.3	322.38	3.271	
13,500.0	6,894.3	6,871.3	6,871.3	185.5	137.4	89.84	-385.4	6,049.7	1,059.7	736.9	322.82	3.283	
13,582.6	6,893.6	6,870.6	6,870.6	187.9	137.3	89.80	-385.4	6,049.7	1,089.3	764.2	325.11	3.351	
13,600.0	6,893.4	6,870.4	6,870.4	188.3	137.3	89.79	-385.4	6,049.7	1,096.2	770.6	325.60	3.367	
13,681.1	6,892.8	6,869.8	6,869.8	190.6	137.3	89.75	-385.4	6,049.7	1,131.5	803.7	327.85	3.451	
13,700.0	6,892.6	6,869.6	6,869.6	191.1	137.3	89.74	-385.4	6,049.7	1,140.4	812.0	328.38	3.473	
13,779.5	6,891.9	6,868.9	6,868.9	193.4	137.3	89.70	-385.4	6,049.7	1,180.4	849.8	330.59	3.571	
13,800.0	6,891.8	6,868.8	6,868.8	193.9	137.3	89.69	-385.4	6,049.7	1,191.4	860.2	331.15	3.598	
13,877.9	6,891.1	6,868.1	6,868.1	196.1	137.3	89.66	-385.4	6,049.7	1,235.2	901.9	333.32	3.706	
13,900.0	6,890.9	6,867.9	6,867.9	196.7	137.3	89.65	-385.4	6,049.7	1,248.3	914.3	333.93	3.738	
13,976.3	6,890.3	6,867.3	6,867.3	198.9	137.3	89.61	-385.4	6,049.7	1,295.2	959.2	336.06	3.854	
14,000.0	6,890.1	6,867.1	6,867.1	199.5	137.3	89.60	-385.4	6,049.7	1,310.3	973.6	336.71	3.892	
14,074.8	6,889.5	6,866.5	6,866.5	201.6	137.3	89.56	-385.4	6,049.7	1,359.7	1,020.9	338.79	4.013	
14,100.0	6,889.3	6,866.3	6,866.3	202.3	137.3	89.55	-385.4	6,049.7	1,376.9	1,037.4	339.49	4.056	
14,173.2	6,888.7	6,865.7	6,865.7	204.4	137.2	89.52	-385.4	6,049.7	1,428.1	1,086.5	341.53	4.181	
14,200.0	6,888.4	6,865.4	6,865.4	205.1	137.2	89.50	-385.4	6,049.7	1,447.3	1,105.0	342.27	4.228	
14,271.6	6,887.8	6,864.8	6,864.8	207.1	137.2	89.47	-385.4	6,049.7	1,499.8	1,155.5	344.26	4.356	
14,300.0	6,887.6	6,864.6	6,864.6	207.9	137.2	89.46	-385.4	6,049.7	1,521.0	1,175.9	345.05	4.408	
14,370.0	6,887.0	6,864.0	6,864.0	209.9	137.2	89.42	-385.4	6,049.7	1,574.4	1,227.4	347.00	4.537	
14,400.0	6,886.8	6,863.8	6,863.8	210.7	137.2	89.41	-385.4	6,049.7	1,597.6	1,249.7	347.83	4.593	
14,468.5	6,886.2	6,863.2	6,863.2	212.6	137.2	89.38	-385.4	6,049.7	1,651.5	1,301.7	349.73	4.722	
14,500.0	6,885.9	6,862.9	6,862.9	213.5	137.2	89.36	-385.4	6,049.7	1,676.6	1,326.0	350.61	4.782	
14,566.9	6,885.4	6,862.4	6,862.4	215.4	137.2	89.33	-385.4	6,049.7	1,730.7	1,378.2	352.47	4.910	
14,600.0	6,885.1	6,862.1	6,862.1	216.3	137.2	89.31	-385.4	6,049.7	1,757.8	1,404.4	353.39	4.974	
14,613.0	6,885.0	6,862.0	6,862.0	216.7	137.2	89.31	-385.4	6,049.7	1,768.5	1,414.8	353.75	4.999	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	9.61	1,497.3	253.6	1,518.7				
98.4	98.4	82.4	82.4	0.1	0.4	9.61	1,497.3	253.6	1,518.6	1,518.2	0.48	3,165.005	
100.0	100.0	84.0	84.0	0.1	0.4	9.61	1,497.3	253.6	1,518.6	1,518.1	0.49	3,104.706	
196.8	196.8	180.8	180.8	0.3	2.5	9.61	1,497.3	253.6	1,518.6	1,515.8	2.79	544.104	
200.0	200.0	184.0	184.0	0.3	2.6	9.61	1,497.3	253.6	1,518.6	1,515.8	2.88	527.968	
295.3	295.3	279.3	279.3	0.5	4.6	9.61	1,497.3	253.6	1,518.6	1,513.5	5.14	295.715	
300.0	300.0	284.0	284.0	0.5	4.7	9.61	1,497.3	253.6	1,518.6	1,513.4	5.24	289.579	
393.7	393.7	377.7	377.7	0.7	6.6	9.61	1,497.3	253.6	1,518.6	1,511.3	7.37	205.996	
400.0	400.0	384.0	384.0	0.8	6.8	9.61	1,497.3	253.6	1,518.6	1,511.1	7.51	202.086	
492.1	492.1	476.1	476.1	1.0	8.6	9.61	1,497.3	253.6	1,518.6	1,509.0	9.59	158.337	
500.0	500.0	484.0	484.0	1.0	8.8	9.61	1,497.3	253.6	1,518.6	1,508.9	9.77	155.463	
590.5	590.5	574.5	574.5	1.2	10.6	9.61	1,497.3	253.6	1,518.6	1,506.8	11.80	128.666	
600.0	600.0	584.0	584.0	1.2	10.8	9.61	1,497.3	253.6	1,518.6	1,506.6	12.02	126.393	
689.0	689.0	673.0	673.0	1.4	12.6	9.61	1,497.3	253.6	1,518.6	1,504.6	14.01	108.387	
700.0	700.0	684.0	684.0	1.4	12.8	9.61	1,497.3	253.6	1,518.6	1,504.4	14.26	106.508	
787.4	787.4	771.4	771.4	1.6	14.6	9.61	1,497.3	253.6	1,518.6	1,502.4	16.22	93.643	
800.0	800.0	784.0	784.0	1.7	14.8	9.61	1,497.3	253.6	1,518.6	1,502.1	16.50	92.041	
885.8	885.8	869.8	869.8	1.9	16.6	9.61	1,497.3	253.6	1,518.6	1,500.2	18.42	82.436	
900.0	900.0	884.0	884.0	1.9	16.9	9.61	1,497.3	253.6	1,518.6	1,499.9	18.74	81.040	
984.2	984.2	968.2	968.2	2.1	18.6	9.61	1,497.3	253.6	1,518.6	1,498.0	20.63	73.628	
1,000.0	1,000.0	984.0	984.0	2.1	18.9	9.61	1,497.3	253.6	1,518.6	1,497.7	20.98	72.390	
1,082.7	1,082.7	1,066.7	1,066.7	2.3	20.5	9.61	1,497.3	253.6	1,518.6	1,495.8	22.83	66.522	
1,100.0	1,100.0	1,084.0	1,084.0	2.3	20.9	9.61	1,497.3	253.6	1,518.6	1,495.4	23.22	65.411	
1,150.0	1,150.0	1,134.0	1,134.0	2.4	21.9	9.61	1,497.3	253.6	1,518.6	1,494.3	24.34	62.404	
1,181.1	1,181.1	1,165.1	1,165.1	2.5	22.5	42.31	1,497.3	253.6	1,518.5	1,493.5	25.03	60.667	
1,200.0	1,200.0	1,184.0	1,184.0	2.6	22.9	42.32	1,497.3	253.6	1,518.3	1,492.9	25.45	59.655	
1,279.5	1,279.5	1,263.5	1,263.5	2.7	24.5	42.40	1,497.3	253.6	1,516.5	1,489.3	27.22	55.721	
1,300.0	1,299.9	1,283.9	1,283.9	2.8	24.9	42.44	1,497.3	253.6	1,515.7	1,488.1	27.67	54.785	
1,377.9	1,377.7	1,361.7	1,361.7	3.0	26.5	42.62	1,497.3	253.6	1,511.9	1,482.6	29.38	51.463	
1,400.0	1,399.7	1,383.7	1,383.7	3.0	26.9	42.69	1,497.3	253.6	1,510.6	1,480.7	29.86	50.588	
1,476.4	1,475.7	1,459.7	1,459.7	3.2	28.4	42.96	1,497.3	253.6	1,504.9	1,473.4	31.52	47.745	
1,500.0	1,499.1	1,483.1	1,483.1	3.2	28.9	43.06	1,497.3	253.6	1,502.9	1,470.9	32.03	46.921	
1,574.8	1,573.2	1,557.2	1,557.2	3.4	30.4	43.43	1,497.3	253.6	1,495.5	1,461.9	33.64	44.458	
1,600.0	1,598.2	1,582.2	1,582.2	3.5	30.9	43.57	1,497.3	253.6	1,492.7	1,458.6	34.18	43.677	
1,673.2	1,670.3	1,654.3	1,654.3	3.7	32.4	44.02	1,497.3	253.6	1,483.7	1,448.0	35.74	41.518	
1,700.0	1,696.6	1,680.6	1,680.6	3.8	32.9	44.20	1,497.3	253.6	1,480.1	1,443.8	36.30	40.771	
1,749.9	1,745.5	1,729.5	1,729.5	3.9	33.9	44.57	1,497.3	253.6	1,473.0	1,435.6	37.36	39.429	
1,771.6	1,766.8	1,750.8	1,750.8	4.0	34.3	44.69	1,497.3	253.6	1,469.7	1,431.8	37.85	38.834	
1,800.0	1,794.5	1,778.5	1,778.5	4.1	34.9	44.85	1,497.3	253.6	1,465.5	1,427.0	38.48	38.081	
1,870.1	1,863.1	1,847.1	1,847.1	4.3	36.2	45.25	1,497.3	253.6	1,455.1	1,415.0	40.06	36.319	
1,900.0	1,892.3	1,876.3	1,876.3	4.4	36.8	45.43	1,497.3	253.6	1,450.6	1,409.9	40.74	35.608	
1,968.5	1,959.4	1,943.4	1,943.4	4.7	38.2	45.82	1,497.3	253.6	1,440.6	1,398.3	42.29	34.061	
2,000.0	1,990.2	1,974.2	1,974.2	4.8	38.8	46.01	1,497.3	253.6	1,436.0	1,393.0	43.01	33.387	
2,066.9	2,055.6	2,039.6	2,039.6	5.1	40.1	46.41	1,497.3	253.6	1,426.2	1,381.7	44.54	32.023	
2,100.0	2,088.0	2,072.0	2,072.0	5.2	40.8	46.61	1,497.3	253.6	1,421.4	1,376.1	45.29	31.383	
2,165.3	2,151.9	2,135.9	2,135.9	5.4	42.0	47.00	1,497.3	253.6	1,412.0	1,365.2	46.79	30.176	
2,200.0	2,185.8	2,169.8	2,169.8	5.6	42.7	47.21	1,497.3	253.6	1,407.1	1,359.5	47.59	29.567	
2,263.8	2,248.2	2,232.2	2,232.2	5.8	44.0	47.61	1,497.3	253.6	1,398.0	1,348.9	49.06	28.496	
2,300.0	2,283.6	2,267.6	2,267.6	6.0	44.7	47.83	1,497.3	253.6	1,392.9	1,343.0	49.89	27.916	
2,362.2	2,344.5	2,328.5	2,328.5	6.2	45.9	48.23	1,497.3	253.6	1,384.1	1,332.8	51.33	26.963	
2,400.0	2,381.4	2,365.4	2,365.4	6.4	46.7	48.47	1,497.3	253.6	1,378.8	1,326.6	52.21	26.409	
2,460.6	2,440.7	2,424.7	2,424.7	6.6	47.9	48.86	1,497.3	253.6	1,370.4	1,316.8	53.62	25.558	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KOWITZ 27-5 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,463.2	2,463.2	6.8	48.6	49.11	1,497.3	253.6	1,365.0	1,310.4	54.53	25.029	
2,559.0	2,537.0	2,521.0	2,521.0	7.0	49.8	49.50	1,497.3	253.6	1,356.9	1,300.9	55.91	24.268	
2,600.0	2,577.1	2,561.1	2,561.1	7.2	50.6	49.77	1,497.3	253.6	1,351.3	1,294.4	56.87	23.762	
2,657.5	2,633.3	2,617.3	2,617.3	7.4	51.7	50.15	1,497.3	253.6	1,343.5	1,285.3	58.21	23.079	
2,700.0	2,674.9	2,658.9	2,658.9	7.6	52.6	50.44	1,497.3	253.6	1,337.8	1,278.6	59.21	22.594	
2,755.9	2,729.6	2,713.6	2,713.6	7.9	53.7	50.82	1,497.3	253.6	1,330.3	1,269.8	60.52	21.981	
2,800.0	2,772.7	2,756.7	2,756.7	8.0	54.5	51.12	1,497.3	253.6	1,324.5	1,262.9	61.56	21.516	
2,854.3	2,825.8	2,809.8	2,809.8	8.3	55.6	51.50	1,497.3	253.6	1,317.3	1,254.5	62.84	20.964	
2,900.0	2,870.5	2,854.5	2,854.5	8.5	56.5	51.82	1,497.3	253.6	1,311.3	1,247.4	63.91	20.517	
2,952.7	2,922.1	2,906.1	2,906.1	8.7	57.5	52.20	1,497.3	253.6	1,304.5	1,239.3	65.16	20.020	
3,000.0	2,968.3	2,952.3	2,952.3	8.9	58.5	52.53	1,497.3	253.6	1,298.4	1,232.1	66.28	19.590	
3,051.2	3,018.4	3,002.4	3,002.4	9.1	59.5	52.90	1,497.3	253.6	1,291.9	1,224.4	67.49	19.142	
3,100.0	3,066.1	3,050.1	3,050.1	9.3	60.4	53.26	1,497.3	253.6	1,285.7	1,217.0	68.65	18.729	
3,149.6	3,114.7	3,098.7	3,098.7	9.5	61.4	53.62	1,497.3	253.6	1,279.5	1,209.6	69.83	18.323	
3,200.0	3,164.0	3,148.0	3,148.0	9.8	62.4	54.00	1,497.3	253.6	1,273.2	1,202.2	71.03	17.926	
3,248.0	3,210.9	3,194.9	3,194.9	10.0	63.3	54.36	1,497.3	253.6	1,267.3	1,195.1	72.17	17.559	
3,300.0	3,261.8	3,245.8	3,245.8	10.2	64.4	54.75	1,497.3	253.6	1,260.9	1,187.5	73.41	17.176	
3,346.4	3,307.2	3,291.2	3,291.2	10.4	65.3	55.10	1,497.3	253.6	1,255.3	1,180.8	74.52	16.845	
3,400.0	3,359.6	3,343.6	3,343.6	10.6	66.3	55.52	1,497.3	253.6	1,248.8	1,173.0	75.80	16.475	
3,444.9	3,403.5	3,387.5	3,387.5	10.8	67.2	55.87	1,497.3	253.6	1,243.5	1,166.6	76.88	16.176	
3,500.0	3,457.4	3,441.4	3,441.4	11.1	68.3	56.30	1,497.3	253.6	1,237.0	1,158.8	78.20	15.819	
3,543.3	3,499.8	3,483.8	3,483.8	11.3	69.2	56.64	1,497.3	253.6	1,232.0	1,152.7	79.24	15.548	
3,600.0	3,555.2	3,539.2	3,539.2	11.5	70.3	57.10	1,497.3	253.6	1,225.4	1,144.8	80.60	15.204	
3,641.7	3,596.0	3,580.0	3,580.0	11.7	71.1	57.43	1,497.3	253.6	1,220.7	1,139.1	81.61	14.958	
3,700.0	3,653.0	3,637.0	3,637.0	11.9	72.2	57.91	1,497.3	253.6	1,214.1	1,131.1	83.01	14.626	
3,740.1	3,692.3	3,676.3	3,676.3	12.1	73.0	58.24	1,497.3	253.6	1,209.6	1,125.6	83.98	14.404	
3,800.0	3,750.8	3,734.8	3,734.8	12.4	74.2	58.73	1,497.3	253.6	1,203.0	1,117.6	85.43	14.082	
3,838.6	3,788.6	3,772.6	3,772.6	12.6	75.0	59.05	1,497.3	253.6	1,198.8	1,112.4	86.36	13.881	
3,900.0	3,848.7	3,832.7	3,832.7	12.8	76.2	59.57	1,497.3	253.6	1,192.2	1,104.3	87.85	13.571	
3,937.0	3,884.9	3,868.9	3,868.9	13.0	76.9	59.89	1,497.3	253.6	1,188.2	1,099.5	88.74	13.389	
4,000.0	3,946.5	3,930.5	3,930.5	13.3	78.1	60.43	1,497.3	253.6	1,181.6	1,091.3	90.27	13.089	
4,035.4	3,981.1	3,965.1	3,965.1	13.4	78.8	60.73	1,497.3	253.6	1,177.9	1,086.8	91.13	12.925	
4,100.0	4,044.3	4,028.3	4,028.3	13.7	80.1	61.30	1,497.3	253.6	1,171.3	1,078.6	92.70	12.635	
4,133.8	4,077.4	4,061.4	4,061.4	13.9	80.8	61.59	1,497.3	253.6	1,167.9	1,074.4	93.53	12.487	
4,200.0	4,142.1	4,126.1	4,126.1	14.2	82.1	62.18	1,497.3	253.6	1,161.3	1,066.1	95.14	12.206	
4,232.3	4,173.7	4,157.7	4,157.7	14.3	82.7	62.47	1,497.3	253.6	1,158.1	1,062.2	95.93	12.073	
4,300.0	4,239.9	4,223.9	4,223.9	14.6	84.0	63.08	1,497.3	253.6	1,151.6	1,054.0	97.58	11.801	
4,330.7	4,270.0	4,254.0	4,254.0	14.7	84.6	63.36	1,497.3	253.6	1,148.6	1,050.3	98.33	11.681	
4,400.0	4,337.7	4,321.7	4,321.7	15.0	86.0	63.99	1,497.3	253.6	1,142.1	1,042.1	100.03	11.418	
4,429.1	4,366.2	4,350.2	4,350.2	15.2	86.6	64.26	1,497.3	253.6	1,139.4	1,038.7	100.74	11.310	
4,500.0	4,435.6	4,419.6	4,419.6	15.5	88.0	64.92	1,497.3	253.6	1,133.0	1,030.5	102.48	11.056	
4,527.5	4,462.5	4,446.5	4,446.5	15.6	88.5	65.18	1,497.3	253.6	1,130.6	1,027.4	103.16	10.960	
4,600.0	4,533.4	4,517.4	4,517.4	15.9	89.9	65.86	1,497.3	253.6	1,124.2	1,019.3	104.94	10.713	
4,626.0	4,558.8	4,542.8	4,542.8	16.0	90.5	66.11	1,497.3	253.6	1,122.0	1,016.4	105.57	10.627	
4,673.6	4,605.3	4,589.3	4,589.3	16.3	91.4	66.56	1,497.3	253.6	1,117.9	1,011.2	106.74	10.473	
4,700.0	4,631.2	4,615.2	4,615.2	16.4	91.9	66.77	1,497.3	253.6	1,115.7	1,008.3	107.40	10.388	
4,724.4	4,655.1	4,639.1	4,639.1	16.4	92.4	66.96	1,497.3	253.6	1,113.9	1,005.9	107.99	10.314	
4,800.0	4,729.5	4,713.5	4,713.5	16.7	93.9	67.49	1,497.3	253.6	1,108.6	998.8	109.82	10.095	
4,822.8	4,752.1	4,736.1	4,736.1	16.7	94.3	67.64	1,497.3	253.6	1,107.2	996.8	110.36	10.033	
4,900.0	4,828.4	4,812.4	4,812.4	17.0	95.9	68.09	1,497.3	253.6	1,103.0	990.8	112.18	9.832	
4,921.2	4,849.5	4,833.5	4,833.5	17.0	96.3	68.20	1,497.3	253.6	1,102.0	989.3	112.67	9.780	
5,000.0	4,927.8	4,911.8	4,911.8	17.2	97.9	68.55	1,497.3	253.6	1,098.8	984.3	114.49	9.598	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,931.4	4,931.4	17.2	98.3	68.63	1,497.3	253.6	1,098.1	983.2	114.93	9.555	
5,100.0	5,027.5	5,011.5	5,011.5	17.4	99.9	68.88	1,497.3	253.6	1,095.9	979.2	116.74	9.388	
5,118.1	5,045.6	5,029.6	5,029.6	17.4	100.2	68.92	1,497.3	253.6	1,095.6	978.4	117.14	9.353	
5,200.0	5,127.4	5,111.4	5,111.4	17.6	101.9	69.06	1,497.3	253.6	1,094.4	975.5	118.94	9.202	
5,216.5	5,143.9	5,127.9	5,127.9	17.6	102.2	69.07	1,497.3	253.6	1,094.3	975.0	119.29	9.173	
5,273.4	5,200.8	5,184.8	5,184.8	17.7	103.4	36.41	1,497.3	253.6	1,094.1	977.7	116.40	9.399	
5,300.0	5,227.4	5,211.4	5,211.4	17.7	103.9	36.41	1,497.3	253.6	1,094.1	977.1	116.98	9.352	
5,314.9	5,242.3	5,226.3	5,226.3	17.7	104.2	36.41	1,497.3	253.6	1,094.1	976.8	117.31	9.326	
5,400.0	5,327.4	5,311.4	5,311.4	17.8	105.9	36.41	1,497.3	253.6	1,094.1	974.9	119.18	9.180	
5,413.4	5,340.8	5,324.8	5,324.8	17.9	106.2	36.41	1,497.3	253.6	1,094.1	974.6	119.47	9.157	
5,500.0	5,427.4	5,411.4	5,411.4	18.0	107.9	36.41	1,497.3	253.6	1,094.1	972.7	121.38	9.014	
5,511.8	5,439.2	5,423.2	5,423.2	18.0	108.2	36.41	1,497.3	253.6	1,094.1	972.4	121.64	8.994	
5,600.0	5,527.4	5,511.4	5,511.4	18.1	109.9	36.41	1,497.3	253.6	1,094.1	970.5	123.58	8.853	
5,610.2	5,537.6	5,521.6	5,521.6	18.1	110.1	36.41	1,497.3	253.6	1,094.1	970.3	123.80	8.837	
5,700.0	5,627.4	5,611.4	5,611.4	18.3	111.9	36.41	1,497.3	253.6	1,094.1	968.3	125.78	8.698	
5,708.6	5,636.0	5,620.0	5,620.0	18.3	112.1	36.41	1,497.3	253.6	1,094.1	968.1	125.97	8.685	
5,800.0	5,727.4	5,711.4	5,711.4	18.4	114.0	36.41	1,497.3	253.6	1,094.1	966.1	127.98	8.549	
5,807.1	5,734.5	5,718.5	5,718.5	18.4	114.1	36.41	1,497.3	253.6	1,094.1	965.9	128.14	8.538	
5,900.0	5,827.4	5,811.4	5,811.4	18.6	116.0	36.41	1,497.3	253.6	1,094.1	963.9	130.19	8.404	
5,905.5	5,832.9	5,816.9	5,816.9	18.6	116.1	36.41	1,497.3	253.6	1,094.1	963.8	130.31	8.396	
6,000.0	5,927.4	5,911.4	5,911.4	18.7	118.0	36.41	1,497.3	253.6	1,094.1	961.7	132.39	8.264	
6,003.9	5,931.3	5,915.3	5,915.3	18.7	118.1	36.41	1,497.3	253.6	1,094.1	961.6	132.48	8.259	
6,100.0	6,027.4	6,011.4	6,011.4	18.9	120.0	36.41	1,497.3	253.6	1,094.1	959.5	134.60	8.129	
6,102.3	6,029.7	6,013.7	6,013.7	18.9	120.0	36.41	1,497.3	253.6	1,094.1	959.4	134.65	8.125	
6,200.0	6,127.4	6,111.4	6,111.4	19.0	122.0	36.41	1,497.3	253.6	1,094.1	957.3	136.80	7.997	
6,200.8	6,128.2	6,112.2	6,112.2	19.0	122.0	36.41	1,497.3	253.6	1,094.1	957.2	136.82	7.996	
6,299.2	6,226.6	6,210.6	6,210.6	19.2	124.0	36.41	1,497.3	253.6	1,094.1	955.1	138.99	7.872	
6,301.4	6,228.8	6,212.8	6,212.8	19.2	124.0	36.41	1,497.3	253.6	1,094.1	955.0	139.04	7.869	
6,350.0	6,277.4	6,261.4	6,261.4	19.3	125.0	-53.72	1,497.3	253.6	1,093.1	949.4	143.69	7.607	
6,397.6	6,324.7	6,308.7	6,308.7	19.3	126.0	-54.11	1,497.3	253.6	1,090.2	945.9	144.34	7.553	
6,400.0	6,327.1	6,311.1	6,311.1	19.3	126.0	-54.14	1,497.3	253.6	1,090.1	945.7	144.37	7.551	
6,450.0	6,376.3	6,360.3	6,360.3	19.3	127.0	-54.83	1,497.3	253.6	1,085.0	940.2	144.79	7.494	
6,496.0	6,421.1	6,405.1	6,405.1	19.3	127.9	-55.72	1,497.3	253.6	1,078.7	933.7	144.99	7.440	
6,500.0	6,424.9	6,408.9	6,408.9	19.3	128.0	-55.81	1,497.3	253.6	1,078.0	933.0	145.00	7.435	
6,550.0	6,472.4	6,456.4	6,456.4	19.3	128.9	-57.06	1,497.3	253.6	1,069.3	924.2	145.07	7.371	
6,594.5	6,513.8	6,497.8	6,497.8	19.3	129.8	-58.41	1,497.3	253.6	1,060.0	915.0	145.08	7.307	
6,600.0	6,518.8	6,502.8	6,502.8	19.3	129.9	-58.59	1,497.3	253.6	1,058.8	913.7	145.08	7.298	
6,650.0	6,563.8	6,547.8	6,547.8	19.3	130.8	-60.39	1,497.3	253.6	1,046.8	901.7	145.12	7.214	
6,692.9	6,601.1	6,585.1	6,585.1	19.2	131.5	-62.13	1,497.3	253.6	1,035.5	890.3	145.26	7.129	
6,700.0	6,607.1	6,591.1	6,591.1	19.2	131.6	-62.44	1,497.3	253.6	1,033.6	888.3	145.29	7.114	
6,750.0	6,648.6	6,632.6	6,632.6	19.2	132.5	-64.71	1,497.3	253.6	1,019.3	873.6	145.67	6.997	
6,791.3	6,681.4	6,665.4	6,665.4	19.1	133.1	-66.75	1,497.3	253.6	1,006.8	860.6	146.17	6.888	
6,800.0	6,688.1	6,672.1	6,672.1	19.1	133.3	-67.19	1,497.3	253.6	1,004.1	857.8	146.30	6.864	
6,850.0	6,725.3	6,709.3	6,709.3	19.1	134.0	-69.81	1,497.3	253.6	988.5	841.3	147.20	6.715	
6,889.7	6,753.2	6,737.2	6,737.2	19.0	134.6	-71.96	1,497.3	253.6	976.0	827.9	148.10	6.590	
6,900.0	6,760.1	6,744.1	6,744.1	19.0	134.7	-72.52	1,497.3	253.6	972.7	824.4	148.35	6.557	
6,950.0	6,792.3	6,776.3	6,776.3	19.0	135.4	-75.26	1,497.3	253.6	957.1	807.4	149.68	6.394	
6,988.2	6,815.1	6,799.1	6,799.1	18.9	135.8	-77.33	1,497.3	253.6	945.5	794.8	150.76	6.272	
7,000.0	6,821.8	6,805.8	6,805.8	18.9	136.0	-77.96	1,497.3	253.6	942.0	790.9	151.10	6.235	
7,050.0	6,848.3	6,832.3	6,832.3	18.9	136.5	-80.54	1,497.3	253.6	927.8	775.3	152.52	6.083	
7,086.6	6,865.9	6,849.9	6,849.9	18.9	136.9	-82.31	1,497.3	253.6	918.2	764.7	153.53	5.981	
7,100.0	6,871.9	6,855.9	6,855.9	18.9	137.0	-82.92	1,497.3	253.6	914.9	761.0	153.88	5.946	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KOWITZ 27-5 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,876.3	6,876.3	18.8	137.4	-85.05	1,497.3	253.6	903.6	748.4	155.12	5.825	
7,185.0	6,904.7	6,888.7	6,888.7	18.8	137.6	-86.35	1,497.3	253.6	896.8	740.8	155.93	5.751	
7,200.0	6,909.5	6,893.5	6,893.5	18.9	137.7	-86.85	1,497.3	253.6	894.2	737.9	156.25	5.723	
7,250.0	6,923.4	6,907.4	6,907.4	19.3	138.0	-88.29	1,497.3	253.6	887.1	729.8	157.27	5.641	
7,283.4	6,930.8	6,914.8	6,914.8	19.8	138.2	-89.03	1,497.3	253.6	883.7	725.8	157.92	5.596	
7,300.0	6,933.9	6,917.9	6,917.9	20.0	138.2	-89.33	1,497.3	253.6	882.5	724.3	158.23	5.577	
7,350.0	6,940.9	6,924.9	6,924.9	20.8	138.4	-89.93	1,497.3	253.6	880.6	721.4	159.15	5.533	
7,359.5	6,941.9	6,925.9	6,925.9	21.0	138.4	-90.00	1,497.3	253.6	880.5	721.2	159.33	5.526 CC	
7,381.9	6,943.6	6,927.6	6,927.6	21.4	138.4	-90.09	1,497.3	253.6	880.8	721.1	159.74	5.514 ES	
7,400.0	6,944.5	6,928.5	6,928.5	21.7	138.4	-90.10	1,497.3	253.6	881.4	721.4	160.06	5.507	
7,432.4	6,945.0	6,929.0	6,929.0	22.3	138.4	-89.96	1,497.3	253.6	883.5	722.9	160.65	5.500 SF	
7,480.3	6,944.6	6,928.6	6,928.6	23.2	138.4	-89.93	1,497.3	253.6	888.8	727.2	161.53	5.502	
7,500.0	6,944.4	6,928.4	6,928.4	23.6	138.4	-89.92	1,497.3	253.6	891.6	729.7	161.90	5.507	
7,578.7	6,943.7	6,927.7	6,927.7	25.2	138.4	-89.88	1,497.3	253.6	907.4	743.9	163.47	5.551	
7,600.0	6,943.6	6,927.6	6,927.6	25.6	138.4	-89.87	1,497.3	253.6	912.7	748.9	163.90	5.569	
7,677.1	6,942.9	6,926.9	6,926.9	27.3	138.4	-89.83	1,497.3	253.6	936.0	770.5	165.55	5.654	
7,700.0	6,942.7	6,926.7	6,926.7	27.8	138.4	-89.81	1,497.3	253.6	944.0	778.0	166.03	5.686	
7,775.6	6,942.1	6,926.1	6,926.1	29.5	138.4	-89.77	1,497.3	253.6	973.8	806.1	167.73	5.806	
7,800.0	6,941.9	6,925.9	6,925.9	30.1	138.4	-89.76	1,497.3	253.6	984.5	816.2	168.28	5.851	
7,874.0	6,941.3	6,925.3	6,925.3	31.8	138.4	-89.72	1,497.3	253.6	1,019.8	849.8	170.00	5.999	
7,900.0	6,941.1	6,925.1	6,925.1	32.4	138.4	-89.71	1,497.3	253.6	1,033.1	862.5	170.60	6.056	
7,972.4	6,940.4	6,924.4	6,924.4	34.2	138.4	-89.67	1,497.3	253.6	1,072.8	900.4	172.34	6.225	
8,000.0	6,940.2	6,924.2	6,924.2	34.9	138.3	-89.65	1,497.3	253.6	1,088.8	915.8	173.00	6.293	
8,070.8	6,939.6	6,923.6	6,923.6	36.6	138.3	-89.61	1,497.3	253.6	1,131.9	957.2	174.74	6.478	
8,100.0	6,939.4	6,923.4	6,923.4	37.3	138.3	-89.60	1,497.3	253.6	1,150.4	975.0	175.46	6.557	
8,169.3	6,938.8	6,922.8	6,922.8	39.1	138.3	-89.56	1,497.3	253.6	1,196.2	1,019.0	177.19	6.751	
8,200.0	6,938.5	6,922.5	6,922.5	39.8	138.3	-89.54	1,497.3	253.6	1,217.2	1,039.2	177.95	6.840	
8,267.7	6,938.0	6,922.0	6,922.0	41.6	138.3	-89.51	1,497.3	253.6	1,264.9	1,085.2	179.67	7.040	
8,300.0	6,937.7	6,921.7	6,921.7	42.4	138.3	-89.49	1,497.3	253.6	1,288.3	1,107.8	180.49	7.138	
8,366.1	6,937.2	6,921.2	6,921.2	44.1	138.3	-89.45	1,497.3	253.6	1,337.3	1,155.1	182.19	7.340	
8,400.0	6,936.9	6,920.9	6,920.9	45.0	138.3	-89.43	1,497.3	253.6	1,363.0	1,179.9	183.06	7.446	
8,464.5	6,936.3	6,920.3	6,920.3	46.6	138.3	-89.40	1,497.3	253.6	1,412.9	1,228.1	184.73	7.648	
8,500.0	6,936.0	6,920.0	6,920.0	47.6	138.3	-89.38	1,497.3	253.6	1,440.8	1,255.1	185.65	7.761	
8,563.0	6,935.5	6,919.5	6,919.5	49.2	138.3	-89.34	1,497.3	253.6	1,491.1	1,303.8	187.29	7.961	
8,600.0	6,935.2	6,919.2	6,919.2	50.2	138.2	-89.32	1,497.3	253.6	1,521.1	1,332.9	188.26	8.080	
8,661.4	6,934.7	6,918.7	6,918.7	51.8	138.2	-89.29	1,497.3	253.6	1,571.6	1,381.7	189.88	8.277	
8,700.0	6,934.4	6,918.4	6,918.4	52.8	138.2	-89.27	1,497.3	253.6	1,603.7	1,412.8	190.89	8.401	
8,759.8	6,933.9	6,917.9	6,917.9	54.4	138.2	-89.24	1,497.3	253.6	1,654.1	1,461.6	192.48	8.593	
8,800.0	6,933.5	6,917.5	6,917.5	55.5	138.2	-89.22	1,497.3	253.6	1,688.2	1,494.7	193.54	8.723	
8,858.2	6,933.0	6,917.0	6,917.0	57.1	138.2	-89.18	1,497.3	253.6	1,738.2	1,543.1	195.09	8.909	
8,900.0	6,932.7	6,916.7	6,916.7	58.2	138.2	-89.16	1,497.3	253.6	1,774.3	1,578.1	196.20	9.043	
8,956.7	6,932.2	6,916.2	6,916.2	59.7	138.2	-89.13	1,497.3	253.6	1,823.7	1,626.0	197.72	9.224	
9,000.0	6,931.8	6,915.8	6,915.8	60.9	138.2	-89.11	1,497.3	253.6	1,861.8	1,662.9	198.87	9.361	
9,055.1	6,931.4	6,915.4	6,915.4	62.4	138.2	-89.08	1,497.3	253.6	1,910.5	1,710.1	200.35	9.536	
9,100.0	6,931.0	6,915.0	6,915.0	63.6	138.2	-89.05	1,497.3	253.6	1,950.4	1,748.9	201.56	9.677	
9,153.5	6,930.6	6,914.6	6,914.6	65.0	138.2	-89.02	1,497.3	253.6	1,998.3	1,795.3	203.00	9.844	
9,200.0	6,930.2	6,914.2	6,914.2	66.3	138.1	-89.00	1,497.3	253.6	2,040.2	1,835.9	204.25	9.989	
9,251.9	6,929.7	6,913.7	6,913.7	67.7	138.1	-88.97	1,497.3	253.6	2,087.1	1,881.5	205.65	10.149	
9,300.0	6,929.3	6,913.3	6,913.3	69.0	138.1	-88.94	1,497.3	253.6	2,130.8	1,923.9	206.95	10.296	
9,350.4	6,928.9	6,912.9	6,912.9	70.4	138.1	-88.92	1,497.3	253.6	2,176.8	1,968.5	208.31	10.450	
9,400.0	6,928.5	6,912.5	6,912.5	71.7	138.1	-88.89	1,497.3	253.6	2,222.2	2,012.6	209.65	10.600	
9,448.8	6,928.1	6,912.1	6,912.1	73.0	138.1	-88.86	1,497.3	253.6	2,267.1	2,056.2	210.98	10.746	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KOWITZ 27-5 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,500.0	6,927.7	6,911.7	6,911.7	74.4	138.1	-88.84	1,497.3	253.6	2,314.4	2,102.0	212.36	10.898	
9,547.2	6,927.3	6,911.3	6,911.3	75.7	138.1	-88.81	1,497.3	253.6	2,358.1	2,144.5	213.65	11.037	
9,600.0	6,926.8	6,910.8	6,910.8	77.2	138.1	-88.78	1,497.3	253.6	2,407.2	2,192.1	215.08	11.192	
9,645.6	6,926.4	6,910.4	6,910.4	78.4	138.1	-88.76	1,497.3	253.6	2,449.7	2,233.4	216.32	11.324	
9,700.0	6,926.0	6,910.0	6,910.0	79.9	138.1	-88.73	1,497.3	253.6	2,500.5	2,282.7	217.80	11.481	
9,744.1	6,925.6	6,909.6	6,909.6	81.1	138.1	-88.70	1,497.3	253.6	2,541.8	2,322.8	219.01	11.606	
9,800.0	6,925.2	6,909.2	6,909.2	82.6	138.0	-88.67	1,497.3	253.6	2,594.3	2,373.8	220.53	11.764	
9,842.5	6,924.8	6,908.8	6,908.8	83.8	138.0	-88.65	1,497.3	253.6	2,634.4	2,412.7	221.69	11.883	
9,900.0	6,924.3	6,908.3	6,908.3	85.4	138.0	-88.62	1,497.3	253.6	2,688.6	2,465.4	223.26	12.043	
9,940.9	6,924.0	6,908.0	6,908.0	86.5	138.0	-88.60	1,497.3	253.6	2,727.3	2,502.9	224.38	12.155	
10,000.0	6,923.5	6,907.5	6,907.5	88.1	138.0	-88.56	1,497.3	253.6	2,783.3	2,557.3	225.99	12.316	
10,039.3	6,923.2	6,907.2	6,907.2	89.2	138.0	-88.54	1,497.3	253.6	2,820.6	2,593.6	227.07	12.422	
10,100.0	6,922.6	6,906.6	6,906.6	90.9	138.0	-88.51	1,497.3	253.6	2,878.3	2,649.6	228.73	12.584	
10,137.8	6,922.3	6,906.3	6,906.3	91.9	138.0	-88.49	1,497.3	253.6	2,914.3	2,684.5	229.77	12.684	
10,200.0	6,921.8	6,905.8	6,905.8	93.7	138.0	-88.46	1,497.3	253.6	2,973.7	2,742.2	231.47	12.847	
10,236.2	6,921.5	6,905.5	6,905.5	94.7	138.0	-88.44	1,497.3	253.6	3,008.3	2,775.8	232.46	12.941	
10,300.0	6,921.0	6,905.0	6,905.0	96.4	138.0	-88.40	1,497.3	253.6	3,069.3	2,835.1	234.21	13.105	
10,334.6	6,920.7	6,904.7	6,904.7	97.4	138.0	-88.38	1,497.3	253.6	3,102.5	2,867.4	235.16	13.193	
10,400.0	6,920.1	6,904.1	6,904.1	99.2	137.9	-88.35	1,497.3	253.6	3,165.3	2,928.3	236.96	13.358	
10,433.0	6,919.9	6,903.9	6,903.9	100.1	137.9	-88.33	1,497.3	253.6	3,197.0	2,959.2	237.86	13.441	
10,500.0	6,919.3	6,903.3	6,903.3	101.9	137.9	-88.29	1,497.3	253.6	3,261.4	3,021.7	239.70	13.606	
10,531.5	6,919.0	6,903.0	6,903.0	102.8	137.9	-88.28	1,497.3	253.6	3,291.7	3,051.2	240.57	13.683	
10,600.0	6,918.5	6,902.5	6,902.5	104.7	137.9	-88.24	1,497.3	253.6	3,357.8	3,115.4	242.45	13.850	
10,629.9	6,918.2	6,902.2	6,902.2	105.5	137.9	-88.22	1,497.3	253.6	3,386.7	3,143.4	243.27	13.921	
10,700.0	6,917.6	6,901.6	6,901.6	107.5	137.9	-88.18	1,497.3	253.6	3,454.4	3,209.2	245.20	14.088	
10,728.3	6,917.4	6,901.4	6,901.4	108.3	137.9	-88.17	1,497.3	253.6	3,481.8	3,235.8	245.98	14.155	
10,800.0	6,916.8	6,900.8	6,900.8	110.3	137.9	-88.13	1,497.3	253.6	3,551.2	3,303.3	247.95	14.322	
10,826.7	6,916.6	6,900.6	6,900.6	111.0	137.9	-88.12	1,497.3	253.6	3,577.1	3,328.4	248.69	14.384	
10,900.0	6,916.0	6,900.0	6,900.0	113.0	137.9	-88.08	1,497.3	253.6	3,648.2	3,397.5	250.70	14.552	
10,925.2	6,915.8	6,899.8	6,899.8	113.7	137.9	-88.06	1,497.3	253.6	3,672.6	3,421.2	251.40	14.609	
11,000.0	6,915.1	6,899.1	6,899.1	115.8	137.8	-88.02	1,497.3	253.6	3,745.3	3,491.8	253.46	14.777	
11,023.6	6,914.9	6,898.9	6,898.9	116.5	137.8	-88.01	1,497.3	253.6	3,768.2	3,514.1	254.11	14.829	
11,100.0	6,914.3	6,898.3	6,898.3	118.6	137.8	-87.97	1,497.3	253.6	3,842.5	3,586.3	256.21	14.998	
11,122.0	6,914.1	6,898.1	6,898.1	119.2	137.8	-87.96	1,497.3	253.6	3,864.0	3,607.2	256.82	15.046	
11,200.0	6,913.5	6,897.5	6,897.5	121.4	137.8	-87.91	1,497.3	253.6	3,939.9	3,681.0	258.97	15.214	
11,220.4	6,913.3	6,897.3	6,897.3	121.9	137.8	-87.90	1,497.3	253.6	3,959.9	3,700.4	259.53	15.258	
11,300.0	6,912.6	6,896.6	6,896.6	124.1	137.8	-87.86	1,497.3	253.6	4,037.5	3,775.8	261.72	15.426	
11,318.9	6,912.5	6,896.5	6,896.5	124.7	137.8	-87.85	1,497.3	253.6	4,055.9	3,793.7	262.25	15.466	
11,400.0	6,911.8	6,895.8	6,895.8	126.9	137.8	-87.81	1,497.3	253.6	4,135.1	3,870.6	264.48	15.635	
11,417.3	6,911.6	6,895.6	6,895.6	127.4	137.8	-87.80	1,497.3	253.6	4,152.0	3,887.1	264.96	15.670	
11,500.0	6,911.0	6,895.0	6,895.0	129.7	137.8	-87.75	1,497.3	253.6	4,232.9	3,965.6	267.24	15.839	
11,515.7	6,910.8	6,894.8	6,894.8	130.2	137.8	-87.74	1,497.3	253.6	4,248.3	3,980.6	267.67	15.871	
11,600.0	6,910.1	6,894.1	6,894.1	132.5	137.7	-87.70	1,497.3	253.6	4,330.7	4,060.7	270.00	16.040	
11,614.1	6,910.0	6,894.0	6,894.0	132.9	137.7	-87.69	1,497.3	253.6	4,344.6	4,074.2	270.39	16.068	
11,700.0	6,909.3	6,893.3	6,893.3	135.3	137.7	-87.64	1,497.3	253.6	4,428.7	4,155.9	272.76	16.237	
11,712.6	6,909.2	6,893.2	6,893.2	135.6	137.7	-87.64	1,497.3	253.6	4,441.0	4,167.9	273.11	16.261	
11,800.0	6,908.5	6,892.5	6,892.5	138.1	137.7	-87.59	1,497.3	253.6	4,526.7	4,251.2	275.52	16.430	
11,811.0	6,908.4	6,892.4	6,892.4	138.4	137.7	-87.58	1,497.3	253.6	4,537.5	4,261.7	275.82	16.451	
11,900.0	6,907.6	6,891.6	6,891.6	140.9	137.7	-87.54	1,497.3	253.6	4,624.9	4,346.6	278.28	16.619	
11,909.4	6,907.5	6,891.5	6,891.5	141.1	137.7	-87.53	1,497.3	253.6	4,634.1	4,355.6	278.54	16.637	
12,000.0	6,906.8	6,890.8	6,890.8	143.6	137.7	-87.48	1,497.3	253.6	4,723.1	4,442.0	281.04	16.806	
12,007.8	6,906.7	6,890.7	6,890.7	143.9	137.7	-87.48	1,497.3	253.6	4,730.8	4,449.5	281.26	16.820	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1												Offset Site Error:	0.0 usft
Survey Program: 0-INC												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,100.0	6,905.9	6,889.9	6,889.9	146.4	137.7	-87.43	1,497.3	253.6	4,821.4	4,537.5	283.80	16.988	
12,106.3	6,905.9	6,889.9	6,889.9	146.6	137.7	-87.42	1,497.3	253.6	4,827.5	4,543.5	283.98	17.000	
12,200.0	6,905.1	6,889.1	6,889.1	149.2	137.6	-87.37	1,497.3	253.6	4,919.7	4,633.1	286.56	17.168	
12,204.7	6,905.1	6,889.1	6,889.1	149.4	137.6	-87.37	1,497.3	253.6	4,924.3	4,637.6	286.69	17.176	
12,300.0	6,904.3	6,888.3	6,888.3	152.0	137.6	-87.32	1,497.3	253.6	5,018.1	4,728.8	289.33	17.344	
12,303.1	6,904.3	6,888.3	6,888.3	152.1	137.6	-87.32	1,497.3	253.6	5,021.2	4,731.8	289.41	17.350	
12,400.0	6,903.4	6,887.4	6,887.4	154.8	137.6	-87.27	1,497.3	253.6	5,116.6	4,824.5	292.09	17.517	
12,401.5	6,903.4	6,887.4	6,887.4	154.8	137.6	-87.27	1,497.3	253.6	5,118.1	4,826.0	292.13	17.520	
12,500.0	6,902.6	6,886.6	6,886.6	157.6	137.6	-87.21	1,497.3	253.6	5,215.1	4,920.3	294.85	17.687	
12,598.4	6,901.8	6,885.8	6,885.8	160.3	137.6	-87.16	1,497.3	253.6	5,312.1	5,014.6	297.57	17.852	
12,600.0	6,901.8	6,885.8	6,885.8	160.4	137.6	-87.16	1,497.3	253.6	5,313.7	5,016.1	297.61	17.854	
12,696.8	6,901.0	6,885.0	6,885.0	163.1	137.6	-87.11	1,497.3	253.6	5,409.2	5,108.9	300.29	18.013	
12,700.0	6,900.9	6,884.9	6,884.9	163.2	137.6	-87.10	1,497.3	253.6	5,412.3	5,112.0	300.37	18.019	
12,795.2	6,900.1	6,884.1	6,884.1	165.8	137.5	-87.05	1,497.3	253.6	5,506.3	5,203.3	303.01	18.172	
12,800.0	6,900.1	6,884.1	6,884.1	166.0	137.5	-87.05	1,497.3	253.6	5,511.0	5,207.9	303.14	18.180	
12,893.7	6,899.3	6,883.3	6,883.3	168.6	137.5	-87.00	1,497.3	253.6	5,603.5	5,297.8	305.72	18.329	
12,900.0	6,899.3	6,883.3	6,883.3	168.8	137.5	-87.00	1,497.3	253.6	5,609.8	5,303.9	305.90	18.339	
12,992.1	6,898.5	6,882.5	6,882.5	171.3	137.5	-86.95	1,497.3	253.6	5,700.7	5,392.3	308.44	18.482	
13,000.0	6,898.4	6,882.4	6,882.4	171.6	137.5	-86.94	1,497.3	253.6	5,708.5	5,399.9	308.66	18.495	
13,090.5	6,897.7	6,881.7	6,881.7	174.1	137.5	-86.89	1,497.3	253.6	5,798.0	5,486.8	311.16	18.633	
13,100.0	6,897.6	6,881.6	6,881.6	174.4	137.5	-86.89	1,497.3	253.6	5,807.4	5,495.9	311.42	18.648	
13,188.9	6,896.9	6,880.9	6,880.9	176.8	137.5	-86.84	1,497.3	253.6	5,895.3	5,581.4	313.88	18.782	
13,200.0	6,896.8	6,880.8	6,880.8	177.2	137.5	-86.84	1,497.3	253.6	5,906.2	5,592.0	314.19	18.798	
13,287.4	6,896.0	6,880.0	6,880.0	179.6	137.5	-86.79	1,497.3	253.6	5,992.6	5,676.0	316.60	18.928	
13,300.0	6,895.9	6,879.9	6,879.9	180.0	137.5	-86.78	1,497.3	253.6	6,005.1	5,688.2	316.95	18.947	
13,385.8	6,895.2	6,879.2	6,879.2	182.4	137.4	-86.74	1,497.3	253.6	6,090.0	5,770.7	319.32	19.072	
13,400.0	6,895.1	6,879.1	6,879.1	182.7	137.4	-86.73	1,497.3	253.6	6,104.1	5,784.3	319.71	19.092	
13,484.2	6,894.4	6,878.4	6,878.4	185.1	137.4	-86.68	1,497.3	253.6	6,187.4	5,865.4	322.04	19.213	
13,500.0	6,894.3	6,878.3	6,878.3	185.5	137.4	-86.67	1,497.3	253.6	6,203.0	5,880.6	322.47	19.236	
13,582.6	6,893.6	6,877.6	6,877.6	187.9	137.4	-86.63	1,497.3	253.6	6,284.8	5,960.1	324.76	19.353	
13,600.0	6,893.4	6,877.4	6,877.4	188.3	137.4	-86.62	1,497.3	253.6	6,302.0	5,976.8	325.23	19.377	
13,681.1	6,892.8	6,876.8	6,876.8	190.6	137.4	-86.58	1,497.3	253.6	6,382.3	6,054.8	327.47	19.490	
13,700.0	6,892.6	6,876.6	6,876.6	191.1	137.4	-86.57	1,497.3	253.6	6,401.1	6,073.1	328.00	19.516	
13,779.5	6,891.9	6,875.9	6,875.9	193.4	137.4	-86.52	1,497.3	253.6	6,479.8	6,149.6	330.19	19.624	
13,800.0	6,891.8	6,875.8	6,875.8	193.9	137.4	-86.51	1,497.3	253.6	6,500.1	6,169.4	330.76	19.652	
13,877.9	6,891.1	6,875.1	6,875.1	196.1	137.4	-86.47	1,497.3	253.6	6,577.3	6,244.4	332.91	19.757	
13,900.0	6,890.9	6,874.9	6,874.9	196.7	137.4	-86.46	1,497.3	253.6	6,599.2	6,265.7	333.52	19.787	
13,976.3	6,890.3	6,874.3	6,874.3	198.9	137.3	-86.42	1,497.3	253.6	6,674.9	6,339.3	335.63	19.888	
14,000.0	6,890.1	6,874.1	6,874.1	199.5	137.3	-86.41	1,497.3	253.6	6,698.3	6,362.0	336.28	19.919	
14,074.8	6,889.5	6,873.5	6,873.5	201.6	137.3	-86.36	1,497.3	253.6	6,772.5	6,434.1	338.34	20.017	
14,100.0	6,889.3	6,873.3	6,873.3	202.3	137.3	-86.35	1,497.3	253.6	6,797.5	6,458.4	339.04	20.049	
14,173.2	6,888.7	6,872.7	6,872.7	204.4	137.3	-86.31	1,497.3	253.6	6,870.1	6,529.0	341.06	20.143	
14,200.0	6,888.4	6,872.4	6,872.4	205.1	137.3	-86.30	1,497.3	253.6	6,896.6	6,554.8	341.80	20.177	
14,271.6	6,887.8	6,871.8	6,871.8	207.1	137.3	-86.26	1,497.3	253.6	6,967.7	6,623.9	343.78	20.268	
14,300.0	6,887.6	6,871.6	6,871.6	207.9	137.3	-86.24	1,497.3	253.6	6,995.8	6,651.3	344.56	20.304	
14,370.0	6,887.0	6,871.0	6,871.0	209.9	137.3	-86.21	1,497.3	253.6	7,065.3	6,718.8	346.49	20.391	
14,400.0	6,886.8	6,870.8	6,870.8	210.7	137.3	-86.19	1,497.3	253.6	7,095.0	6,747.7	347.32	20.428	
14,468.5	6,886.2	6,870.2	6,870.2	212.6	137.3	-86.15	1,497.3	253.6	7,163.0	6,813.8	349.21	20.512	
14,500.0	6,885.9	6,869.9	6,869.9	213.5	137.3	-86.14	1,497.3	253.6	7,194.3	6,844.2	350.08	20.550	
14,566.9	6,885.4	6,869.4	6,869.4	215.4	137.2	-86.10	1,497.3	253.6	7,260.7	6,908.7	351.92	20.631	
14,600.0	6,885.1	6,869.1	6,869.1	216.3	137.2	-86.08	1,497.3	253.6	7,293.5	6,940.7	352.84	20.671	
14,613.0	6,885.0	6,869.0	6,869.0	216.7	137.2	-86.08	1,497.3	253.6	7,306.4	6,953.2	353.20	20.687	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	42.05	1,745.1	1,574.3	2,350.3				
98.4	98.4	89.4	89.4	0.1	0.3	42.05	1,745.1	1,574.3	2,350.3	2,349.8	0.43	5,465.337	
100.0	100.0	91.0	91.0	0.1	0.4	42.05	1,745.1	1,574.3	2,350.3	2,349.8	0.44	5,367.346	
196.8	196.8	187.8	187.8	0.3	2.6	42.05	1,745.1	1,574.3	2,350.3	2,347.4	2.90	810.697	
200.0	200.0	191.0	191.0	0.3	2.7	42.05	1,745.1	1,574.3	2,350.3	2,347.3	2.99	787.268	
295.3	295.3	286.3	286.3	0.5	4.7	42.05	1,745.1	1,574.3	2,350.3	2,345.0	5.22	450.525	
300.0	300.0	291.0	291.0	0.5	4.8	42.05	1,745.1	1,574.3	2,350.3	2,344.9	5.33	441.329	
393.7	393.7	384.7	384.7	0.7	6.7	42.05	1,745.1	1,574.3	2,350.3	2,342.8	7.45	315.507	
400.0	400.0	391.0	391.0	0.8	6.8	42.05	1,745.1	1,574.3	2,350.3	2,342.7	7.59	309.582	
492.1	492.1	483.1	483.1	1.0	8.7	42.05	1,745.1	1,574.3	2,350.3	2,340.6	9.67	243.140	
500.0	500.0	491.0	491.0	1.0	8.9	42.05	1,745.1	1,574.3	2,350.3	2,340.4	9.84	238.762	
590.5	590.5	581.5	581.5	1.2	10.7	42.05	1,745.1	1,574.3	2,350.3	2,338.4	11.88	197.882	
600.0	600.0	591.0	591.0	1.2	10.9	42.05	1,745.1	1,574.3	2,350.3	2,338.2	12.09	194.409	
689.0	689.0	680.0	680.0	1.4	12.7	42.05	1,745.1	1,574.3	2,350.3	2,336.2	14.08	166.867	
700.0	700.0	691.0	691.0	1.4	12.9	42.05	1,745.1	1,574.3	2,350.3	2,335.9	14.33	163.989	
787.4	787.4	778.4	778.4	1.6	14.7	42.05	1,745.1	1,574.3	2,350.3	2,334.0	16.29	144.274	
800.0	800.0	791.0	791.0	1.7	14.9	42.05	1,745.1	1,574.3	2,350.3	2,333.7	16.57	141.817	
885.8	885.8	876.8	876.8	1.9	16.6	42.05	1,745.1	1,574.3	2,350.3	2,331.8	18.49	127.078	
900.0	900.0	891.0	891.0	1.9	16.9	42.05	1,745.1	1,574.3	2,350.3	2,331.4	18.81	124.934	
984.2	984.2	975.2	975.2	2.1	18.6	42.05	1,745.1	1,574.3	2,350.3	2,329.6	20.70	113.549	
1,000.0	1,000.0	991.0	991.0	2.1	18.9	42.05	1,745.1	1,574.3	2,350.3	2,329.2	21.05	111.647	
1,082.7	1,082.7	1,073.7	1,073.7	2.3	20.6	42.05	1,745.1	1,574.3	2,350.3	2,327.4	22.90	102.626	
1,100.0	1,100.0	1,091.0	1,091.0	2.3	21.0	42.05	1,745.1	1,574.3	2,350.3	2,327.0	23.29	100.918	
1,150.0	1,150.0	1,141.0	1,141.0	2.4	22.0	42.05	1,745.1	1,574.3	2,350.3	2,325.9	24.41	96.292	
1,181.1	1,181.1	1,172.1	1,172.1	2.5	22.6	74.75	1,745.1	1,574.3	2,350.2	2,325.1	25.10	93.624	
1,200.0	1,200.0	1,191.0	1,191.0	2.6	23.0	74.76	1,745.1	1,574.3	2,350.1	2,324.6	25.53	92.072	
1,279.5	1,279.5	1,270.5	1,270.5	2.7	24.6	74.83	1,745.1	1,574.3	2,349.5	2,322.2	27.30	86.065	
1,300.0	1,299.9	1,290.9	1,290.9	2.8	25.0	74.85	1,745.1	1,574.3	2,349.2	2,321.5	27.76	84.641	
1,377.9	1,377.7	1,368.7	1,368.7	3.0	26.5	75.00	1,745.1	1,574.3	2,347.9	2,318.4	29.49	79.608	
1,400.0	1,399.7	1,390.7	1,390.7	3.0	27.0	75.05	1,745.1	1,574.3	2,347.4	2,317.4	29.98	78.289	
1,476.4	1,475.7	1,466.7	1,466.7	3.2	28.5	75.27	1,745.1	1,574.3	2,345.4	2,313.8	31.69	74.017	
1,500.0	1,499.1	1,490.1	1,490.1	3.2	29.0	75.35	1,745.1	1,574.3	2,344.7	2,312.5	32.21	72.786	
1,574.8	1,573.2	1,564.2	1,564.2	3.4	30.5	75.64	1,745.1	1,574.3	2,342.2	2,308.3	33.89	69.114	
1,600.0	1,598.2	1,589.2	1,589.2	3.5	31.0	75.75	1,745.1	1,574.3	2,341.2	2,306.8	34.45	67.956	
1,673.2	1,670.3	1,661.3	1,661.3	3.7	32.4	76.09	1,745.1	1,574.3	2,338.2	2,302.1	36.10	64.765	
1,700.0	1,696.6	1,687.6	1,687.6	3.8	33.0	76.24	1,745.1	1,574.3	2,337.0	2,300.3	36.71	63.668	
1,749.9	1,745.5	1,736.5	1,736.5	3.9	33.9	76.51	1,745.1	1,574.3	2,334.6	2,296.7	37.84	61.701	
1,771.6	1,766.8	1,757.8	1,757.8	4.0	34.4	76.62	1,745.1	1,574.3	2,333.5	2,295.2	38.34	60.869	
1,800.0	1,794.5	1,785.5	1,785.5	4.1	34.9	76.76	1,745.1	1,574.3	2,332.1	2,293.1	38.99	59.817	
1,870.1	1,863.1	1,854.1	1,854.1	4.3	36.3	77.10	1,745.1	1,574.3	2,328.8	2,288.1	40.61	57.350	
1,900.0	1,892.3	1,883.3	1,883.3	4.4	36.9	77.25	1,745.1	1,574.3	2,327.3	2,286.0	41.30	56.354	
1,968.5	1,959.4	1,950.4	1,950.4	4.7	38.2	77.58	1,745.1	1,574.3	2,324.2	2,281.3	42.89	54.185	
2,000.0	1,990.2	1,981.2	1,981.2	4.8	38.9	77.74	1,745.1	1,574.3	2,322.7	2,279.1	43.63	53.240	
2,066.9	2,055.6	2,046.6	2,046.6	5.1	40.2	78.06	1,745.1	1,574.3	2,319.8	2,274.6	45.20	51.327	
2,100.0	2,088.0	2,079.0	2,079.0	5.2	40.8	78.23	1,745.1	1,574.3	2,318.3	2,272.3	45.97	50.430	
2,165.3	2,151.9	2,142.9	2,142.9	5.4	42.1	78.55	1,745.1	1,574.3	2,315.5	2,268.0	47.51	48.738	
2,200.0	2,185.8	2,176.8	2,176.8	5.6	42.8	78.72	1,745.1	1,574.3	2,314.1	2,265.8	48.33	47.885	
2,263.8	2,248.2	2,239.2	2,239.2	5.8	44.1	79.04	1,745.1	1,574.3	2,311.5	2,261.6	49.83	46.384	
2,300.0	2,283.6	2,274.6	2,274.6	6.0	44.8	79.22	1,745.1	1,574.3	2,310.0	2,259.3	50.69	45.571	
2,362.2	2,344.5	2,335.5	2,335.5	6.2	46.0	79.52	1,745.1	1,574.3	2,307.6	2,255.4	52.17	44.235	
2,400.0	2,381.4	2,372.4	2,372.4	6.4	46.7	79.71	1,745.1	1,574.3	2,306.1	2,253.1	53.06	43.460	
2,460.6	2,440.7	2,431.7	2,431.7	6.6	47.9	80.01	1,745.1	1,574.3	2,303.9	2,249.4	54.50	42.269	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,470.2	2,470.2	6.8	48.7	80.21	1,745.1	1,574.3	2,302.4	2,247.0	55.44	41.529	
2,559.0	2,537.0	2,528.0	2,528.0	7.0	49.9	80.50	1,745.1	1,574.3	2,300.3	2,243.5	56.85	40.463	
2,600.0	2,577.1	2,568.1	2,568.1	7.2	50.7	80.71	1,745.1	1,574.3	2,298.9	2,241.1	57.83	39.755	
2,657.5	2,633.3	2,624.3	2,624.3	7.4	51.8	81.00	1,745.1	1,574.3	2,297.0	2,237.8	59.20	38.801	
2,700.0	2,674.9	2,665.9	2,665.9	7.6	52.6	81.21	1,745.1	1,574.3	2,295.6	2,235.4	60.22	38.123	
2,755.9	2,729.6	2,720.6	2,720.6	7.9	53.7	81.49	1,745.1	1,574.3	2,293.8	2,232.2	61.55	37.265	
2,800.0	2,772.7	2,763.7	2,763.7	8.0	54.6	81.71	1,745.1	1,574.3	2,292.4	2,229.8	62.61	36.615	
2,854.3	2,825.8	2,816.8	2,816.8	8.3	55.7	81.99	1,745.1	1,574.3	2,290.8	2,226.9	63.91	35.844	
2,900.0	2,870.5	2,861.5	2,861.5	8.5	56.6	82.22	1,745.1	1,574.3	2,289.5	2,224.4	65.00	35.220	
2,952.7	2,922.1	2,913.1	2,913.1	8.7	57.6	82.48	1,745.1	1,574.3	2,288.0	2,221.7	66.27	34.525	
3,000.0	2,968.3	2,959.3	2,959.3	8.9	58.5	82.72	1,745.1	1,574.3	2,286.7	2,219.3	67.40	33.925	
3,051.2	3,018.4	3,009.4	3,009.4	9.1	59.5	82.98	1,745.1	1,574.3	2,285.3	2,216.7	68.63	33.298	
3,100.0	3,066.1	3,057.1	3,057.1	9.3	60.5	83.23	1,745.1	1,574.3	2,284.1	2,214.3	69.81	32.721	
3,149.6	3,114.7	3,105.7	3,105.7	9.5	61.5	83.48	1,745.1	1,574.3	2,282.8	2,211.9	71.00	32.154	
3,200.0	3,164.0	3,155.0	3,155.0	9.8	62.5	83.73	1,745.1	1,574.3	2,281.7	2,209.4	72.21	31.598	
3,248.0	3,210.9	3,201.9	3,201.9	10.0	63.4	83.98	1,745.1	1,574.3	2,280.6	2,207.2	73.36	31.086	
3,300.0	3,261.8	3,252.8	3,252.8	10.2	64.4	84.24	1,745.1	1,574.3	2,279.4	2,204.8	74.61	30.549	
3,346.4	3,307.2	3,298.2	3,298.2	10.4	65.4	84.48	1,745.1	1,574.3	2,278.5	2,202.7	75.73	30.086	
3,400.0	3,359.6	3,350.6	3,350.6	10.6	66.4	84.75	1,745.1	1,574.3	2,277.4	2,200.4	77.02	29.568	
3,444.9	3,403.5	3,394.5	3,394.5	10.8	67.3	84.98	1,745.1	1,574.3	2,276.5	2,198.4	78.10	29.148	
3,500.0	3,457.4	3,448.4	3,448.4	11.1	68.4	85.26	1,745.1	1,574.3	2,275.5	2,196.1	79.43	28.649	
3,543.3	3,499.8	3,490.8	3,490.8	11.3	69.2	85.48	1,745.1	1,574.3	2,274.8	2,194.3	80.47	28.268	
3,600.0	3,555.2	3,546.2	3,546.2	11.5	70.3	85.77	1,745.1	1,574.3	2,273.9	2,192.0	81.84	27.785	
3,641.7	3,596.0	3,587.0	3,587.0	11.7	71.2	85.99	1,745.1	1,574.3	2,273.2	2,190.4	82.84	27.440	
3,700.0	3,653.0	3,644.0	3,644.0	11.9	72.3	86.28	1,745.1	1,574.3	2,272.4	2,188.2	84.25	26.973	
3,740.1	3,692.3	3,683.3	3,683.3	12.1	73.1	86.49	1,745.1	1,574.3	2,271.9	2,186.7	85.22	26.660	
3,800.0	3,750.8	3,741.8	3,741.8	12.4	74.3	86.80	1,745.1	1,574.3	2,271.1	2,184.5	86.66	26.208	
3,838.6	3,788.6	3,779.6	3,779.6	12.6	75.0	86.99	1,745.1	1,574.3	2,270.7	2,183.1	87.59	25.925	
3,900.0	3,848.7	3,839.7	3,839.7	12.8	76.2	87.31	1,745.1	1,574.3	2,270.0	2,181.0	89.07	25.486	
3,937.0	3,884.9	3,875.9	3,875.9	13.0	77.0	87.50	1,745.1	1,574.3	2,269.7	2,179.7	89.96	25.230	
4,000.0	3,946.5	3,937.5	3,937.5	13.3	78.2	87.82	1,745.1	1,574.3	2,269.1	2,177.7	91.48	24.805	
4,035.4	3,981.1	3,972.1	3,972.1	13.4	78.9	88.00	1,745.1	1,574.3	2,268.9	2,176.5	92.33	24.572	
4,100.0	4,044.3	4,035.3	4,035.3	13.7	80.2	88.33	1,745.1	1,574.3	2,268.4	2,174.5	93.89	24.160	
4,133.8	4,077.4	4,068.4	4,068.4	13.9	80.8	88.51	1,745.1	1,574.3	2,268.2	2,173.5	94.71	23.950	
4,200.0	4,142.1	4,133.1	4,133.1	14.2	82.1	88.85	1,745.1	1,574.3	2,267.9	2,171.6	96.30	23.550	
4,232.3	4,173.7	4,164.7	4,164.7	14.3	82.8	89.01	1,745.1	1,574.3	2,267.8	2,170.7	97.08	23.360	
4,300.0	4,239.9	4,230.9	4,230.9	14.6	84.1	89.36	1,745.1	1,574.3	2,267.6	2,168.9	98.71	22.972	
4,330.7	4,270.0	4,261.0	4,261.0	14.7	84.7	89.52	1,745.1	1,574.3	2,267.5	2,168.1	99.45	22.800	
4,400.0	4,337.7	4,328.7	4,328.7	15.0	86.1	89.88	1,745.1	1,574.3	2,267.4	2,166.3	101.12	22.423	
4,424.3	4,361.5	4,352.5	4,352.5	15.2	86.6	90.00	1,745.1	1,574.3	2,267.4	2,165.7	101.71	22.294	
4,429.1	4,366.2	4,357.2	4,357.2	15.2	86.7	90.02	1,745.1	1,574.3	2,267.4	2,165.6	101.82	22.268	
4,500.0	4,435.6	4,426.6	4,426.6	15.5	88.0	90.39	1,745.1	1,574.3	2,267.5	2,163.9	103.53	21.901	
4,527.5	4,462.5	4,453.5	4,453.5	15.6	88.6	90.53	1,745.1	1,574.3	2,267.5	2,163.3	104.19	21.762	
4,600.0	4,533.4	4,524.4	4,524.4	15.9	90.0	90.90	1,745.1	1,574.3	2,267.7	2,161.8	105.94	21.406	
4,626.0	4,558.8	4,549.8	4,549.8	16.0	90.5	91.04	1,745.1	1,574.3	2,267.8	2,161.2	106.57	21.281	
4,673.6	4,605.3	4,596.3	4,596.3	16.3	91.5	91.28	1,745.1	1,574.3	2,268.0	2,160.3	107.71	21.056	
4,700.0	4,631.2	4,622.2	4,622.2	16.4	92.0	91.42	1,745.1	1,574.3	2,268.1	2,159.8	108.33	20.937	
4,724.4	4,655.1	4,646.1	4,646.1	16.4	92.5	91.54	1,745.1	1,574.3	2,268.3	2,159.4	108.89	20.830	
4,800.0	4,729.5	4,720.5	4,720.5	16.7	94.0	91.88	1,745.1	1,574.3	2,268.7	2,158.0	110.63	20.507	
4,822.8	4,752.1	4,743.1	4,743.1	16.7	94.4	91.97	1,745.1	1,574.3	2,268.8	2,157.7	111.14	20.413	
4,900.0	4,828.4	4,819.4	4,819.4	17.0	95.9	92.26	1,745.1	1,574.3	2,269.2	2,156.3	112.90	20.100	
4,921.2	4,849.5	4,840.5	4,840.5	17.0	96.4	92.33	1,745.1	1,574.3	2,269.3	2,155.9	113.37	20.017	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,918.8	4,918.8	17.2	97.9	92.55	1,745.1	1,574.3	2,269.7	2,154.5	115.14	19.713	
5,019.7	4,947.4	4,938.4	4,938.4	17.2	98.3	92.59	1,745.1	1,574.3	2,269.8	2,154.2	115.57	19.640	
5,100.0	5,027.5	5,018.5	5,018.5	17.4	100.0	92.75	1,745.1	1,574.3	2,270.0	2,152.7	117.34	19.345	
5,118.1	5,045.6	5,036.6	5,036.6	17.4	100.3	92.78	1,745.1	1,574.3	2,270.1	2,152.4	117.74	19.281	
5,200.0	5,127.4	5,118.4	5,118.4	17.6	102.0	92.86	1,745.1	1,574.3	2,270.3	2,150.7	119.52	18.995	
5,216.5	5,143.9	5,134.9	5,134.9	17.6	102.3	92.87	1,745.1	1,574.3	2,270.3	2,150.4	119.87	18.939	
5,273.4	5,200.8	5,191.8	5,191.8	17.7	103.4	60.20	1,745.1	1,574.3	2,270.3	2,154.5	115.78	19.610	
5,300.0	5,227.4	5,218.4	5,218.4	17.7	104.0	60.20	1,745.1	1,574.3	2,270.3	2,153.9	116.36	19.511	
5,314.9	5,242.3	5,233.3	5,233.3	17.7	104.3	60.20	1,745.1	1,574.3	2,270.3	2,153.6	116.69	19.456	
5,400.0	5,327.4	5,318.4	5,318.4	17.8	106.0	60.20	1,745.1	1,574.3	2,270.3	2,151.7	118.57	19.148	
5,413.4	5,340.8	5,331.8	5,331.8	17.9	106.3	60.20	1,745.1	1,574.3	2,270.3	2,151.4	118.87	19.100	
5,500.0	5,427.4	5,418.4	5,418.4	18.0	108.0	60.20	1,745.1	1,574.3	2,270.3	2,149.5	120.78	18.797	
5,511.8	5,439.2	5,430.2	5,430.2	18.0	108.2	60.20	1,745.1	1,574.3	2,270.3	2,149.3	121.04	18.756	
5,600.0	5,527.4	5,518.4	5,518.4	18.1	110.0	60.20	1,745.1	1,574.3	2,270.3	2,147.3	122.99	18.459	
5,610.2	5,537.6	5,528.6	5,528.6	18.1	110.2	60.20	1,745.1	1,574.3	2,270.3	2,147.1	123.22	18.425	
5,700.0	5,627.4	5,618.4	5,618.4	18.3	112.0	60.20	1,745.1	1,574.3	2,270.3	2,145.1	125.21	18.132	
5,708.6	5,636.0	5,627.0	5,627.0	18.3	112.2	60.20	1,745.1	1,574.3	2,270.3	2,144.9	125.40	18.105	
5,800.0	5,727.4	5,718.4	5,718.4	18.4	114.0	60.20	1,745.1	1,574.3	2,270.3	2,142.9	127.42	17.817	
5,807.1	5,734.5	5,725.5	5,725.5	18.4	114.2	60.20	1,745.1	1,574.3	2,270.3	2,142.7	127.58	17.796	
5,900.0	5,827.4	5,818.4	5,818.4	18.6	116.0	60.20	1,745.1	1,574.3	2,270.3	2,140.7	129.63	17.513	
5,905.5	5,832.9	5,823.9	5,823.9	18.6	116.1	60.20	1,745.1	1,574.3	2,270.3	2,140.5	129.76	17.497	
6,000.0	5,927.4	5,918.4	5,918.4	18.7	118.0	60.20	1,745.1	1,574.3	2,270.3	2,138.5	131.85	17.219	
6,003.9	5,931.3	5,922.3	5,922.3	18.7	118.1	60.20	1,745.1	1,574.3	2,270.3	2,138.4	131.94	17.207	
6,100.0	6,027.4	6,018.4	6,018.4	18.9	120.1	60.20	1,745.1	1,574.3	2,270.3	2,136.2	134.07	16.934	
6,102.3	6,029.7	6,020.7	6,020.7	18.9	120.1	60.20	1,745.1	1,574.3	2,270.3	2,136.2	134.12	16.928	
6,200.0	6,127.4	6,118.4	6,118.4	19.0	122.1	60.20	1,745.1	1,574.3	2,270.3	2,134.0	136.28	16.659	
6,200.8	6,128.2	6,119.2	6,119.2	19.0	122.1	60.20	1,745.1	1,574.3	2,270.3	2,134.0	136.30	16.657	
6,299.2	6,226.6	6,217.6	6,217.6	19.2	124.1	60.20	1,745.1	1,574.3	2,270.3	2,131.8	138.48	16.394	
6,301.4	6,228.8	6,219.8	6,219.8	19.2	124.1	60.20	1,745.1	1,574.3	2,270.3	2,131.8	138.53	16.388	
6,350.0	6,277.4	6,268.4	6,268.4	19.3	125.1	-29.88	1,745.1	1,574.3	2,268.9	2,124.8	144.07	15.748	
6,397.6	6,324.7	6,315.7	6,315.7	19.3	126.0	-30.11	1,745.1	1,574.3	2,264.7	2,120.4	144.35	15.689	
6,400.0	6,327.1	6,318.1	6,318.1	19.3	126.1	-30.12	1,745.1	1,574.3	2,264.4	2,120.1	144.35	15.687	
6,450.0	6,376.3	6,367.3	6,367.3	19.3	127.1	-30.53	1,745.1	1,574.3	2,257.0	2,112.9	144.11	15.662	
6,496.0	6,421.1	6,412.1	6,412.1	19.3	128.0	-31.07	1,745.1	1,574.3	2,247.5	2,104.1	143.43	15.669	
6,500.0	6,424.9	6,415.9	6,415.9	19.3	128.1	-31.13	1,745.1	1,574.3	2,246.6	2,103.2	143.36	15.671	
6,550.0	6,472.4	6,463.4	6,463.4	19.3	129.0	-31.90	1,745.1	1,574.3	2,233.3	2,091.2	142.15	15.712	
6,594.5	6,513.8	6,504.8	6,504.8	19.3	129.8	-32.76	1,745.1	1,574.3	2,219.2	2,078.5	140.74	15.768	
6,600.0	6,518.8	6,509.8	6,509.8	19.3	129.9	-32.88	1,745.1	1,574.3	2,217.3	2,076.7	140.54	15.776	
6,650.0	6,563.8	6,554.8	6,554.8	19.3	130.8	-34.08	1,745.1	1,574.3	2,198.5	2,059.9	138.65	15.857	
6,692.9	6,601.1	6,592.1	6,592.1	19.2	131.6	-35.29	1,745.1	1,574.3	2,180.4	2,043.5	136.89	15.928	
6,700.0	6,607.1	6,598.1	6,598.1	19.2	131.7	-35.51	1,745.1	1,574.3	2,177.2	2,040.6	136.59	15.939	
6,750.0	6,648.6	6,639.6	6,639.6	19.2	132.6	-37.21	1,745.1	1,574.3	2,153.4	2,018.9	134.53	16.006	
6,791.3	6,681.4	6,672.4	6,672.4	19.1	133.2	-38.83	1,745.1	1,574.3	2,132.0	1,999.0	132.98	16.032	
6,800.0	6,688.1	6,679.1	6,679.1	19.1	133.3	-39.19	1,745.1	1,574.3	2,127.3	1,994.6	132.69	16.033	
6,850.0	6,725.3	6,716.3	6,716.3	19.1	134.1	-41.49	1,745.1	1,574.3	2,099.1	1,967.8	131.28	15.990	
6,889.7	6,753.2	6,744.2	6,744.2	19.0	134.7	-43.56	1,745.1	1,574.3	2,075.2	1,944.6	130.64	15.885	
6,900.0	6,760.1	6,751.1	6,751.1	19.0	134.8	-44.13	1,745.1	1,574.3	2,068.9	1,938.3	130.56	15.846	
6,950.0	6,792.3	6,783.3	6,783.3	19.0	135.4	-47.15	1,745.1	1,574.3	2,037.0	1,906.2	130.78	15.576	
6,988.2	6,815.1	6,806.1	6,806.1	18.9	135.9	-49.71	1,745.1	1,574.3	2,011.5	1,879.8	131.68	15.276	
7,000.0	6,821.8	6,812.8	6,812.8	18.9	136.0	-50.55	1,745.1	1,574.3	2,003.5	1,871.4	132.09	15.167	
7,050.0	6,848.3	6,839.3	6,839.3	18.9	136.6	-54.35	1,745.1	1,574.3	1,968.6	1,834.1	134.56	14.630	
7,086.6	6,865.9	6,856.9	6,856.9	18.9	136.9	-57.37	1,745.1	1,574.3	1,942.4	1,805.3	137.05	14.173	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,100.0	6,871.9	6,862.9	6,862.9	18.9	137.0	-58.53	1,745.1	1,574.3	1,932.7	1,794.6	138.08	13.997		
7,150.0	6,892.3	6,883.3	6,883.3	18.8	137.5	-63.06	1,745.1	1,574.3	1,895.8	1,753.4	142.36	13.317		
7,185.0	6,904.7	6,895.7	6,895.7	18.8	137.7	-66.40	1,745.1	1,574.3	1,869.6	1,724.0	145.60	12.840		
7,200.0	6,909.5	6,900.5	6,900.5	18.9	137.8	-67.86	1,745.1	1,574.3	1,858.3	1,711.3	146.99	12.642		
7,250.0	6,923.4	6,914.4	6,914.4	19.3	138.1	-72.84	1,745.1	1,574.3	1,820.4	1,668.9	151.46	12.018		
7,283.4	6,930.8	6,921.8	6,921.8	19.8	138.2	-76.22	1,745.1	1,574.3	1,794.9	1,640.7	154.15	11.644		
7,300.0	6,933.9	6,924.9	6,924.9	20.0	138.3	-77.88	1,745.1	1,574.3	1,782.3	1,626.9	155.33	11.474		
7,350.0	6,940.9	6,931.9	6,931.9	20.8	138.4	-82.85	1,745.1	1,574.3	1,744.2	1,586.0	158.25	11.022		
7,381.9	6,943.6	6,934.6	6,934.6	21.4	138.5	-85.91	1,745.1	1,574.3	1,720.1	1,560.6	159.55	10.781		
7,400.0	6,944.5	6,935.5	6,935.5	21.7	138.5	-87.60	1,745.1	1,574.3	1,706.5	1,546.4	160.08	10.661		
7,432.4	6,945.0	6,936.0	6,936.0	22.3	138.5	-90.53	1,745.1	1,574.3	1,682.3	1,521.6	160.69	10.469		
7,480.3	6,944.6	6,935.6	6,935.6	23.2	138.5	-90.51	1,745.1	1,574.3	1,647.1	1,485.5	161.58	10.194		
7,500.0	6,944.4	6,935.4	6,935.4	23.6	138.5	-90.50	1,745.1	1,574.3	1,632.8	1,470.9	161.94	10.083		
7,578.7	6,943.7	6,934.7	6,934.7	25.2	138.5	-90.47	1,745.1	1,574.3	1,576.9	1,413.3	163.52	9.643		
7,600.0	6,943.6	6,934.6	6,934.6	25.6	138.5	-90.46	1,745.1	1,574.3	1,562.1	1,398.1	163.94	9.528		
7,677.1	6,942.9	6,933.9	6,933.9	27.3	138.5	-90.43	1,745.1	1,574.3	1,509.8	1,344.2	165.59	9.117		
7,700.0	6,942.7	6,933.7	6,933.7	27.8	138.5	-90.42	1,745.1	1,574.3	1,494.7	1,328.6	166.08	9.000		
7,775.6	6,942.1	6,933.1	6,933.1	29.5	138.5	-90.38	1,745.1	1,574.3	1,446.2	1,278.5	167.78	8.620		
7,800.0	6,941.9	6,932.9	6,932.9	30.1	138.5	-90.37	1,745.1	1,574.3	1,431.1	1,262.8	168.32	8.502		
7,874.0	6,941.3	6,932.3	6,932.3	31.8	138.4	-90.34	1,745.1	1,574.3	1,386.8	1,216.7	170.05	8.155		
7,900.0	6,941.1	6,932.1	6,932.1	32.4	138.4	-90.33	1,745.1	1,574.3	1,371.8	1,201.2	170.65	8.039		
7,972.4	6,940.4	6,931.4	6,931.4	34.2	138.4	-90.30	1,745.1	1,574.3	1,332.0	1,159.6	172.39	7.726		
8,000.0	6,940.2	6,931.2	6,931.2	34.9	138.4	-90.29	1,745.1	1,574.3	1,317.5	1,144.5	173.05	7.613		
8,070.8	6,939.6	6,930.6	6,930.6	36.6	138.4	-90.26	1,745.1	1,574.3	1,282.4	1,107.6	174.79	7.337		
8,100.0	6,939.4	6,930.4	6,930.4	37.3	138.4	-90.25	1,745.1	1,574.3	1,268.8	1,093.3	175.51	7.229		
8,169.3	6,938.8	6,929.8	6,929.8	39.1	138.4	-90.22	1,745.1	1,574.3	1,238.6	1,061.4	177.24	6.988		
8,200.0	6,938.5	6,929.5	6,929.5	39.8	138.4	-90.20	1,745.1	1,574.3	1,226.3	1,048.3	178.01	6.889		
8,267.7	6,938.0	6,929.0	6,929.0	41.6	138.4	-90.18	1,745.1	1,574.3	1,201.4	1,021.6	179.73	6.684		
8,300.0	6,937.7	6,928.7	6,928.7	42.4	138.4	-90.16	1,745.1	1,574.3	1,190.7	1,010.1	180.55	6.595		
8,366.1	6,937.2	6,928.2	6,928.2	44.1	138.4	-90.13	1,745.1	1,574.3	1,171.2	989.0	182.24	6.427		
8,400.0	6,936.9	6,927.9	6,927.9	45.0	138.3	-90.12	1,745.1	1,574.3	1,162.6	979.5	183.11	6.349		
8,464.5	6,936.3	6,927.3	6,927.3	46.6	138.3	-90.09	1,745.1	1,574.3	1,148.7	964.0	184.79	6.216		
8,500.0	6,936.0	6,927.0	6,927.0	47.6	138.3	-90.08	1,745.1	1,574.3	1,142.6	956.9	185.71	6.153		
8,563.0	6,935.5	6,926.5	6,926.5	49.2	138.3	-90.05	1,745.1	1,574.3	1,134.4	947.0	187.36	6.055		
8,600.0	6,935.2	6,926.2	6,926.2	50.2	138.3	-90.03	1,745.1	1,574.3	1,131.1	942.8	188.32	6.006		
8,661.4	6,934.7	6,925.7	6,925.7	51.8	138.3	-90.01	1,745.1	1,574.3	1,128.5	938.5	189.94	5.941		
8,680.3	6,934.5	6,925.5	6,925.5	52.3	138.3	-90.00	1,745.1	1,574.3	1,128.3	937.9	190.44	5.925 CC		
8,700.0	6,934.4	6,925.4	6,925.4	52.8	138.3	-89.99	1,745.1	1,574.3	1,128.5	937.5	190.96	5.909 ES		
8,759.8	6,933.9	6,924.9	6,924.9	54.4	138.3	-89.97	1,745.1	1,574.3	1,131.1	938.5	192.54	5.874		
8,800.0	6,933.5	6,924.5	6,924.5	55.5	138.3	-89.95	1,745.1	1,574.3	1,134.6	941.0	193.61	5.860		
8,858.2	6,933.0	6,924.0	6,924.0	57.1	138.3	-89.92	1,745.1	1,574.3	1,142.2	947.1	195.16	5.853 SF		
8,900.0	6,932.7	6,923.7	6,923.7	58.2	138.3	-89.91	1,745.1	1,574.3	1,149.5	953.2	196.27	5.857		
8,956.7	6,932.2	6,923.2	6,923.2	59.7	138.3	-89.88	1,745.1	1,574.3	1,161.6	963.8	197.79	5.873		
9,000.0	6,931.8	6,922.8	6,922.8	60.9	138.2	-89.86	1,745.1	1,574.3	1,172.7	973.8	198.95	5.895		
9,055.1	6,931.4	6,922.4	6,922.4	62.4	138.2	-89.84	1,745.1	1,574.3	1,188.9	988.5	200.43	5.932		
9,100.0	6,931.0	6,922.0	6,922.0	63.6	138.2	-89.82	1,745.1	1,574.3	1,203.8	1,002.2	201.63	5.970		
9,153.5	6,930.6	6,921.6	6,921.6	65.0	138.2	-89.80	1,745.1	1,574.3	1,223.5	1,020.4	203.07	6.025		
9,200.0	6,930.2	6,921.2	6,921.2	66.3	138.2	-89.78	1,745.1	1,574.3	1,242.2	1,037.9	204.32	6.080		
9,251.9	6,929.7	6,920.7	6,920.7	67.7	138.2	-89.76	1,745.1	1,574.3	1,264.8	1,059.1	205.73	6.148		
9,300.0	6,929.3	6,920.3	6,920.3	69.0	138.2	-89.74	1,745.1	1,574.3	1,287.2	1,080.2	207.03	6.218		
9,350.4	6,928.9	6,919.9	6,919.9	70.4	138.2	-89.72	1,745.1	1,574.3	1,312.2	1,103.8	208.39	6.297		
9,400.0	6,928.5	6,919.5	6,919.5	71.7	138.2	-89.69	1,745.1	1,574.3	1,338.3	1,128.5	209.74	6.381		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,448.8	6,928.1	6,919.1	6,919.1	73.0	138.2	-89.67	1,745.1	1,574.3	1,365.1	1,154.1	211.06	6.468		
9,500.0	6,927.7	6,918.7	6,918.7	74.4	138.2	-89.65	1,745.1	1,574.3	1,394.6	1,182.1	212.45	6.564		
9,547.2	6,927.3	6,918.3	6,918.3	75.7	138.2	-89.63	1,745.1	1,574.3	1,422.8	1,209.1	213.74	6.657		
9,600.0	6,926.8	6,917.8	6,917.8	77.2	138.1	-89.61	1,745.1	1,574.3	1,455.6	1,240.4	215.17	6.765		
9,645.6	6,926.4	6,917.4	6,917.4	78.4	138.1	-89.59	1,745.1	1,574.3	1,484.9	1,268.4	216.42	6.861		
9,700.0	6,926.0	6,917.0	6,917.0	79.9	138.1	-89.57	1,745.1	1,574.3	1,520.7	1,302.9	217.90	6.979		
9,744.1	6,925.6	6,916.6	6,916.6	81.1	138.1	-89.55	1,745.1	1,574.3	1,550.6	1,331.5	219.10	7.077		
9,800.0	6,925.2	6,916.2	6,916.2	82.6	138.1	-89.52	1,745.1	1,574.3	1,589.5	1,368.9	220.63	7.205		
9,842.5	6,924.8	6,915.8	6,915.8	83.8	138.1	-89.51	1,745.1	1,574.3	1,619.7	1,398.0	221.79	7.303		
9,900.0	6,924.3	6,915.3	6,915.3	85.4	138.1	-89.48	1,745.1	1,574.3	1,661.5	1,438.1	223.36	7.439		
9,940.9	6,924.0	6,915.0	6,915.0	86.5	138.1	-89.46	1,745.1	1,574.3	1,691.7	1,467.3	224.48	7.536		
10,000.0	6,923.5	6,914.5	6,914.5	88.1	138.1	-89.44	1,745.1	1,574.3	1,736.2	1,510.1	226.10	7.679		
10,039.3	6,923.2	6,914.2	6,914.2	89.2	138.1	-89.42	1,745.1	1,574.3	1,766.3	1,539.1	227.18	7.775		
10,100.0	6,922.6	6,913.6	6,913.6	90.9	138.1	-89.40	1,745.1	1,574.3	1,813.4	1,584.5	228.84	7.924		
10,137.8	6,922.3	6,913.3	6,913.3	91.9	138.1	-89.38	1,745.1	1,574.3	1,843.1	1,613.2	229.87	8.018		
10,200.0	6,921.8	6,912.8	6,912.8	93.7	138.0	-89.36	1,745.1	1,574.3	1,892.7	1,661.1	231.58	8.173		
10,236.2	6,921.5	6,912.5	6,912.5	94.7	138.0	-89.34	1,745.1	1,574.3	1,921.9	1,689.3	232.58	8.263		
10,300.0	6,921.0	6,912.0	6,912.0	96.4	138.0	-89.31	1,745.1	1,574.3	1,973.9	1,739.5	234.33	8.424		
10,334.6	6,920.7	6,911.7	6,911.7	97.4	138.0	-89.30	1,745.1	1,574.3	2,002.4	1,767.1	235.28	8.511		
10,400.0	6,920.1	6,911.1	6,911.1	99.2	138.0	-89.27	1,745.1	1,574.3	2,056.7	1,819.6	237.08	8.675		
10,433.0	6,919.9	6,910.9	6,910.9	100.1	138.0	-89.26	1,745.1	1,574.3	2,084.4	1,846.4	237.99	8.759		
10,500.0	6,919.3	6,910.3	6,910.3	101.9	138.0	-89.23	1,745.1	1,574.3	2,141.0	1,901.2	239.83	8.927		
10,531.5	6,919.0	6,910.0	6,910.0	102.8	138.0	-89.21	1,745.1	1,574.3	2,167.8	1,927.1	240.69	9.007		
10,600.0	6,918.5	6,909.5	6,909.5	104.7	138.0	-89.19	1,745.1	1,574.3	2,226.6	1,984.0	242.58	9.179		
10,629.9	6,918.2	6,909.2	6,909.2	105.5	138.0	-89.17	1,745.1	1,574.3	2,252.5	2,009.1	243.40	9.254		
10,700.0	6,917.6	6,908.6	6,908.6	107.5	138.0	-89.14	1,745.1	1,574.3	2,313.4	2,068.1	245.34	9.430		
10,728.3	6,917.4	6,908.4	6,908.4	108.3	138.0	-89.13	1,745.1	1,574.3	2,338.2	2,092.0	246.12	9.500		
10,800.0	6,916.8	6,907.8	6,907.8	110.3	137.9	-89.10	1,745.1	1,574.3	2,401.2	2,153.1	248.09	9.679		
10,826.7	6,916.6	6,907.6	6,907.6	111.0	137.9	-89.09	1,745.1	1,574.3	2,424.8	2,176.0	248.83	9.745		
10,900.0	6,916.0	6,907.0	6,907.0	113.0	137.9	-89.06	1,745.1	1,574.3	2,489.9	2,239.0	250.85	9.926		
10,925.2	6,915.8	6,906.8	6,906.8	113.7	137.9	-89.05	1,745.1	1,574.3	2,512.4	2,260.8	251.54	9.988		
11,000.0	6,915.1	6,906.1	6,906.1	115.8	137.9	-89.02	1,745.1	1,574.3	2,579.4	2,325.8	253.61	10.171		
11,023.6	6,914.9	6,905.9	6,905.9	116.5	137.9	-89.01	1,745.1	1,574.3	2,600.7	2,346.4	254.26	10.228		
11,100.0	6,914.3	6,905.3	6,905.3	118.6	137.9	-88.97	1,745.1	1,574.3	2,669.7	2,413.3	256.37	10.414		
11,122.0	6,914.1	6,905.1	6,905.1	119.2	137.9	-88.96	1,745.1	1,574.3	2,689.7	2,432.7	256.98	10.467		
11,200.0	6,913.5	6,904.5	6,904.5	121.4	137.9	-88.93	1,745.1	1,574.3	2,760.7	2,501.5	259.13	10.654		
11,220.4	6,913.3	6,904.3	6,904.3	121.9	137.9	-88.92	1,745.1	1,574.3	2,779.3	2,519.6	259.70	10.702		
11,300.0	6,912.6	6,903.6	6,903.6	124.1	137.9	-88.89	1,745.1	1,574.3	2,852.2	2,590.3	261.89	10.891		
11,318.9	6,912.5	6,903.5	6,903.5	124.7	137.9	-88.88	1,745.1	1,574.3	2,869.6	2,607.2	262.42	10.935		
11,400.0	6,911.8	6,902.8	6,902.8	126.9	137.8	-88.85	1,745.1	1,574.3	2,944.3	2,679.7	264.66	11.125		
11,417.3	6,911.6	6,902.6	6,902.6	127.4	137.8	-88.84	1,745.1	1,574.3	2,960.3	2,695.2	265.14	11.165		
11,500.0	6,911.0	6,902.0	6,902.0	129.7	137.8	-88.80	1,745.1	1,574.3	3,036.9	2,769.5	267.42	11.356		
11,515.7	6,910.8	6,901.8	6,901.8	130.2	137.8	-88.80	1,745.1	1,574.3	3,051.5	2,783.7	267.86	11.392		
11,600.0	6,910.1	6,901.1	6,901.1	132.5	137.8	-88.76	1,745.1	1,574.3	3,130.0	2,859.8	270.19	11.584		
11,614.1	6,910.0	6,901.0	6,901.0	132.9	137.8	-88.76	1,745.1	1,574.3	3,143.2	2,872.6	270.58	11.616		
11,700.0	6,909.3	6,900.3	6,900.3	135.3	137.8	-88.72	1,745.1	1,574.3	3,223.5	2,950.5	272.96	11.810		
11,712.6	6,909.2	6,900.2	6,900.2	135.6	137.8	-88.71	1,745.1	1,574.3	3,235.2	2,961.9	273.30	11.838		
11,800.0	6,908.5	6,899.5	6,899.5	138.1	137.8	-88.68	1,745.1	1,574.3	3,317.3	3,041.6	275.72	12.031		
11,811.0	6,908.4	6,899.4	6,899.4	138.4	137.8	-88.67	1,745.1	1,574.3	3,327.7	3,051.6	276.03	12.056		
11,900.0	6,907.6	6,898.6	6,898.6	140.9	137.8	-88.64	1,745.1	1,574.3	3,411.5	3,133.0	278.49	12.250		
11,909.4	6,907.5	6,898.5	6,898.5	141.1	137.8	-88.63	1,745.1	1,574.3	3,420.4	3,141.7	278.75	12.271		
12,000.0	6,906.8	6,897.8	6,897.8	143.6	137.7	-88.59	1,745.1	1,574.3	3,506.1	3,224.8	281.26	12.466		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,007.8	6,906.7	6,897.7	6,897.7	143.9	137.7	-88.59	1,745.1	1,574.3	3,513.5	3,232.0	281.48	12.482	
12,100.0	6,905.9	6,896.9	6,896.9	146.4	137.7	-88.55	1,745.1	1,574.3	3,600.9	3,316.8	284.03	12.678	
12,106.3	6,905.9	6,896.9	6,896.9	146.6	137.7	-88.55	1,745.1	1,574.3	3,606.8	3,322.6	284.20	12.691	
12,200.0	6,905.1	6,896.1	6,896.1	149.2	137.7	-88.51	1,745.1	1,574.3	3,696.0	3,409.2	286.80	12.887	
12,204.7	6,905.1	6,896.1	6,896.1	149.4	137.7	-88.51	1,745.1	1,574.3	3,700.4	3,413.5	286.93	12.897	
12,300.0	6,904.3	6,895.3	6,895.3	152.0	137.7	-88.47	1,745.1	1,574.3	3,791.3	3,501.7	289.57	13.093	
12,303.1	6,904.3	6,895.3	6,895.3	152.1	137.7	-88.47	1,745.1	1,574.3	3,794.3	3,504.6	289.65	13.099	
12,400.0	6,903.4	6,894.4	6,894.4	154.8	137.7	-88.42	1,745.1	1,574.3	3,886.9	3,594.6	292.34	13.296	
12,401.5	6,903.4	6,894.4	6,894.4	154.8	137.7	-88.42	1,745.1	1,574.3	3,888.4	3,596.0	292.38	13.299	
12,500.0	6,902.6	6,893.6	6,893.6	157.6	137.7	-88.38	1,745.1	1,574.3	3,982.7	3,687.6	295.11	13.496	
12,598.4	6,901.8	6,892.8	6,892.8	160.3	137.6	-88.34	1,745.1	1,574.3	4,077.1	3,779.3	297.84	13.689	
12,600.0	6,901.8	6,892.8	6,892.8	160.4	137.6	-88.34	1,745.1	1,574.3	4,078.7	3,780.8	297.88	13.692	
12,696.8	6,901.0	6,892.0	6,892.0	163.1	137.6	-88.30	1,745.1	1,574.3	4,171.8	3,871.3	300.56	13.880	
12,700.0	6,900.9	6,891.9	6,891.9	163.2	137.6	-88.30	1,745.1	1,574.3	4,174.9	3,874.2	300.65	13.886	
12,795.2	6,900.1	6,891.1	6,891.1	165.8	137.6	-88.26	1,745.1	1,574.3	4,266.7	3,963.4	303.29	14.068	
12,800.0	6,900.1	6,891.1	6,891.1	166.0	137.6	-88.26	1,745.1	1,574.3	4,271.2	3,967.8	303.42	14.077	
12,893.7	6,899.3	6,890.3	6,890.3	168.6	137.6	-88.22	1,745.1	1,574.3	4,361.6	4,055.6	306.02	14.253	
12,900.0	6,899.3	6,890.3	6,890.3	168.8	137.6	-88.21	1,745.1	1,574.3	4,367.8	4,061.6	306.19	14.265	
12,992.1	6,898.5	6,889.5	6,889.5	171.3	137.6	-88.17	1,745.1	1,574.3	4,456.8	4,148.0	308.75	14.435	
13,000.0	6,898.4	6,889.4	6,889.4	171.6	137.6	-88.17	1,745.1	1,574.3	4,464.4	4,155.5	308.97	14.450	
13,090.5	6,897.7	6,888.7	6,888.7	174.1	137.6	-88.13	1,745.1	1,574.3	4,552.1	4,240.6	311.48	14.615	
13,100.0	6,897.6	6,888.6	6,888.6	174.4	137.6	-88.13	1,745.1	1,574.3	4,561.3	4,249.5	311.74	14.632	
13,188.9	6,896.9	6,887.9	6,887.9	176.8	137.5	-88.09	1,745.1	1,574.3	4,647.5	4,333.3	314.21	14.791	
13,200.0	6,896.8	6,887.8	6,887.8	177.2	137.5	-88.09	1,745.1	1,574.3	4,658.2	4,343.7	314.51	14.811	
13,287.4	6,896.0	6,887.0	6,887.0	179.6	137.5	-88.05	1,745.1	1,574.3	4,743.0	4,426.1	316.93	14.965	
13,300.0	6,895.9	6,886.9	6,886.9	180.0	137.5	-88.05	1,745.1	1,574.3	4,755.3	4,438.0	317.28	14.987	
13,385.8	6,895.2	6,886.2	6,886.2	182.4	137.5	-88.01	1,745.1	1,574.3	4,838.7	4,519.0	319.66	15.137	
13,400.0	6,895.1	6,886.1	6,886.1	182.7	137.5	-88.00	1,745.1	1,574.3	4,852.5	4,532.4	320.06	15.161	
13,484.2	6,894.4	6,885.4	6,885.4	185.1	137.5	-87.97	1,745.1	1,574.3	4,934.4	4,612.0	322.39	15.306	
13,500.0	6,894.3	6,885.3	6,885.3	185.5	137.5	-87.96	1,745.1	1,574.3	4,949.8	4,627.0	322.83	15.333	
13,582.6	6,893.6	6,884.6	6,884.6	187.9	137.5	-87.93	1,745.1	1,574.3	5,030.3	4,705.2	325.12	15.472	
13,600.0	6,893.4	6,884.4	6,884.4	188.3	137.5	-87.92	1,745.1	1,574.3	5,047.2	4,721.6	325.60	15.501	
13,681.1	6,892.8	6,883.8	6,883.8	190.6	137.5	-87.88	1,745.1	1,574.3	5,126.3	4,798.4	327.85	15.636	
13,700.0	6,892.6	6,883.6	6,883.6	191.1	137.5	-87.88	1,745.1	1,574.3	5,144.7	4,816.4	328.38	15.667	
13,779.5	6,891.9	6,882.9	6,882.9	193.4	137.4	-87.84	1,745.1	1,574.3	5,222.3	4,891.7	330.58	15.797	
13,800.0	6,891.8	6,882.8	6,882.8	193.9	137.4	-87.83	1,745.1	1,574.3	5,242.3	4,911.2	331.15	15.831	
13,877.9	6,891.1	6,882.1	6,882.1	196.1	137.4	-87.80	1,745.1	1,574.3	5,318.5	4,985.2	333.31	15.957	
13,900.0	6,890.9	6,881.9	6,881.9	196.7	137.4	-87.79	1,745.1	1,574.3	5,340.0	5,006.1	333.92	15.992	
13,976.3	6,890.3	6,881.3	6,881.3	198.9	137.4	-87.76	1,745.1	1,574.3	5,414.7	5,078.6	336.04	16.113	
14,000.0	6,890.1	6,881.1	6,881.1	199.5	137.4	-87.75	1,745.1	1,574.3	5,437.8	5,101.1	336.69	16.151	
14,074.8	6,889.5	6,880.5	6,880.5	201.6	137.4	-87.72	1,745.1	1,574.3	5,511.0	5,172.2	338.77	16.268	
14,100.0	6,889.3	6,880.3	6,880.3	202.3	137.4	-87.71	1,745.1	1,574.3	5,535.7	5,196.2	339.47	16.307	
14,173.2	6,888.7	6,879.7	6,879.7	204.4	137.4	-87.68	1,745.1	1,574.3	5,607.4	5,265.9	341.50	16.420	
14,200.0	6,888.4	6,879.4	6,879.4	205.1	137.4	-87.67	1,745.1	1,574.3	5,633.6	5,291.4	342.24	16.461	
14,271.6	6,887.8	6,878.8	6,878.8	207.1	137.4	-87.64	1,745.1	1,574.3	5,703.8	5,359.6	344.23	16.570	
14,300.0	6,887.6	6,878.6	6,878.6	207.9	137.4	-87.62	1,745.1	1,574.3	5,731.6	5,386.6	345.01	16.613	
14,370.0	6,887.0	6,878.0	6,878.0	209.9	137.3	-87.60	1,745.1	1,574.3	5,800.3	5,453.3	346.96	16.718	
14,400.0	6,886.8	6,877.8	6,877.8	210.7	137.3	-87.58	1,745.1	1,574.3	5,829.7	5,481.9	347.79	16.762	
14,468.5	6,886.2	6,877.2	6,877.2	212.6	137.3	-87.55	1,745.1	1,574.3	5,896.9	5,547.2	349.68	16.863	
14,500.0	6,885.9	6,876.9	6,876.9	213.5	137.3	-87.54	1,745.1	1,574.3	5,927.8	5,577.3	350.56	16.910	
14,566.9	6,885.4	6,876.4	6,876.4	215.4	137.3	-87.51	1,745.1	1,574.3	5,993.5	5,641.1	352.41	17.007	
14,600.0	6,885.1	6,876.1	6,876.1	216.3	137.3	-87.50	1,745.1	1,574.3	6,026.0	5,672.7	353.33	17.055	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT M LEAMING 27-24 - 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									
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	Warning
14,613.0	6,885.0	6,876.0	6,876.0	216.7	137.3	-87.49	1,745.1	1,574.3	6,038.8	5,685.1	353.69	17.074	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	89.22	130.8	9,565.9	9,566.8				
98.4	98.4	75.4	75.4	0.1	0.4	89.22	130.8	9,565.9	9,566.8	9,566.2	0.52	N/A	
100.0	100.0	77.0	77.0	0.1	0.4	89.22	130.8	9,565.9	9,566.8	9,566.2	0.53	N/A	
196.8	196.8	173.8	173.8	0.3	2.4	89.22	130.8	9,565.9	9,566.8	9,564.1	2.69	3,558.240	
200.0	200.0	177.0	177.0	0.3	2.5	89.22	130.8	9,565.9	9,566.8	9,564.0	2.77	3,449.984	
295.3	295.3	272.3	272.3	0.5	4.5	89.22	130.8	9,565.9	9,566.8	9,561.7	5.05	1,892.569	
300.0	300.0	277.0	277.0	0.5	4.6	89.22	130.8	9,565.9	9,566.8	9,561.6	5.16	1,852.653	
393.7	393.7	370.7	370.7	0.7	6.5	89.22	130.8	9,565.9	9,566.8	9,559.5	7.30	1,311.302	
400.0	400.0	377.0	377.0	0.8	6.7	89.22	130.8	9,565.9	9,566.8	9,559.3	7.44	1,286.142	
492.1	492.1	469.1	469.1	1.0	8.5	89.22	130.8	9,565.9	9,566.8	9,557.2	9.52	1,005.303	
500.0	500.0	477.0	477.0	1.0	8.7	89.22	130.8	9,565.9	9,566.8	9,557.1	9.69	986.908	
590.5	590.5	567.5	567.5	1.2	10.5	89.22	130.8	9,565.9	9,566.8	9,555.0	11.73	815.644	
600.0	600.0	577.0	577.0	1.2	10.7	89.22	130.8	9,565.9	9,566.8	9,554.8	11.94	801.145	
689.0	689.0	666.0	666.0	1.4	12.5	89.22	130.8	9,565.9	9,566.8	9,552.8	13.94	686.385	
700.0	700.0	677.0	677.0	1.4	12.8	89.22	130.8	9,565.9	9,566.8	9,552.6	14.19	674.419	
787.4	787.4	764.4	764.4	1.6	14.5	89.22	130.8	9,565.9	9,566.8	9,550.6	16.14	592.575	
800.0	800.0	777.0	777.0	1.7	14.8	89.22	130.8	9,565.9	9,566.8	9,550.3	16.43	582.389	
885.8	885.8	862.8	862.8	1.9	16.5	89.22	130.8	9,565.9	9,566.8	9,548.4	18.35	521.366	
900.0	900.0	877.0	877.0	1.9	16.8	89.22	130.8	9,565.9	9,566.8	9,548.1	18.67	512.498	
984.2	984.2	961.2	961.2	2.1	18.5	89.22	130.8	9,565.9	9,566.8	9,546.2	20.55	465.457	
1,000.0	1,000.0	977.0	977.0	2.1	18.8	89.22	130.8	9,565.9	9,566.8	9,545.9	20.91	457.606	
1,082.7	1,082.7	1,059.7	1,059.7	2.3	20.5	89.22	130.8	9,565.9	9,566.8	9,544.0	22.76	420.391	
1,100.0	1,100.0	1,077.0	1,077.0	2.3	20.8	89.22	130.8	9,565.9	9,566.8	9,543.6	23.14	413.347	
1,150.0	1,150.0	1,127.0	1,127.0	2.4	21.8	89.22	130.8	9,565.9	9,566.8	9,542.5	24.26	394.283	
1,181.1	1,181.1	1,158.1	1,158.1	2.5	22.4	121.90	130.8	9,565.9	9,566.9	9,541.9	24.96	383.311	
1,200.0	1,200.0	1,177.0	1,177.0	2.6	22.8	121.90	130.8	9,565.9	9,567.0	9,541.6	25.38	376.947	
1,279.5	1,279.5	1,256.5	1,256.5	2.7	24.4	121.89	130.8	9,565.9	9,568.3	9,541.2	27.15	352.443	
1,300.0	1,299.9	1,276.9	1,276.9	2.8	24.8	121.89	130.8	9,565.9	9,568.8	9,541.2	27.60	346.667	
1,377.9	1,377.7	1,354.7	1,354.7	3.0	26.4	121.87	130.8	9,565.9	9,571.6	9,542.2	29.33	326.382	
1,400.0	1,399.7	1,376.7	1,376.7	3.0	26.8	121.86	130.8	9,565.9	9,572.5	9,542.7	29.81	321.098	
1,476.4	1,475.7	1,452.7	1,452.7	3.2	28.4	121.83	130.8	9,565.9	9,576.6	9,545.1	31.49	304.094	
1,500.0	1,499.1	1,476.1	1,476.1	3.2	28.8	121.82	130.8	9,565.9	9,578.1	9,546.1	32.01	299.228	
1,574.8	1,573.2	1,550.2	1,550.2	3.4	30.3	121.78	130.8	9,565.9	9,583.4	9,549.8	33.65	284.811	
1,600.0	1,598.2	1,575.2	1,575.2	3.5	30.8	121.77	130.8	9,565.9	9,585.5	9,551.3	34.20	280.299	
1,673.2	1,670.3	1,647.3	1,647.3	3.7	32.3	121.72	130.8	9,565.9	9,592.0	9,556.2	35.80	267.950	
1,700.0	1,696.6	1,673.6	1,673.6	3.8	32.8	121.69	130.8	9,565.9	9,594.7	9,558.3	36.38	263.741	
1,749.9	1,745.5	1,722.5	1,722.5	3.9	33.8	121.65	130.8	9,565.9	9,600.0	9,562.5	37.47	256.231	
1,771.6	1,766.8	1,743.8	1,743.8	4.0	34.2	121.68	130.8	9,565.9	9,602.4	9,564.4	37.96	252.979	
1,800.0	1,794.5	1,771.5	1,771.5	4.1	34.8	121.71	130.8	9,565.9	9,605.5	9,566.9	38.60	248.873	
1,870.1	1,863.1	1,840.1	1,840.1	4.3	36.2	121.78	130.8	9,565.9	9,613.3	9,573.1	40.18	239.229	
1,900.0	1,892.3	1,869.3	1,869.3	4.4	36.8	121.81	130.8	9,565.9	9,616.7	9,575.8	40.86	235.341	
1,968.5	1,959.4	1,936.4	1,936.4	4.7	38.1	121.88	130.8	9,565.9	9,624.3	9,581.9	42.43	226.853	
2,000.0	1,990.2	1,967.2	1,967.2	4.8	38.7	121.91	130.8	9,565.9	9,627.8	9,584.7	43.14	223.159	
2,066.9	2,055.6	2,032.6	2,032.6	5.1	40.0	121.98	130.8	9,565.9	9,635.3	9,590.6	44.68	215.670	
2,100.0	2,088.0	2,065.0	2,065.0	5.2	40.7	122.02	130.8	9,565.9	9,639.0	9,593.6	45.43	212.149	
2,165.3	2,151.9	2,128.9	2,128.9	5.4	42.0	122.08	130.8	9,565.9	9,646.3	9,599.4	46.94	205.510	
2,200.0	2,185.8	2,162.8	2,162.8	5.6	42.7	122.12	130.8	9,565.9	9,650.2	9,602.5	47.74	202.160	
2,263.8	2,248.2	2,225.2	2,225.2	5.8	43.9	122.18	130.8	9,565.9	9,657.4	9,608.2	49.21	196.259	
2,300.0	2,283.6	2,260.6	2,260.6	6.0	44.6	122.22	130.8	9,565.9	9,661.4	9,611.4	50.04	193.062	
2,362.2	2,344.5	2,321.5	2,321.5	6.2	45.8	122.29	130.8	9,565.9	9,668.4	9,617.0	51.48	187.802	
2,400.0	2,381.4	2,358.4	2,358.4	6.4	46.6	122.32	130.8	9,565.9	9,672.7	9,620.4	52.36	184.747	
2,460.6	2,440.7	2,417.7	2,417.7	6.6	47.8	122.39	130.8	9,565.9	9,679.6	9,625.8	53.76	180.045	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,456.2	2,456.2	6.8	48.6	122.43	130.8	9,565.9	9,684.0	9,629.3	54.67	177.121	
2,559.0	2,537.0	2,514.0	2,514.0	7.0	49.7	122.49	130.8	9,565.9	9,690.7	9,634.7	56.05	172.907	
2,600.0	2,577.1	2,554.1	2,554.1	7.2	50.5	122.53	130.8	9,565.9	9,695.4	9,638.4	57.00	170.104	
2,657.5	2,633.3	2,610.3	2,610.3	7.4	51.7	122.59	130.8	9,565.9	9,701.9	9,643.6	58.33	166.319	
2,700.0	2,674.9	2,651.9	2,651.9	7.6	52.5	122.63	130.8	9,565.9	9,706.7	9,647.4	59.32	163.629	
2,755.9	2,729.6	2,706.6	2,706.6	7.9	53.6	122.69	130.8	9,565.9	9,713.1	9,652.5	60.62	160.222	
2,800.0	2,772.7	2,749.7	2,749.7	8.0	54.5	122.73	130.8	9,565.9	9,718.1	9,656.5	61.65	157.637	
2,854.3	2,825.8	2,802.8	2,802.8	8.3	55.5	122.79	130.8	9,565.9	9,724.3	9,661.4	62.91	154.564	
2,900.0	2,870.5	2,847.5	2,847.5	8.5	56.4	122.83	130.8	9,565.9	9,729.6	9,665.6	63.98	152.076	
2,952.7	2,922.1	2,899.1	2,899.1	8.7	57.5	122.89	130.8	9,565.9	9,735.6	9,670.4	65.21	149.300	
3,000.0	2,968.3	2,945.3	2,945.3	8.9	58.4	122.94	130.8	9,565.9	9,741.0	9,674.7	66.31	146.902	
3,051.2	3,018.4	2,995.4	2,995.4	9.1	59.4	122.99	130.8	9,565.9	9,746.9	9,679.4	67.50	144.391	
3,100.0	3,066.1	3,043.1	3,043.1	9.3	60.4	123.04	130.8	9,565.9	9,752.5	9,683.9	68.64	142.078	
3,149.6	3,114.7	3,091.7	3,091.7	9.5	61.3	123.09	130.8	9,565.9	9,758.2	9,688.4	69.80	139.803	
3,200.0	3,164.0	3,141.0	3,141.0	9.8	62.3	123.14	130.8	9,565.9	9,764.0	9,693.1	70.98	137.568	
3,248.0	3,210.9	3,187.9	3,187.9	10.0	63.3	123.18	130.8	9,565.9	9,769.6	9,697.5	72.10	135.506	
3,300.0	3,261.8	3,238.8	3,238.8	10.2	64.3	123.24	130.8	9,565.9	9,775.6	9,702.3	73.31	133.345	
3,346.4	3,307.2	3,284.2	3,284.2	10.4	65.2	123.28	130.8	9,565.9	9,781.0	9,706.6	74.40	131.473	
3,400.0	3,359.6	3,336.6	3,336.6	10.6	66.3	123.34	130.8	9,565.9	9,787.2	9,711.5	75.65	129.382	
3,444.9	3,403.5	3,380.5	3,380.5	10.8	67.1	123.38	130.8	9,565.9	9,792.4	9,715.7	76.69	127.681	
3,500.0	3,457.4	3,434.4	3,434.4	11.1	68.2	123.44	130.8	9,565.9	9,798.8	9,720.8	77.98	125.655	
3,543.3	3,499.8	3,476.8	3,476.8	11.3	69.1	123.48	130.8	9,565.9	9,803.8	9,724.8	78.99	124.110	
3,600.0	3,555.2	3,532.2	3,532.2	11.5	70.2	123.54	130.8	9,565.9	9,810.4	9,730.1	80.32	122.145	
3,641.7	3,596.0	3,573.0	3,573.0	11.7	71.0	123.58	130.8	9,565.9	9,815.3	9,734.0	81.29	120.740	
3,700.0	3,653.0	3,630.0	3,630.0	11.9	72.2	123.64	130.8	9,565.9	9,822.1	9,739.5	82.65	118.834	
3,740.1	3,692.3	3,669.3	3,669.3	12.1	73.0	123.68	130.8	9,565.9	9,826.8	9,743.2	83.59	117.556	
3,800.0	3,750.8	3,727.8	3,727.8	12.4	74.1	123.74	130.8	9,565.9	9,833.8	9,748.8	84.99	115.704	
3,838.6	3,788.6	3,765.6	3,765.6	12.6	74.9	123.77	130.8	9,565.9	9,838.3	9,752.4	85.89	114.542	
3,900.0	3,848.7	3,825.7	3,825.7	12.8	76.1	123.84	130.8	9,565.9	9,845.5	9,758.2	87.33	112.742	
3,937.0	3,884.9	3,861.9	3,861.9	13.0	76.8	123.87	130.8	9,565.9	9,849.9	9,761.7	88.19	111.686	
4,000.0	3,946.5	3,923.5	3,923.5	13.3	78.1	123.93	130.8	9,565.9	9,857.3	9,767.6	89.66	109.935	
4,035.4	3,981.1	3,958.1	3,958.1	13.4	78.8	123.97	130.8	9,565.9	9,861.5	9,771.0	90.49	108.976	
4,100.0	4,044.3	4,021.3	4,021.3	13.7	80.0	124.03	130.8	9,565.9	9,869.1	9,777.1	92.00	107.271	
4,133.8	4,077.4	4,054.4	4,054.4	13.9	80.7	124.07	130.8	9,565.9	9,873.1	9,780.3	92.79	106.400	
4,200.0	4,142.1	4,119.1	4,119.1	14.2	82.0	124.13	130.8	9,565.9	9,880.9	9,786.6	94.34	104.739	
4,232.3	4,173.7	4,150.7	4,150.7	14.3	82.6	124.16	130.8	9,565.9	9,884.8	9,789.7	95.09	103.949	
4,300.0	4,239.9	4,216.9	4,216.9	14.6	84.0	124.23	130.8	9,565.9	9,892.8	9,796.1	96.68	102.330	
4,330.7	4,270.0	4,247.0	4,247.0	14.7	84.6	124.26	130.8	9,565.9	9,896.4	9,799.0	97.39	101.614	
4,400.0	4,337.7	4,314.7	4,314.7	15.0	85.9	124.33	130.8	9,565.9	9,904.7	9,805.7	99.01	100.036	
4,429.1	4,366.2	4,343.2	4,343.2	15.2	86.5	124.36	130.8	9,565.9	9,908.1	9,808.4	99.69	99.388	
4,500.0	4,435.6	4,412.6	4,412.6	15.5	87.9	124.42	130.8	9,565.9	9,916.6	9,815.2	101.35	97.847	
4,527.5	4,462.5	4,439.5	4,439.5	15.6	88.4	124.45	130.8	9,565.9	9,919.9	9,817.9	101.99	97.262	
4,600.0	4,533.4	4,510.4	4,510.4	15.9	89.9	124.52	130.8	9,565.9	9,928.5	9,824.8	103.68	95.758	
4,626.0	4,558.8	4,535.8	4,535.8	16.0	90.4	124.55	130.8	9,565.9	9,931.6	9,827.3	104.29	95.230	
4,673.6	4,605.3	4,582.3	4,582.3	16.3	91.3	124.59	130.8	9,565.9	9,937.3	9,831.9	105.40	94.281	
4,700.0	4,631.2	4,608.2	4,608.2	16.4	91.8	124.67	130.8	9,565.9	9,940.4	9,834.4	106.06	93.725	
4,724.4	4,655.1	4,632.1	4,632.1	16.4	92.3	124.74	130.8	9,565.9	9,943.2	9,836.5	106.65	93.230	
4,800.0	4,729.5	4,706.5	4,706.5	16.7	93.8	124.93	130.8	9,565.9	9,950.9	9,842.4	108.49	91.726	
4,822.8	4,752.1	4,729.1	4,729.1	16.7	94.3	124.98	130.8	9,565.9	9,953.0	9,844.0	109.03	91.286	
4,900.0	4,828.4	4,805.4	4,805.4	17.0	95.8	125.14	130.8	9,565.9	9,959.4	9,848.6	110.87	89.830	
4,921.2	4,849.5	4,826.5	4,826.5	17.0	96.2	125.18	130.8	9,565.9	9,961.0	9,849.6	111.37	89.443	
5,000.0	4,927.8	4,904.8	4,904.8	17.2	97.8	125.30	130.8	9,565.9	9,966.0	9,852.8	113.20	88.036	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,924.4	4,924.4	17.2	98.2	125.32	130.8	9,565.9	9,967.0	9,853.4	113.65	87.697	
5,100.0	5,027.5	5,004.5	5,004.5	17.4	99.8	125.41	130.8	9,565.9	9,970.5	9,855.0	115.48	86.340	
5,118.1	5,045.6	5,022.6	5,022.6	17.4	100.2	125.42	130.8	9,565.9	9,971.1	9,855.2	115.88	86.045	
5,200.0	5,127.4	5,104.4	5,104.4	17.6	101.8	125.47	130.8	9,565.9	9,973.0	9,855.3	117.69	84.739	
5,216.5	5,143.9	5,120.9	5,120.9	17.6	102.2	125.47	130.8	9,565.9	9,973.2	9,855.1	118.05	84.484	
5,273.4	5,200.8	5,177.8	5,177.8	17.7	103.3	92.79	130.8	9,565.9	9,973.5	9,855.8	117.74	84.709	
5,300.0	5,227.4	5,204.4	5,204.4	17.7	103.8	92.79	130.8	9,565.9	9,973.5	9,855.2	118.32	84.296	
5,314.9	5,242.3	5,219.3	5,219.3	17.7	104.1	92.79	130.8	9,565.9	9,973.5	9,854.9	118.64	84.064	
5,400.0	5,327.4	5,304.4	5,304.4	17.8	105.8	92.79	130.8	9,565.9	9,973.5	9,853.0	120.50	82.768	
5,413.4	5,340.8	5,317.8	5,317.8	17.9	106.1	92.79	130.8	9,565.9	9,973.5	9,852.7	120.79	82.567	
5,500.0	5,427.4	5,404.4	5,404.4	18.0	107.9	92.79	130.8	9,565.9	9,973.5	9,850.8	122.69	81.293	
5,511.8	5,439.2	5,416.2	5,416.2	18.0	108.1	92.79	130.8	9,565.9	9,973.5	9,850.6	122.94	81.122	
5,600.0	5,527.4	5,504.4	5,504.4	18.1	109.9	92.79	130.8	9,565.9	9,973.5	9,848.6	124.87	79.869	
5,610.2	5,537.6	5,514.6	5,514.6	18.1	110.1	92.79	130.8	9,565.9	9,973.5	9,848.4	125.10	79.726	
5,700.0	5,627.4	5,604.4	5,604.4	18.3	111.9	92.79	130.8	9,565.9	9,973.5	9,846.5	127.06	78.493	
5,708.6	5,636.0	5,613.0	5,613.0	18.3	112.0	92.79	130.8	9,565.9	9,973.5	9,846.3	127.25	78.376	
5,800.0	5,727.4	5,704.4	5,704.4	18.4	113.9	92.79	130.8	9,565.9	9,973.5	9,844.3	129.25	77.163	
5,807.1	5,734.5	5,711.5	5,711.5	18.4	114.0	92.79	130.8	9,565.9	9,973.5	9,844.1	129.41	77.070	
5,900.0	5,827.4	5,804.4	5,804.4	18.6	115.9	92.79	130.8	9,565.9	9,973.5	9,842.1	131.44	75.876	
5,905.5	5,832.9	5,809.9	5,809.9	18.6	116.0	92.79	130.8	9,565.9	9,973.5	9,842.0	131.57	75.807	
6,000.0	5,927.4	5,904.4	5,904.4	18.7	117.9	92.79	130.8	9,565.9	9,973.5	9,839.9	133.64	74.631	
6,003.9	5,931.3	5,908.3	5,908.3	18.7	118.0	92.79	130.8	9,565.9	9,973.5	9,839.8	133.72	74.583	
6,100.0	6,027.4	6,004.4	6,004.4	18.9	119.9	92.79	130.8	9,565.9	9,973.5	9,837.7	135.83	73.426	
6,102.3	6,029.7	6,006.7	6,006.7	18.9	120.0	92.79	130.8	9,565.9	9,973.5	9,837.6	135.88	73.398	
6,200.0	6,127.4	6,104.4	6,104.4	19.0	121.9	92.79	130.8	9,565.9	9,973.5	9,835.5	138.03	72.259	
6,200.8	6,128.2	6,105.2	6,105.2	19.0	121.9	92.79	130.8	9,565.9	9,973.5	9,835.5	138.04	72.250	
6,299.2	6,226.6	6,203.6	6,203.6	19.2	123.9	92.79	130.8	9,565.9	9,973.5	9,833.3	140.20	71.136	
6,301.4	6,228.8	6,205.8	6,205.8	19.2	124.0	92.79	130.8	9,565.9	9,973.5	9,833.3	140.25	71.111	
6,350.0	6,277.4	6,254.4	6,254.4	19.3	124.9	2.80	130.8	9,565.9	9,971.9	9,829.6	142.26	70.095	
6,397.6	6,324.7	6,301.7	6,301.7	19.3	125.9	2.82	130.8	9,565.9	9,967.1	9,824.8	142.29	70.049	
6,400.0	6,327.1	6,304.1	6,304.1	19.3	125.9	2.82	130.8	9,565.9	9,966.7	9,824.5	142.27	70.054	
6,450.0	6,376.3	6,353.3	6,353.3	19.3	126.9	2.86	130.8	9,565.9	9,958.2	9,816.6	141.57	70.340	
6,496.0	6,421.1	6,398.1	6,398.1	19.3	127.8	2.91	130.8	9,565.9	9,947.3	9,807.0	140.29	70.904	
6,500.0	6,424.9	6,401.9	6,401.9	19.3	127.9	2.91	130.8	9,565.9	9,946.2	9,806.0	140.15	70.967	
6,550.0	6,472.4	6,449.4	6,449.4	19.3	128.9	2.98	130.8	9,565.9	9,930.9	9,792.8	138.01	71.958	
6,594.5	6,513.8	6,490.8	6,490.8	19.3	129.7	3.06	130.8	9,565.9	9,914.5	9,779.0	135.50	73.171	
6,600.0	6,518.8	6,495.8	6,495.8	19.3	129.8	3.07	130.8	9,565.9	9,912.2	9,777.1	135.14	73.345	
6,650.0	6,563.8	6,540.8	6,540.8	19.3	130.7	3.19	130.8	9,565.9	9,890.4	9,758.9	131.56	75.175	
6,692.9	6,601.1	6,578.1	6,578.1	19.2	131.5	3.30	130.8	9,565.9	9,869.3	9,741.3	127.93	77.144	
6,700.0	6,607.1	6,584.1	6,584.1	19.2	131.6	3.32	130.8	9,565.9	9,865.6	9,738.3	127.28	77.509	
6,750.0	6,648.6	6,625.6	6,625.6	19.2	132.4	3.49	130.8	9,565.9	9,837.7	9,715.4	122.32	80.426	
6,791.3	6,681.4	6,658.4	6,658.4	19.1	133.1	3.66	130.8	9,565.9	9,812.6	9,694.9	117.72	83.352	
6,800.0	6,688.1	6,665.1	6,665.1	19.1	133.2	3.70	130.8	9,565.9	9,807.1	9,690.4	116.70	84.034	
6,850.0	6,725.3	6,702.3	6,702.3	19.1	134.0	3.95	130.8	9,565.9	9,773.7	9,663.3	110.47	88.473	
6,889.7	6,753.2	6,730.2	6,730.2	19.0	134.5	4.19	130.8	9,565.9	9,745.4	9,640.3	105.11	92.719	
6,900.0	6,760.1	6,737.1	6,737.1	19.0	134.7	4.26	130.8	9,565.9	9,737.9	9,634.2	103.67	93.933	
6,950.0	6,792.3	6,769.3	6,769.3	19.0	135.3	4.65	130.8	9,565.9	9,699.7	9,603.3	96.36	100.663	
6,988.2	6,815.1	6,792.1	6,792.1	18.9	135.8	5.01	130.8	9,565.9	9,669.1	9,578.6	90.49	106.856	
7,000.0	6,821.8	6,798.8	6,798.8	18.9	135.9	5.13	130.8	9,565.9	9,659.4	9,570.7	88.62	108.992	
7,050.0	6,848.3	6,825.3	6,825.3	18.9	136.4	5.76	130.8	9,565.9	9,617.1	9,536.5	80.59	119.339	
7,086.6	6,865.9	6,842.9	6,842.9	18.9	136.8	6.34	130.8	9,565.9	9,585.0	9,510.4	74.62	128.459	
7,100.0	6,871.9	6,848.9	6,848.9	18.9	136.9	6.59	130.8	9,565.9	9,573.0	9,500.6	72.43	132.165	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,869.3	6,869.3	18.8	137.3	7.73	130.8	9,565.9	9,527.5	9,463.0	64.50	147.701	
7,185.0	6,904.7	6,881.7	6,881.7	18.8	137.6	8.81	130.8	9,565.9	9,494.8	9,435.3	59.44	159.735	
7,200.0	6,909.5	6,886.5	6,886.5	18.9	137.7	9.38	130.8	9,565.9	9,480.6	9,423.1	57.51	164.846	
7,250.0	6,923.4	6,900.4	6,900.4	19.3	137.9	11.95	130.8	9,565.9	9,432.6	9,379.5	53.11	177.621	
7,283.4	6,930.8	6,907.8	6,907.8	19.8	138.1	14.63	130.8	9,565.9	9,400.1	9,346.6	53.41	176.009	
7,300.0	6,933.9	6,910.9	6,910.9	20.0	138.1	16.45	130.8	9,565.9	9,383.8	9,328.6	55.26	169.815	
7,350.0	6,940.9	6,917.9	6,917.9	20.8	138.3	26.09	130.8	9,565.9	9,334.4	9,261.0	73.35	127.252	
7,381.9	6,943.6	6,920.6	6,920.6	21.4	138.3	40.09	130.8	9,565.9	9,302.7	9,199.2	103.50	89.879	
7,400.0	6,944.5	6,921.5	6,921.5	21.7	138.4	54.88	130.8	9,565.9	9,284.6	9,154.0	130.65	71.065	
7,432.4	6,945.0	6,922.0	6,922.0	22.3	138.4	99.05	130.8	9,565.9	9,252.2	9,093.3	158.93	58.217	
7,480.3	6,944.6	6,921.6	6,921.6	23.2	138.4	99.00	130.8	9,565.9	9,204.4	9,044.6	159.82	57.592	
7,500.0	6,944.4	6,921.4	6,921.4	23.6	138.4	98.98	130.8	9,565.9	9,184.7	9,024.6	160.19	57.337	
7,578.7	6,943.7	6,920.7	6,920.7	25.2	138.3	98.91	130.8	9,565.9	9,106.1	8,944.4	161.77	56.291	
7,600.0	6,943.6	6,920.6	6,920.6	25.6	138.3	98.89	130.8	9,565.9	9,084.9	8,922.7	162.20	56.011	
7,677.1	6,942.9	6,919.9	6,919.9	27.3	138.3	98.81	130.8	9,565.9	9,007.9	8,844.0	163.85	54.975	
7,700.0	6,942.7	6,919.7	6,919.7	27.8	138.3	98.79	130.8	9,565.9	8,985.0	8,820.7	164.35	54.672	
7,775.6	6,942.1	6,919.1	6,919.1	29.5	138.3	98.72	130.8	9,565.9	8,909.6	8,743.5	166.05	53.657	
7,800.0	6,941.9	6,918.9	6,918.9	30.1	138.3	98.69	130.8	9,565.9	8,885.2	8,718.6	166.60	53.333	
7,874.0	6,941.3	6,918.3	6,918.3	31.8	138.3	98.62	130.8	9,565.9	8,811.3	8,643.0	168.33	52.346	
7,900.0	6,941.1	6,918.1	6,918.1	32.4	138.3	98.60	130.8	9,565.9	8,785.3	8,616.4	168.94	52.004	
7,972.4	6,940.4	6,917.4	6,917.4	34.2	138.3	98.53	130.8	9,565.9	8,713.0	8,542.4	170.68	51.049	
8,000.0	6,940.2	6,917.2	6,917.2	34.9	138.3	98.50	130.8	9,565.9	8,685.5	8,514.2	171.34	50.690	
8,070.8	6,939.6	6,916.6	6,916.6	36.6	138.3	98.43	130.8	9,565.9	8,614.8	8,441.7	173.09	49.771	
8,100.0	6,939.4	6,916.4	6,916.4	37.3	138.3	98.40	130.8	9,565.9	8,585.7	8,411.9	173.81	49.397	
8,169.3	6,938.8	6,915.8	6,915.8	39.1	138.2	98.33	130.8	9,565.9	8,516.5	8,341.0	175.55	48.514	
8,200.0	6,938.5	6,915.5	6,915.5	39.8	138.2	98.30	130.8	9,565.9	8,485.8	8,309.5	176.32	48.128	
8,267.7	6,938.0	6,915.0	6,915.0	41.6	138.2	98.24	130.8	9,565.9	8,418.2	8,240.2	178.04	47.282	
8,300.0	6,937.7	6,914.7	6,914.7	42.4	138.2	98.21	130.8	9,565.9	8,386.0	8,207.1	178.87	46.884	
8,366.1	6,937.2	6,914.2	6,914.2	44.1	138.2	98.14	130.8	9,565.9	8,320.0	8,139.4	180.57	46.076	
8,400.0	6,936.9	6,913.9	6,913.9	45.0	138.2	98.11	130.8	9,565.9	8,286.2	8,104.7	181.45	45.668	
8,464.5	6,936.3	6,913.3	6,913.3	46.6	138.2	98.05	130.8	9,565.9	8,221.7	8,038.6	183.13	44.896	
8,500.0	6,936.0	6,913.0	6,913.0	47.6	138.2	98.01	130.8	9,565.9	8,186.4	8,002.3	184.05	44.479	
8,563.0	6,935.5	6,912.5	6,912.5	49.2	138.2	97.95	130.8	9,565.9	8,123.5	7,937.8	185.71	43.744	
8,600.0	6,935.2	6,912.2	6,912.2	50.2	138.2	97.91	130.8	9,565.9	8,086.5	7,899.9	186.68	43.318	
8,661.4	6,934.7	6,911.7	6,911.7	51.8	138.2	97.85	130.8	9,565.9	8,025.3	7,836.9	188.31	42.618	
8,700.0	6,934.4	6,911.4	6,911.4	52.8	138.2	97.82	130.8	9,565.9	7,986.7	7,797.4	189.33	42.185	
8,759.8	6,933.9	6,910.9	6,910.9	54.4	138.1	97.76	130.8	9,565.9	7,927.0	7,736.1	190.92	41.520	
8,800.0	6,933.5	6,910.5	6,910.5	55.5	138.1	97.72	130.8	9,565.9	7,886.9	7,694.9	191.99	41.080	
8,858.2	6,933.0	6,910.0	6,910.0	57.1	138.1	97.66	130.8	9,565.9	7,828.8	7,635.2	193.55	40.448	
8,900.0	6,932.7	6,909.7	6,909.7	58.2	138.1	97.62	130.8	9,565.9	7,787.1	7,592.4	194.67	40.002	
8,956.7	6,932.2	6,909.2	6,909.2	59.7	138.1	97.57	130.8	9,565.9	7,730.5	7,534.4	196.19	39.402	
9,000.0	6,931.8	6,908.8	6,908.8	60.9	138.1	97.52	130.8	9,565.9	7,687.3	7,490.0	197.36	38.951	
9,055.1	6,931.4	6,908.4	6,908.4	62.4	138.1	97.47	130.8	9,565.9	7,632.3	7,433.5	198.85	38.382	
9,100.0	6,931.0	6,908.0	6,908.0	63.6	138.1	97.43	130.8	9,565.9	7,587.5	7,387.5	200.06	37.926	
9,153.5	6,930.6	6,907.6	6,907.6	65.0	138.1	97.37	130.8	9,565.9	7,534.1	7,332.6	201.51	37.387	
9,200.0	6,930.2	6,907.2	6,907.2	66.3	138.1	97.33	130.8	9,565.9	7,487.7	7,285.0	202.77	36.926	
9,251.9	6,929.7	6,906.7	6,906.7	67.7	138.1	97.28	130.8	9,565.9	7,435.9	7,231.7	204.19	36.417	
9,300.0	6,929.3	6,906.3	6,906.3	69.0	138.1	97.23	130.8	9,565.9	7,387.9	7,182.5	205.50	35.952	
9,350.4	6,928.9	6,905.9	6,905.9	70.4	138.0	97.18	130.8	9,565.9	7,337.7	7,130.8	206.87	35.470	
9,400.0	6,928.5	6,905.5	6,905.5	71.7	138.0	97.13	130.8	9,565.9	7,288.2	7,079.9	208.22	35.002	
9,448.8	6,928.1	6,905.1	6,905.1	73.0	138.0	97.09	130.8	9,565.9	7,239.5	7,029.9	209.56	34.546	
9,500.0	6,927.7	6,904.7	6,904.7	74.4	138.0	97.04	130.8	9,565.9	7,188.4	6,977.4	210.96	34.075	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,904.3	6,904.3	75.7	138.0	96.99	130.8	9,565.9	7,141.3	6,929.0	212.25	33.645	
9,600.0	6,926.8	6,903.8	6,903.8	77.2	138.0	96.94	130.8	9,565.9	7,088.6	6,874.9	213.70	33.171	
9,645.6	6,926.4	6,903.4	6,903.4	78.4	138.0	96.89	130.8	9,565.9	7,043.1	6,828.1	214.95	32.766	
9,700.0	6,926.0	6,903.0	6,903.0	79.9	138.0	96.84	130.8	9,565.9	6,988.9	6,772.4	216.45	32.289	
9,744.1	6,925.6	6,902.6	6,902.6	81.1	138.0	96.80	130.8	9,565.9	6,944.9	6,727.3	217.66	31.907	
9,800.0	6,925.2	6,902.2	6,902.2	82.6	138.0	96.74	130.8	9,565.9	6,889.1	6,669.9	219.20	31.429	
9,842.5	6,924.8	6,901.8	6,901.8	83.8	138.0	96.70	130.8	9,565.9	6,846.7	6,626.4	220.37	31.069	
9,900.0	6,924.3	6,901.3	6,901.3	85.4	138.0	96.64	130.8	9,565.9	6,789.4	6,567.4	221.95	30.589	
9,940.9	6,924.0	6,901.0	6,901.0	86.5	137.9	96.60	130.8	9,565.9	6,748.6	6,525.5	223.08	30.251	
10,000.0	6,923.5	6,900.5	6,900.5	88.1	137.9	96.55	130.8	9,565.9	6,689.6	6,464.9	224.71	29.770	
10,039.3	6,923.2	6,900.2	6,900.2	89.2	137.9	96.51	130.8	9,565.9	6,650.4	6,424.6	225.80	29.452	
10,100.0	6,922.6	6,899.6	6,899.6	90.9	137.9	96.45	130.8	9,565.9	6,589.9	6,362.4	227.48	28.969	
10,137.8	6,922.3	6,899.3	6,899.3	91.9	137.9	96.41	130.8	9,565.9	6,552.2	6,323.7	228.52	28.672	
10,200.0	6,921.8	6,898.8	6,898.8	93.7	137.9	96.35	130.8	9,565.9	6,490.2	6,260.0	230.25	28.188	
10,236.2	6,921.5	6,898.5	6,898.5	94.7	137.9	96.32	130.8	9,565.9	6,454.1	6,222.9	231.25	27.910	
10,300.0	6,921.0	6,898.0	6,898.0	96.4	137.9	96.25	130.8	9,565.9	6,390.5	6,157.5	233.02	27.425	
10,334.6	6,920.7	6,897.7	6,897.7	97.4	137.9	96.22	130.8	9,565.9	6,356.0	6,122.0	233.98	27.165	
10,400.0	6,920.1	6,897.1	6,897.1	99.2	137.9	96.15	130.8	9,565.9	6,290.8	6,055.0	235.79	26.680	
10,433.0	6,919.9	6,896.9	6,896.9	100.1	137.9	96.12	130.8	9,565.9	6,257.8	6,021.1	236.71	26.437	
10,500.0	6,919.3	6,896.3	6,896.3	101.9	137.9	96.06	130.8	9,565.9	6,191.1	5,952.5	238.57	25.951	
10,531.5	6,919.0	6,896.0	6,896.0	102.8	137.8	96.03	130.8	9,565.9	6,159.7	5,920.3	239.44	25.725	
10,600.0	6,918.5	6,895.5	6,895.5	104.7	137.8	95.96	130.8	9,565.9	6,091.4	5,850.1	241.35	25.239	
10,629.9	6,918.2	6,895.2	6,895.2	105.5	137.8	95.93	130.8	9,565.9	6,061.6	5,819.4	242.18	25.030	
10,700.0	6,917.6	6,894.6	6,894.6	107.5	137.8	95.86	130.8	9,565.9	5,991.7	5,747.6	244.13	24.543	
10,728.3	6,917.4	6,894.4	6,894.4	108.3	137.8	95.83	130.8	9,565.9	5,963.5	5,718.6	244.92	24.349	
10,800.0	6,916.8	6,893.8	6,893.8	110.3	137.8	95.76	130.8	9,565.9	5,892.1	5,645.2	246.91	23.863	
10,826.7	6,916.6	6,893.6	6,893.6	111.0	137.8	95.74	130.8	9,565.9	5,865.4	5,617.8	247.66	23.684	
10,900.0	6,916.0	6,893.0	6,893.0	113.0	137.8	95.67	130.8	9,565.9	5,792.4	5,542.7	249.70	23.198	
10,925.2	6,915.8	6,892.8	6,892.8	113.7	137.8	95.64	130.8	9,565.9	5,767.3	5,516.9	250.40	23.033	
11,000.0	6,915.1	6,892.1	6,892.1	115.8	137.8	95.57	130.8	9,565.9	5,692.8	5,440.3	252.48	22.547	
11,023.6	6,914.9	6,891.9	6,891.9	116.5	137.8	95.54	130.8	9,565.9	5,669.3	5,416.1	253.14	22.396	
11,100.0	6,914.3	6,891.3	6,891.3	118.6	137.8	95.47	130.8	9,565.9	5,593.2	5,337.9	255.27	21.911	
11,122.0	6,914.1	6,891.1	6,891.1	119.2	137.8	95.45	130.8	9,565.9	5,571.2	5,315.3	255.89	21.772	
11,200.0	6,913.5	6,890.5	6,890.5	121.4	137.7	95.37	130.8	9,565.9	5,493.6	5,235.5	258.06	21.288	
11,220.4	6,913.3	6,890.3	6,890.3	121.9	137.7	95.35	130.8	9,565.9	5,473.2	5,214.5	258.63	21.162	
11,300.0	6,912.6	6,889.6	6,889.6	124.1	137.7	95.27	130.8	9,565.9	5,394.0	5,133.1	260.85	20.678	
11,318.9	6,912.5	6,889.5	6,889.5	124.7	137.7	95.25	130.8	9,565.9	5,375.2	5,113.8	261.38	20.564	
11,400.0	6,911.8	6,888.8	6,888.8	126.9	137.7	95.18	130.8	9,565.9	5,294.4	5,030.7	263.65	20.081	
11,417.3	6,911.6	6,888.6	6,888.6	127.4	137.7	95.16	130.8	9,565.9	5,277.1	5,013.0	264.13	19.979	
11,500.0	6,911.0	6,888.0	6,888.0	129.7	137.7	95.08	130.8	9,565.9	5,194.8	4,928.4	266.44	19.497	
11,515.7	6,910.8	6,887.8	6,887.8	130.2	137.7	95.06	130.8	9,565.9	5,179.1	4,912.3	266.88	19.406	
11,600.0	6,910.1	6,887.1	6,887.1	132.5	137.7	94.98	130.8	9,565.9	5,095.3	4,826.0	269.24	18.925	
11,614.1	6,910.0	6,887.0	6,887.0	132.9	137.7	94.97	130.8	9,565.9	5,081.2	4,811.5	269.63	18.845	
11,700.0	6,909.3	6,886.3	6,886.3	135.3	137.7	94.88	130.8	9,565.9	4,995.7	4,723.7	272.03	18.364	
11,712.6	6,909.2	6,886.2	6,886.2	135.6	137.7	94.87	130.8	9,565.9	4,983.2	4,710.8	272.38	18.295	
11,800.0	6,908.5	6,885.5	6,885.5	138.1	137.6	94.78	130.8	9,565.9	4,896.2	4,621.4	274.83	17.815	
11,811.0	6,908.4	6,885.4	6,885.4	138.4	137.6	94.77	130.8	9,565.9	4,885.3	4,610.1	275.14	17.756	
11,900.0	6,907.6	6,884.6	6,884.6	140.9	137.6	94.68	130.8	9,565.9	4,796.7	4,519.1	277.63	17.278	
11,909.4	6,907.5	6,884.5	6,884.5	141.1	137.6	94.68	130.8	9,565.9	4,787.3	4,509.5	277.89	17.227	
12,000.0	6,906.8	6,883.8	6,883.8	143.6	137.6	94.59	130.8	9,565.9	4,697.2	4,416.8	280.43	16.750	
12,007.8	6,906.7	6,883.7	6,883.7	143.9	137.6	94.58	130.8	9,565.9	4,689.4	4,408.8	280.65	16.709	
12,100.0	6,905.9	6,882.9	6,882.9	146.4	137.6	94.49	130.8	9,565.9	4,597.8	4,314.6	283.23	16.234	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT MINERAL-FUELCO #1 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,106.3	6,905.9	6,882.9	6,882.9	146.6	137.6	94.48	130.8	9,565.9	4,591.6	4,308.2	283.40	16.202		
12,200.0	6,905.1	6,882.1	6,882.1	149.2	137.6	94.39	130.8	9,565.9	4,498.4	4,212.4	286.03	15.727		
12,204.7	6,905.1	6,882.1	6,882.1	149.4	137.6	94.39	130.8	9,565.9	4,493.7	4,207.5	286.16	15.704		
12,300.0	6,904.3	6,881.3	6,881.3	152.0	137.6	94.29	130.8	9,565.9	4,399.0	4,110.2	288.83	15.230		
12,303.1	6,904.3	6,881.3	6,881.3	152.1	137.6	94.29	130.8	9,565.9	4,395.9	4,107.0	288.91	15.215		
12,400.0	6,903.4	6,880.4	6,880.4	154.8	137.5	94.19	130.8	9,565.9	4,299.6	4,008.0	291.63	14.743		
12,401.5	6,903.4	6,880.4	6,880.4	154.8	137.5	94.19	130.8	9,565.9	4,298.1	4,006.4	291.67	14.736		
12,500.0	6,902.6	6,879.6	6,879.6	157.6	137.5	94.10	130.8	9,565.9	4,200.3	3,905.8	294.43	14.266		
12,598.4	6,901.8	6,878.8	6,878.8	160.3	137.5	94.00	130.8	9,565.9	4,102.5	3,805.4	297.19	13.805		
12,600.0	6,901.8	6,878.8	6,878.8	160.4	137.5	94.00	130.8	9,565.9	4,101.0	3,803.7	297.23	13.797		
12,696.8	6,901.0	6,878.0	6,878.0	163.1	137.5	93.90	130.8	9,565.9	4,004.8	3,704.9	299.95	13.352		
12,700.0	6,900.9	6,877.9	6,877.9	163.2	137.5	93.90	130.8	9,565.9	4,001.7	3,701.7	300.03	13.337		
12,795.2	6,900.1	6,877.1	6,877.1	165.8	137.5	93.81	130.8	9,565.9	3,907.2	3,604.5	302.70	12.908		
12,800.0	6,900.1	6,877.1	6,877.1	166.0	137.5	93.80	130.8	9,565.9	3,902.4	3,599.6	302.84	12.886		
12,893.7	6,899.3	6,876.3	6,876.3	168.6	137.5	93.71	130.8	9,565.9	3,809.5	3,504.1	305.46	12.471		
12,900.0	6,899.3	6,876.3	6,876.3	168.8	137.5	93.70	130.8	9,565.9	3,803.3	3,497.6	305.64	12.444		
12,992.1	6,898.5	6,875.5	6,875.5	171.3	137.4	93.61	130.8	9,565.9	3,711.9	3,403.7	308.22	12.043		
13,000.0	6,898.4	6,875.4	6,875.4	171.6	137.4	93.60	130.8	9,565.9	3,704.1	3,395.7	308.44	12.009		
13,090.5	6,897.7	6,874.7	6,874.7	174.1	137.4	93.52	130.8	9,565.9	3,614.4	3,303.4	310.98	11.623		
13,100.0	6,897.6	6,874.6	6,874.6	174.4	137.4	93.51	130.8	9,565.9	3,605.0	3,293.7	311.25	11.582		
13,188.9	6,896.9	6,873.9	6,873.9	176.8	137.4	93.42	130.8	9,565.9	3,516.9	3,203.1	313.74	11.210		
13,200.0	6,896.8	6,873.8	6,873.8	177.2	137.4	93.41	130.8	9,565.9	3,505.9	3,191.9	314.05	11.164		
13,287.4	6,896.0	6,873.0	6,873.0	179.6	137.4	93.32	130.8	9,565.9	3,419.4	3,102.9	316.50	10.804		
13,300.0	6,895.9	6,872.9	6,872.9	180.0	137.4	93.31	130.8	9,565.9	3,406.9	3,090.1	316.85	10.752		
13,385.8	6,895.2	6,872.2	6,872.2	182.4	137.4	93.23	130.8	9,565.9	3,322.0	3,002.8	319.26	10.405		
13,400.0	6,895.1	6,872.1	6,872.1	182.7	137.4	93.21	130.8	9,565.9	3,308.0	2,988.3	319.66	10.349		
13,484.2	6,894.4	6,871.4	6,871.4	185.1	137.4	93.13	130.8	9,565.9	3,224.7	2,902.7	322.02	10.014		
13,500.0	6,894.3	6,871.3	6,871.3	185.5	137.4	93.11	130.8	9,565.9	3,209.1	2,886.6	322.46	9.952		
13,582.6	6,893.6	6,870.6	6,870.6	187.9	137.3	93.03	130.8	9,565.9	3,127.4	2,802.7	324.78	9.629		
13,600.0	6,893.4	6,870.4	6,870.4	188.3	137.3	93.02	130.8	9,565.9	3,110.3	2,785.0	325.26	9.562		
13,681.1	6,892.8	6,869.8	6,869.8	190.6	137.3	92.94	130.8	9,565.9	3,030.3	2,702.7	327.54	9.252		
13,700.0	6,892.6	6,869.6	6,869.6	191.1	137.3	92.92	130.8	9,565.9	3,011.6	2,683.5	328.07	9.180		
13,779.5	6,891.9	6,868.9	6,868.9	193.4	137.3	92.84	130.8	9,565.9	2,933.1	2,602.9	330.30	8.880		
13,800.0	6,891.8	6,868.8	6,868.8	193.9	137.3	92.82	130.8	9,565.9	2,912.9	2,582.1	330.87	8.804		
13,877.9	6,891.1	6,868.1	6,868.1	196.1	137.3	92.74	130.8	9,565.9	2,836.1	2,503.1	333.05	8.516		
13,900.0	6,890.9	6,867.9	6,867.9	196.7	137.3	92.72	130.8	9,565.9	2,814.4	2,480.7	333.67	8.435		
13,976.3	6,890.3	6,867.3	6,867.3	198.9	137.3	92.65	130.8	9,565.9	2,739.2	2,403.4	335.81	8.157		
14,000.0	6,890.1	6,867.1	6,867.1	199.5	137.3	92.62	130.8	9,565.9	2,715.9	2,379.5	336.48	8.072		
14,074.8	6,889.5	6,866.5	6,866.5	201.6	137.3	92.55	130.8	9,565.9	2,642.4	2,303.8	338.57	7.805		
14,100.0	6,889.3	6,866.3	6,866.3	202.3	137.3	92.52	130.8	9,565.9	2,617.6	2,278.3	339.28	7.715		
14,173.2	6,888.7	6,865.7	6,865.7	204.4	137.2	92.45	130.8	9,565.9	2,545.7	2,204.4	341.33	7.458		
14,200.0	6,888.4	6,865.4	6,865.4	205.1	137.2	92.43	130.8	9,565.9	2,519.4	2,177.4	342.08	7.365		
14,271.6	6,887.8	6,864.8	6,864.8	207.1	137.2	92.36	130.8	9,565.9	2,449.2	2,105.1	344.09	7.118		
14,300.0	6,887.6	6,864.6	6,864.6	207.9	137.2	92.33	130.8	9,565.9	2,421.4	2,076.5	344.88	7.021		
14,370.0	6,887.0	6,864.0	6,864.0	209.9	137.2	92.26	130.8	9,565.9	2,352.8	2,006.0	346.84	6.783		
14,400.0	6,886.8	6,863.8	6,863.8	210.7	137.2	92.23	130.8	9,565.9	2,323.5	1,975.8	347.68	6.683		
14,468.5	6,886.2	6,863.2	6,863.2	212.6	137.2	92.16	130.8	9,565.9	2,256.6	1,907.0	349.60	6.455		
14,500.0	6,885.9	6,862.9	6,862.9	213.5	137.2	92.13	130.8	9,565.9	2,225.8	1,875.4	350.48	6.351		
14,566.9	6,885.4	6,862.4	6,862.4	215.4	137.2	92.07	130.8	9,565.9	2,160.6	1,808.2	352.36	6.132		
14,600.0	6,885.1	6,862.1	6,862.1	216.3	137.2	92.03	130.8	9,565.9	2,128.4	1,775.1	353.29	6.024		
14,613.0	6,885.0	6,862.0	6,862.0	216.7	137.2	92.02	130.8	9,565.9	2,115.7	1,762.0	353.65	5.982 CC, ES, 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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	39.45	287.8	236.9	373.5				
98.4	98.4	74.1	74.1	0.1	0.0	39.45	287.9	236.8	372.8	372.6	0.12	3,134.397	
100.0	100.0	75.7	75.7	0.1	0.0	39.45	287.9	236.8	372.8	372.6	0.12	3,070.052	
196.8	196.8	172.9	172.9	0.3	0.2	39.43	288.0	236.8	372.8	372.4	0.45	820.161	
200.0	200.0	176.0	176.0	0.3	0.2	39.42	288.0	236.8	372.8	372.4	0.47	799.731	
295.3	295.3	271.4	271.4	0.5	0.2	39.42	288.0	236.7	372.8	372.1	0.72	516.093	
300.0	300.0	276.2	276.2	0.5	0.2	39.43	288.0	236.7	372.8	372.0	0.73	508.259	
393.7	393.7	369.8	369.8	0.7	0.3	39.46	287.8	236.9	372.7	371.7	1.01	369.479	
400.0	400.0	376.1	376.1	0.8	0.3	39.47	287.8	236.9	372.7	371.7	1.03	362.388	
492.1	492.1	468.3	468.3	1.0	0.3	39.51	287.5	237.1	372.7	371.4	1.30	286.002	
500.0	500.0	476.1	476.1	1.0	0.3	39.52	287.5	237.2	372.7	371.4	1.33	281.031	
590.5	590.5	566.6	566.6	1.2	0.4	39.57	287.3	237.4	372.7	371.1	1.58	235.241	
600.0	600.0	576.1	576.1	1.2	0.4	39.57	287.3	237.4	372.7	371.1	1.61	231.348	
689.0	689.0	665.3	665.3	1.4	0.5	39.62	287.0	237.6	372.6	370.8	1.86	200.682	
700.0	700.0	676.4	676.4	1.4	0.5	39.63	287.0	237.6	372.6	370.7	1.89	197.460	
787.4	787.4	763.8	763.8	1.6	0.5	39.67	286.7	237.8	372.5	370.4	2.12	175.371	
800.0	800.0	776.4	776.4	1.7	0.5	39.67	286.7	237.8	372.5	370.3	2.16	172.600	
885.8	885.8	862.1	862.1	1.9	0.6	39.71	286.5	237.9	372.4	370.0	2.39	156.001	
900.0	900.0	876.3	876.3	1.9	0.6	39.71	286.5	237.9	372.4	370.0	2.42	153.574	
984.2	984.2	960.4	960.4	2.1	0.6	39.76	286.2	238.1	372.4	369.7	2.65	140.614	
1,000.0	1,000.0	976.1	976.1	2.1	0.6	39.76	286.2	238.2	372.3	369.7	2.69	138.434	
1,082.7	1,082.7	1,059.2	1,059.2	2.3	0.6	39.79	286.1	238.2	372.3	369.4	2.90	128.288	
1,100.0	1,100.0	1,076.6	1,076.6	2.3	0.6	39.79	286.0	238.2	372.3	369.3	2.95	126.366	
1,150.0	1,150.0	1,126.7	1,126.7	2.4	0.7	39.80	285.9	238.2	372.2	369.1	3.07	121.163	
1,181.1	1,181.1	1,157.8	1,157.8	2.5	0.7	72.51	285.9	238.2	372.1	368.9	3.15	118.019	
1,200.0	1,200.0	1,176.7	1,176.7	2.6	0.7	72.55	285.9	238.2	371.9	368.7	3.20	116.220	
1,279.5	1,279.5	1,256.6	1,256.6	2.7	0.7	72.92	285.8	237.9	371.0	367.6	3.40	108.976	
1,300.0	1,299.9	1,277.2	1,277.2	2.8	0.7	73.07	285.8	237.9	370.7	367.2	3.46	107.206	
1,377.9	1,377.7	1,354.8	1,354.8	3.0	0.7	73.82	285.8	237.5	368.9	365.3	3.66	100.750	
1,400.0	1,399.7	1,376.7	1,376.7	3.0	0.7	74.10	285.7	237.4	368.4	364.6	3.72	99.033	
1,476.4	1,475.7	1,452.4	1,452.4	3.2	0.8	75.27	285.7	237.2	366.1	362.2	3.93	93.235	
1,500.0	1,499.1	1,475.8	1,475.8	3.2	0.8	75.70	285.7	237.2	365.4	361.4	3.99	91.543	
1,574.8	1,573.2	1,550.4	1,550.4	3.4	0.8	77.28	285.6	237.0	362.8	358.6	4.21	86.260	
1,600.0	1,598.2	1,575.5	1,575.5	3.5	0.8	77.88	285.5	236.9	361.9	357.6	4.28	84.562	
1,673.2	1,670.3	1,648.2	1,648.2	3.7	0.8	79.84	285.3	236.7	359.2	354.6	4.51	79.600	
1,700.0	1,696.6	1,674.6	1,674.6	3.8	0.8	80.64	285.2	236.6	358.2	353.6	4.60	77.901	
1,749.9	1,745.5	1,723.7	1,723.7	3.9	0.8	82.24	285.0	236.4	356.3	351.6	4.77	74.729	
1,771.6	1,766.8	1,745.2	1,745.2	4.0	0.9	82.96	284.9	236.3	355.6	350.8	4.85	73.380	
1,800.0	1,794.5	1,773.0	1,773.0	4.1	0.9	83.90	284.7	236.2	354.7	349.8	4.95	71.693	
1,870.1	1,863.1	1,841.5	1,841.5	4.3	0.9	86.24	284.2	236.0	352.9	347.7	5.21	67.766	
1,900.0	1,892.3	1,870.6	1,870.6	4.4	0.9	87.25	284.0	235.9	352.4	347.0	5.32	66.232	
1,968.5	1,959.4	1,937.9	1,937.9	4.7	0.9	89.57	283.5	235.7	351.5	345.9	5.59	62.934	
2,000.0	1,990.2	1,969.0	1,969.0	4.8	0.9	90.65	283.2	235.6	351.3	345.6	5.71	61.547	
2,050.2	2,039.3	2,018.4	2,018.3	5.0	1.0	92.39	282.6	235.5	351.1	345.2	5.91	59.449 CC	
2,066.9	2,055.6	2,034.7	2,034.7	5.1	1.0	92.97	282.4	235.4	351.1	345.2	5.97	58.795 ES	
2,100.0	2,088.0	2,067.1	2,067.0	5.2	1.0	94.11	282.0	235.3	351.3	345.2	6.10	57.561	
2,165.3	2,151.9	2,130.9	2,130.8	5.4	1.0	96.36	281.2	235.1	352.0	345.6	6.36	55.309	
2,200.0	2,185.8	2,164.6	2,164.6	5.6	1.0	97.55	280.8	235.0	352.6	346.1	6.50	54.234	
2,263.8	2,248.2	2,227.4	2,227.3	5.8	1.0	99.75	279.9	234.9	354.1	347.3	6.76	52.418	
2,300.0	2,283.6	2,263.5	2,263.4	6.0	1.0	101.01	279.4	234.7	355.1	348.2	6.90	51.481	
2,362.2	2,344.5	2,325.0	2,324.9	6.2	1.1	103.12	278.6	234.2	357.1	350.0	7.14	49.990	
2,400.0	2,381.4	2,361.8	2,361.8	6.4	1.1	104.37	278.1	233.9	358.5	351.2	7.29	49.175	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,460.6	2,440.7	2,421.0	2,420.9	6.6	1.1	106.36	277.3	233.4	361.2	353.7	7.53	47.989	
2,500.0	2,479.2	2,459.4	2,459.3	6.8	1.1	107.63	276.8	233.1	363.2	355.5	7.68	47.305	
2,559.0	2,537.0	2,516.9	2,516.8	7.0	1.1	109.50	276.1	232.6	366.5	358.6	7.90	46.382	
2,600.0	2,577.1	2,556.6	2,556.5	7.2	1.1	110.78	275.6	232.3	369.1	361.1	8.06	45.822	
2,657.5	2,633.3	2,612.4	2,612.3	7.4	1.2	112.54	274.9	232.0	373.1	364.8	8.27	45.126	
2,700.0	2,674.9	2,654.0	2,654.0	7.6	1.2	113.82	274.4	231.7	376.3	367.9	8.42	44.680	
2,755.9	2,729.6	2,708.7	2,708.6	7.9	1.2	115.47	273.8	231.3	380.8	372.1	8.62	44.159	
2,800.0	2,772.7	2,751.5	2,751.4	8.0	1.2	116.73	273.4	231.0	384.5	375.7	8.78	43.809	
2,854.3	2,825.8	2,804.2	2,804.1	8.3	1.2	118.25	272.8	230.8	389.5	380.5	8.97	43.441	
2,900.0	2,870.5	2,848.6	2,848.5	8.5	1.2	119.51	272.3	230.5	393.9	384.8	9.12	43.186	
2,952.7	2,922.1	2,900.0	2,899.9	8.7	1.3	120.92	271.8	230.3	399.3	390.0	9.30	42.940	
3,000.0	2,968.3	2,946.1	2,946.0	8.9	1.3	122.16	271.4	230.1	404.3	394.8	9.45	42.766	
3,051.2	3,018.4	2,996.0	2,995.9	9.1	1.3	123.47	270.8	229.9	409.9	400.3	9.62	42.615	
3,100.0	3,066.1	3,043.4	3,043.3	9.3	1.3	124.68	270.3	229.8	415.5	405.8	9.77	42.512	
3,149.6	3,114.7	3,091.6	3,091.4	9.5	1.3	125.87	269.8	229.6	421.5	411.5	9.93	42.441	
3,200.0	3,164.0	3,140.8	3,140.7	9.8	1.3	127.06	269.3	229.5	427.7	417.6	10.09	42.404	
3,248.0	3,210.9	3,187.8	3,187.7	10.0	1.4	128.17	268.8	229.4	433.8	423.6	10.23	42.392	
3,300.0	3,261.8	3,237.4	3,237.2	10.2	1.4	129.31	268.2	229.3	440.6	430.2	10.39	42.409	
3,346.4	3,307.2	3,281.2	3,281.1	10.4	1.4	130.30	267.6	229.3	447.0	436.5	10.53	42.459	
3,400.0	3,359.6	3,332.8	3,332.7	10.6	1.4	131.45	266.7	229.5	454.7	444.0	10.68	42.558	
3,444.9	3,403.5	3,376.6	3,376.4	10.8	1.4	132.41	265.8	229.6	461.3	450.5	10.81	42.661	
3,500.0	3,457.4	3,430.2	3,430.0	11.1	1.4	133.56	264.6	229.8	469.6	458.6	10.97	42.809	
3,543.3	3,499.8	3,472.2	3,472.0	11.3	1.5	134.45	263.7	229.9	476.2	465.1	11.09	42.941	
3,600.0	3,555.2	3,527.8	3,527.6	11.5	1.5	135.58	262.3	230.0	485.1	473.9	11.25	43.133	
3,641.7	3,596.0	3,569.1	3,568.9	11.7	1.5	136.40	261.4	230.1	491.7	480.3	11.36	43.280	
3,700.0	3,653.0	3,626.6	3,626.4	11.9	1.5	137.48	260.3	230.1	501.0	489.5	11.52	43.486	
3,740.1	3,692.3	3,665.8	3,665.6	12.1	1.5	138.19	259.5	230.1	507.4	495.8	11.63	43.633	
3,800.0	3,750.8	3,724.3	3,724.0	12.4	1.5	139.23	258.3	230.1	517.2	505.4	11.79	43.862	
3,838.6	3,788.6	3,761.8	3,761.5	12.6	1.6	139.87	257.6	230.1	523.6	511.7	11.90	44.012	
3,900.0	3,848.7	3,821.6	3,821.4	12.8	1.6	140.86	256.4	230.1	533.8	521.8	12.06	44.261	
3,937.0	3,884.9	3,857.7	3,857.4	13.0	1.6	141.44	255.7	230.1	540.1	528.0	12.16	44.413	
4,000.0	3,946.5	3,919.1	3,918.8	13.3	1.6	142.39	254.6	230.1	550.9	538.6	12.33	44.678	
4,035.4	3,981.1	3,953.5	3,953.2	13.4	1.6	142.90	254.0	230.1	557.1	544.6	12.43	44.830	
4,100.0	4,044.3	4,016.5	4,016.2	13.7	1.6	143.83	252.8	230.1	568.4	555.8	12.60	45.113	
4,133.8	4,077.4	4,050.0	4,049.7	13.9	1.6	144.30	252.2	230.1	574.3	561.7	12.69	45.263	
4,200.0	4,142.1	4,115.2	4,114.9	14.2	1.7	145.17	251.2	230.1	586.0	573.2	12.87	45.549	
4,232.3	4,173.7	4,146.7	4,146.4	14.3	1.7	145.59	250.8	230.1	591.8	578.8	12.95	45.687	
4,300.0	4,239.9	4,212.9	4,212.6	14.6	1.7	146.43	249.7	230.1	603.9	590.8	13.13	45.982	
4,330.7	4,270.0	4,243.2	4,242.9	14.7	1.7	146.80	249.3	230.0	609.4	596.2	13.22	46.115	
4,400.0	4,337.7	4,311.4	4,311.1	15.0	1.7	147.62	248.2	229.9	621.9	608.5	13.40	46.412	
4,429.1	4,366.2	4,339.6	4,339.3	15.2	1.7	147.95	247.8	229.8	627.2	613.7	13.48	46.534	
4,500.0	4,435.6	4,408.2	4,407.8	15.5	1.8	148.72	246.8	229.7	640.2	626.5	13.67	46.836	
4,527.5	4,462.5	4,434.7	4,434.4	15.6	1.8	149.01	246.5	229.7	645.3	631.5	13.74	46.952	
4,600.0	4,533.4	4,504.6	4,504.3	15.9	1.8	149.76	245.4	229.7	658.8	644.9	13.94	47.263	
4,626.0	4,558.8	4,529.8	4,529.5	16.0	1.8	150.02	245.0	229.8	663.7	649.7	14.01	47.374	
4,673.6	4,605.3	4,575.9	4,575.6	16.3	1.8	150.48	244.3	229.8	672.7	658.6	14.14	47.579	
4,700.0	4,631.2	4,601.6	4,601.3	16.4	1.8	150.78	244.0	229.9	677.7	663.5	14.19	47.759	
4,724.4	4,655.1	4,625.5	4,625.2	16.4	1.8	151.04	243.6	229.9	682.1	667.8	14.23	47.940	
4,800.0	4,729.5	4,699.8	4,699.5	16.7	1.9	151.76	242.7	230.1	694.5	680.2	14.35	48.410	
4,822.8	4,752.1	4,722.2	4,721.8	16.7	1.9	151.94	242.4	230.2	698.0	683.6	14.38	48.537	
4,900.0	4,828.4	4,797.9	4,797.5	17.0	1.9	152.47	241.9	230.8	708.5	694.0	14.50	48.868	
4,921.2	4,849.5	4,819.4	4,819.0	17.0	1.9	152.59	241.9	231.0	711.1	696.6	14.53	48.944	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,927.8	4,899.4	4,899.1	17.2	1.9	152.95	242.0	231.8	719.3	704.7	14.65	49.116	
5,019.7	4,947.4	4,918.8	4,918.5	17.2	1.9	153.01	242.1	232.0	721.1	706.4	14.67	49.143	
5,100.0	5,027.5	4,998.0	4,997.7	17.4	1.9	153.21	242.6	232.9	727.0	712.2	14.79	49.160	
5,118.1	5,045.6	5,016.3	5,015.9	17.4	1.9	153.24	242.6	233.2	728.1	713.3	14.81	49.153	
5,200.0	5,127.4	5,099.3	5,099.0	17.6	1.9	153.32	243.1	234.1	731.6	716.7	14.93	49.013	
5,216.5	5,143.9	5,116.5	5,116.2	17.6	1.9	153.33	243.2	234.3	732.0	717.1	14.95	48.972	
5,273.4	5,200.8	5,175.8	5,175.5	17.7	1.9	120.62	243.6	234.7	732.7	714.1	18.62	39.353	
5,300.0	5,227.4	5,203.4	5,203.0	17.7	1.9	120.61	243.8	234.9	732.7	714.1	18.65	39.285	
5,314.9	5,242.3	5,218.3	5,217.9	17.7	1.9	120.60	243.8	234.9	732.7	714.1	18.67	39.242	
5,400.0	5,327.4	5,303.0	5,302.6	17.8	1.9	120.56	244.2	235.2	732.8	714.0	18.79	38.997	
5,413.4	5,340.8	5,316.7	5,316.3	17.9	1.9	120.55	244.3	235.3	732.8	714.0	18.81	38.959	
5,500.0	5,427.4	5,405.1	5,404.7	18.0	1.9	120.52	244.7	235.5	732.8	713.8	18.93	38.702	
5,511.8	5,439.2	5,417.0	5,416.6	18.0	1.9	120.52	244.7	235.5	732.8	713.8	18.95	38.666	
5,600.0	5,527.4	5,506.1	5,505.7	18.1	1.9	120.47	245.3	235.5	732.5	713.5	19.08	38.394	
5,610.2	5,537.6	5,516.3	5,515.9	18.1	1.9	120.47	245.4	235.6	732.5	713.4	19.09	38.362	
5,700.0	5,627.4	5,605.4	5,605.0	18.3	1.9	120.43	246.0	235.6	732.3	713.0	19.23	38.085	
5,708.6	5,636.0	5,614.1	5,613.7	18.3	1.9	120.42	246.0	235.6	732.2	713.0	19.24	38.058	
5,800.0	5,727.4	5,705.0	5,704.6	18.4	1.9	120.39	246.4	235.7	732.1	712.7	19.38	37.778	
5,807.1	5,734.5	5,712.0	5,711.6	18.4	1.9	120.39	246.5	235.7	732.0	712.7	19.39	37.757	
5,900.0	5,827.4	5,803.8	5,803.4	18.6	1.8	120.37	246.7	235.7	732.0	712.5	19.53	37.480	
5,905.5	5,832.9	5,809.4	5,809.0	18.6	1.8	120.37	246.7	235.7	732.0	712.4	19.54	37.463	
6,000.0	5,927.4	5,905.8	5,905.4	18.7	1.8	120.36	246.9	235.6	731.8	712.2	19.69	37.172	
6,003.9	5,931.3	5,909.8	5,909.4	18.7	1.8	120.37	246.9	235.6	731.8	712.1	19.70	37.158	
6,100.0	6,027.4	6,006.9	6,006.5	18.9	1.9	120.38	246.9	235.2	731.5	711.6	19.87	36.816	
6,102.3	6,029.7	6,009.3	6,008.9	18.9	1.9	120.38	246.9	235.2	731.5	711.6	19.87	36.807	
6,200.0	6,127.4	6,105.4	6,105.0	19.0	1.9	120.43	246.5	234.6	731.2	711.1	20.06	36.458	
6,200.8	6,128.2	6,106.2	6,105.8	19.0	1.9	120.43	246.5	234.6	731.2	711.1	20.06	36.455	
6,299.2	6,226.6	6,205.7	6,205.3	19.2	1.9	120.53	245.6	233.8	730.9	710.6	20.25	36.091	
6,301.4	6,228.8	6,207.9	6,207.5	19.2	1.9	120.53	245.6	233.7	730.9	710.6	20.26	36.083	
6,350.0	6,277.4	6,256.5	6,256.0	19.3	1.9	30.71	245.1	233.2	729.3	712.2	17.05	42.780	
6,397.6	6,324.7	6,303.8	6,303.3	19.3	1.9	31.14	244.6	232.7	725.0	707.9	17.07	42.461	
6,400.0	6,327.1	6,306.1	6,305.7	19.3	1.9	31.17	244.5	232.7	724.7	707.6	17.08	42.440	
6,450.0	6,376.3	6,354.7	6,354.3	19.3	1.9	31.90	244.0	232.2	717.2	700.1	17.11	41.927	
6,496.0	6,421.1	6,398.9	6,398.4	19.3	1.9	32.83	243.3	231.7	707.8	690.6	17.12	41.335	
6,500.0	6,424.9	6,402.6	6,402.2	19.3	1.9	32.93	243.3	231.6	706.8	689.7	17.12	41.281	
6,550.0	6,472.4	6,449.1	6,448.6	19.3	2.0	34.27	242.5	231.1	693.8	676.7	17.12	40.528	
6,594.5	6,513.8	6,489.4	6,488.9	19.3	2.0	35.76	241.7	230.6	680.1	663.0	17.10	39.778	
6,600.0	6,518.8	6,494.3	6,493.9	19.3	2.0	35.97	241.6	230.6	678.2	661.1	17.09	39.681	
6,650.0	6,563.8	6,539.7	6,539.2	19.3	2.0	38.09	240.7	230.0	660.2	643.2	17.05	38.727	
6,692.9	6,601.1	6,577.2	6,576.8	19.2	2.0	40.27	239.7	229.3	643.0	625.9	17.01	37.798	
6,700.0	6,607.1	6,583.3	6,582.8	19.2	2.0	40.67	239.6	229.2	639.9	622.9	17.00	37.635	
6,750.0	6,648.6	6,625.1	6,624.6	19.2	2.0	43.73	238.4	228.4	617.7	600.7	16.99	36.364	
6,791.3	6,681.4	6,657.9	6,657.4	19.1	2.0	46.64	237.4	227.6	598.0	581.0	17.02	35.144	
6,800.0	6,688.1	6,664.6	6,664.1	19.1	2.0	47.30	237.2	227.4	593.7	576.7	17.03	34.873	
6,850.0	6,725.3	6,701.6	6,701.0	19.1	2.0	51.36	236.0	226.4	568.5	551.4	17.15	33.144	
6,889.7	6,753.2	6,729.1	6,728.4	19.0	2.0	54.91	235.1	225.5	547.9	530.5	17.34	31.603	
6,900.0	6,760.1	6,735.8	6,735.2	19.0	2.0	55.87	234.8	225.3	542.5	525.1	17.39	31.197	
6,950.0	6,792.3	6,767.1	6,766.4	19.0	2.1	60.71	233.7	224.2	516.2	498.4	17.73	29.110	
6,988.2	6,815.1	6,788.9	6,788.2	18.9	2.1	64.53	232.8	223.4	496.3	478.2	18.06	27.477	
7,000.0	6,821.8	6,795.2	6,794.5	18.9	2.1	65.71	232.6	223.1	490.2	472.0	18.16	26.988	
7,050.0	6,848.3	6,818.9	6,818.2	18.9	2.1	70.52	231.6	222.1	465.4	446.7	18.66	24.945	
7,086.6	6,865.9	6,834.1	6,833.4	18.9	2.1	73.83	230.9	221.5	448.5	429.4	19.06	23.531	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,100.0	6,871.9	6,839.3	6,838.5	18.9	2.1	74.99	230.6	221.3	442.6	423.4	19.20	23.052	
7,150.0	6,892.3	6,856.6	6,855.8	18.8	2.1	78.96	229.8	220.5	422.8	403.0	19.80	21.356	
7,185.0	6,904.7	6,866.8	6,866.0	18.8	2.1	81.34	229.2	220.1	411.2	390.9	20.26	20.295	
7,200.0	6,909.5	6,870.7	6,869.9	18.9	2.1	82.24	229.0	219.9	406.9	386.4	20.45	19.892	
7,250.0	6,923.4	6,881.7	6,880.8	19.3	2.1	84.70	228.4	219.4	395.8	374.6	21.17	18.692	
7,283.4	6,930.8	6,887.2	6,886.3	19.8	2.1	85.85	228.1	219.2	391.4	369.7	21.69	18.044	
7,300.0	6,933.9	6,889.3	6,888.4	20.0	2.1	86.27	228.0	219.1	390.2	368.2	21.94	17.782	
7,321.3	6,937.3	6,891.6	6,890.7	20.3	2.1	86.64	227.8	219.0	389.6	367.3	22.29	17.480	
7,350.0	6,940.9	6,893.8	6,892.9	20.8	2.1	86.88	227.7	218.9	390.7	367.9	22.75	17.170	
7,381.9	6,943.6	6,894.9	6,894.0	21.4	2.1	86.76	227.6	218.8	394.2	370.9	23.29	16.926	
7,400.0	6,944.5	6,895.0	6,894.1	21.7	2.1	86.52	227.6	218.8	397.2	373.7	23.58	16.843	
7,432.4	6,945.0	6,894.0	6,893.1	22.3	2.1	85.78	227.7	218.9	404.7	380.5	24.13	16.769 SF	
7,480.3	6,944.6	6,891.7	6,890.8	23.2	2.1	85.43	227.8	219.0	419.9	394.9	25.01	16.790	
7,500.0	6,944.4	6,890.7	6,889.8	23.6	2.1	85.28	227.9	219.0	427.6	402.2	25.37	16.853	
7,578.7	6,943.7	6,886.8	6,885.9	25.2	2.1	84.71	228.1	219.2	465.3	438.4	26.93	17.278	
7,600.0	6,943.6	6,885.7	6,884.8	25.6	2.1	84.56	228.2	219.2	477.2	449.9	27.35	17.447	
7,677.1	6,942.9	6,881.9	6,881.1	27.3	2.1	84.00	228.4	219.4	525.4	496.4	28.98	18.126	
7,700.0	6,942.7	6,880.8	6,880.0	27.8	2.1	83.84	228.4	219.5	540.9	511.4	29.47	18.356	
7,775.6	6,942.1	6,877.2	6,876.3	29.5	2.1	83.30	228.7	219.6	595.7	564.5	31.14	19.128	
7,800.0	6,941.9	6,876.0	6,875.1	30.1	2.1	83.13	228.7	219.7	614.3	582.6	31.68	19.390	
7,874.0	6,941.3	6,872.4	6,871.6	31.8	2.1	82.61	228.9	219.8	673.1	639.7	33.38	20.161	
7,900.0	6,941.1	6,871.2	6,870.3	32.4	2.1	82.43	229.0	219.9	694.4	660.4	33.98	20.435	
7,972.4	6,940.4	6,867.7	6,866.9	34.2	2.1	81.93	229.2	220.0	755.3	719.6	35.69	21.164	
8,000.0	6,940.2	6,866.4	6,865.6	34.9	2.1	81.74	229.2	220.1	779.0	742.7	36.34	21.439	
8,070.8	6,939.6	6,863.1	6,862.2	36.6	2.1	81.25	229.4	220.2	841.0	803.0	38.04	22.108	
8,100.0	6,939.4	6,861.7	6,860.9	37.3	2.1	81.05	229.5	220.3	866.9	828.2	38.74	22.377	
8,169.3	6,938.8	6,858.5	6,857.6	39.1	2.1	80.58	229.7	220.5	929.2	888.8	40.43	22.983	
8,200.0	6,938.5	6,857.0	6,856.2	39.8	2.1	80.37	229.7	220.5	957.2	916.0	41.18	23.244	
8,267.7	6,938.0	6,853.9	6,853.1	41.6	2.1	79.92	229.9	220.7	1,019.3	976.4	42.85	23.788	
8,300.0	6,937.7	6,852.4	6,851.6	42.4	2.1	79.71	230.0	220.7	1,049.1	1,005.5	43.64	24.040	
8,366.1	6,937.2	6,849.4	6,848.6	44.1	2.1	79.27	230.1	220.8	1,110.7	1,065.4	45.29	24.527	
8,400.0	6,936.9	6,847.8	6,847.0	45.0	2.1	79.04	230.2	220.9	1,142.5	1,096.3	46.12	24.769	
8,464.5	6,936.3	6,844.9	6,844.1	46.6	2.1	78.62	230.3	221.0	1,203.3	1,155.5	47.74	25.206	
8,500.0	6,936.0	6,843.3	6,842.5	47.6	2.1	78.39	230.4	221.1	1,236.8	1,188.2	48.62	25.439	
8,563.0	6,935.5	6,840.4	6,839.6	49.2	2.1	77.99	230.6	221.2	1,296.6	1,246.4	50.20	25.832	
8,600.0	6,935.2	6,838.8	6,838.0	50.2	2.1	77.75	230.6	221.3	1,332.0	1,280.8	51.12	26.055	
8,661.4	6,934.7	6,836.0	6,835.3	51.8	2.1	77.36	230.8	221.4	1,390.7	1,338.0	52.66	26.409	
8,700.0	6,934.4	6,834.3	6,833.5	52.8	2.1	77.11	230.9	221.5	1,427.8	1,374.1	53.63	26.624	
8,759.8	6,933.9	6,831.7	6,830.9	54.4	2.1	76.74	231.0	221.6	1,485.3	1,430.2	55.13	26.944	
8,800.0	6,933.5	6,829.9	6,829.1	55.5	2.1	76.49	231.1	221.7	1,524.1	1,467.9	56.13	27.152	
8,858.2	6,933.0	6,827.3	6,826.6	57.1	2.1	76.12	231.2	221.8	1,580.4	1,522.8	57.59	27.441	
8,900.0	6,932.7	6,825.5	6,824.8	58.2	2.1	75.87	231.3	221.9	1,620.8	1,562.2	58.63	27.643	
8,956.7	6,932.2	6,823.0	6,822.3	59.7	2.1	75.52	231.4	222.0	1,675.8	1,615.8	60.05	27.906	
9,000.0	6,931.8	6,821.2	6,820.4	60.9	2.1	75.26	231.5	222.1	1,717.9	1,656.8	61.13	28.102	
9,055.1	6,931.4	6,818.8	6,818.1	62.4	2.1	74.92	231.6	222.2	1,771.6	1,709.1	62.51	28.342	
9,100.0	6,931.0	6,816.9	6,816.1	63.6	2.1	74.65	231.6	222.2	1,815.4	1,751.7	63.62	28.533	
9,153.5	6,930.6	6,814.6	6,813.9	65.0	2.1	74.34	231.7	222.3	1,867.6	1,802.7	64.95	28.753	
9,200.0	6,930.2	6,812.6	6,811.9	66.3	2.1	74.06	231.8	222.4	1,913.0	1,846.9	66.11	28.939	
9,251.9	6,929.7	6,810.4	6,809.7	67.7	2.1	73.76	231.9	222.5	1,963.9	1,896.5	67.39	29.141	
9,300.0	6,929.3	6,808.4	6,807.7	69.0	2.1	73.47	232.0	222.6	2,010.9	1,942.3	68.58	29.323	
9,350.4	6,928.9	6,800.0	6,799.3	70.4	2.1	72.32	232.4	222.9	2,060.3	1,990.7	69.58	29.610	
9,400.0	6,928.5	6,800.0	6,799.3	71.7	2.1	72.32	232.4	222.9	2,109.0	2,038.1	70.87	29.757	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,448.8	6,928.1	6,800.0	6,799.3	73.0	2.1	72.32	232.4	222.9	2,156.9	2,084.8	72.15	29.895	
9,500.0	6,927.7	6,800.0	6,799.3	74.4	2.1	72.32	232.4	222.9	2,207.2	2,133.8	73.49	30.036	
9,547.2	6,927.3	6,800.0	6,799.3	75.7	2.1	72.32	232.4	222.9	2,253.7	2,179.0	74.72	30.161	
9,600.0	6,926.8	6,800.0	6,799.3	77.2	2.1	72.32	232.4	222.9	2,305.6	2,229.5	76.10	30.296	
9,645.6	6,926.4	6,800.0	6,799.3	78.4	2.1	72.32	232.4	222.9	2,350.6	2,273.3	77.30	30.408	
9,700.0	6,926.0	6,800.0	6,799.3	79.9	2.1	72.32	232.4	222.9	2,404.1	2,325.4	78.73	30.538	
9,744.1	6,925.6	6,800.0	6,799.3	81.1	2.1	72.32	232.4	222.9	2,447.6	2,367.7	79.88	30.640	
9,800.0	6,925.2	6,800.0	6,799.3	82.6	2.1	72.32	232.4	222.9	2,502.8	2,421.4	81.35	30.765	
9,842.5	6,924.8	6,787.3	6,786.6	83.8	2.1	70.60	232.9	223.4	2,544.7	2,462.9	81.83	31.096	
9,900.0	6,924.3	6,785.2	6,784.5	85.4	2.1	70.32	233.0	223.5	2,601.5	2,518.2	83.22	31.259	
9,940.9	6,924.0	6,783.8	6,783.1	86.5	2.1	70.13	233.0	223.6	2,641.9	2,557.7	84.21	31.373	
10,000.0	6,923.5	6,781.7	6,781.0	88.1	2.1	69.85	233.1	223.7	2,700.3	2,614.6	85.63	31.535	
10,039.3	6,923.2	6,780.3	6,779.6	89.2	2.1	69.66	233.1	223.7	2,739.2	2,652.6	86.57	31.641	
10,100.0	6,922.6	6,778.2	6,777.5	90.9	2.1	69.39	233.2	223.8	2,799.2	2,711.1	88.02	31.801	
10,137.8	6,922.3	6,776.9	6,776.2	91.9	2.1	69.21	233.3	223.8	2,836.5	2,747.6	88.92	31.899	
10,200.0	6,921.8	6,774.8	6,774.1	93.7	2.1	68.93	233.4	223.9	2,898.1	2,807.7	90.40	32.057	
10,236.2	6,921.5	6,773.5	6,772.9	94.7	2.1	68.77	233.4	224.0	2,934.0	2,842.7	91.26	32.148	
10,300.0	6,921.0	6,771.4	6,770.7	96.4	2.1	68.49	233.5	224.0	2,997.1	2,904.4	92.77	32.306	
10,334.6	6,920.7	6,770.2	6,769.6	97.4	2.1	68.34	233.5	224.1	3,031.4	2,937.8	93.59	32.390	
10,400.0	6,920.1	6,768.1	6,767.4	99.2	2.1	68.06	233.6	224.2	3,096.2	3,001.1	95.13	32.546	
10,433.0	6,919.9	6,767.0	6,766.3	100.1	2.1	67.92	233.7	224.2	3,129.0	3,033.1	95.91	32.624	
10,500.0	6,919.3	6,764.8	6,764.2	101.9	2.1	67.63	233.7	224.3	3,195.3	3,097.9	97.48	32.779	
10,531.5	6,919.0	6,763.8	6,763.2	102.8	2.1	67.50	233.8	224.3	3,226.6	3,128.3	98.22	32.851	
10,600.0	6,918.5	6,761.6	6,761.0	104.7	2.1	67.22	233.9	224.4	3,294.5	3,194.7	99.82	33.006	
10,629.9	6,918.2	6,760.7	6,760.0	105.5	2.1	67.10	233.9	224.4	3,324.2	3,223.7	100.51	33.072	
10,700.0	6,917.6	6,758.5	6,757.8	107.5	2.1	66.81	234.0	224.5	3,393.8	3,291.6	102.14	33.226	
10,728.3	6,917.4	6,757.6	6,756.9	108.3	2.1	66.70	234.0	224.6	3,421.9	3,319.1	102.80	33.288	
10,800.0	6,916.8	6,755.4	6,754.7	110.3	2.1	66.42	234.1	224.6	3,493.0	3,388.6	104.45	33.441	
10,826.7	6,916.6	6,754.5	6,753.9	111.0	2.1	66.31	234.1	224.7	3,519.6	3,414.5	105.07	33.498	
10,900.0	6,916.0	6,752.3	6,751.7	113.0	2.1	66.03	234.2	224.7	3,592.3	3,485.6	106.75	33.650	
10,925.2	6,915.8	6,751.6	6,750.9	113.7	2.1	65.93	234.2	224.8	3,617.3	3,510.0	107.33	33.702	
11,000.0	6,915.1	6,749.3	6,748.7	115.8	2.0	65.65	234.3	224.8	3,691.7	3,582.6	109.04	33.855	
11,023.6	6,914.9	6,748.6	6,748.0	116.5	2.0	65.56	234.4	224.9	3,715.1	3,605.5	109.58	33.902	
11,100.0	6,914.3	6,746.4	6,745.7	118.6	2.0	65.28	234.4	224.9	3,791.0	3,679.7	111.32	34.054	
11,122.0	6,914.1	6,745.7	6,745.1	119.2	2.0	65.20	234.5	225.0	3,812.9	3,701.1	111.82	34.097	
11,200.0	6,913.5	6,743.4	6,742.8	121.4	2.0	64.91	234.5	225.0	3,890.4	3,776.8	113.59	34.249	
11,220.4	6,913.3	6,742.9	6,742.2	121.9	2.0	64.84	234.6	225.1	3,910.7	3,796.7	114.05	34.288	
11,300.0	6,912.6	6,740.6	6,740.0	124.1	2.0	64.56	234.6	225.1	3,989.8	3,874.0	115.85	34.440	
11,318.9	6,912.5	6,740.0	6,739.4	124.7	2.0	64.49	234.7	225.2	4,008.6	3,892.3	116.27	34.475	
11,400.0	6,911.8	6,737.8	6,737.1	126.9	2.0	64.21	234.7	225.2	4,089.3	3,971.2	118.10	34.627	
11,417.3	6,911.6	6,737.3	6,736.7	127.4	2.0	64.15	234.8	225.3	4,106.5	3,988.0	118.48	34.659	
11,500.0	6,911.0	6,735.0	6,734.4	129.7	2.0	63.87	234.8	225.3	4,188.8	4,068.4	120.33	34.810	
11,515.7	6,910.8	6,734.6	6,733.9	130.2	2.0	63.81	234.9	225.3	4,204.4	4,083.7	120.68	34.838	
11,600.0	6,910.1	6,732.2	6,731.6	132.5	2.0	63.53	234.9	225.4	4,288.3	4,165.7	122.56	34.989	
11,614.1	6,910.0	6,731.9	6,731.3	132.9	2.0	63.49	235.0	225.4	4,302.3	4,179.5	122.87	35.014	
11,700.0	6,909.3	6,729.6	6,728.9	135.3	2.0	63.20	235.0	225.5	4,387.8	4,263.0	124.78	35.165	
11,712.6	6,909.2	6,729.2	6,728.6	135.6	2.0	63.16	235.1	225.5	4,400.3	4,275.2	125.05	35.187	
11,800.0	6,908.5	6,726.9	6,726.3	138.1	2.0	62.88	235.1	225.6	4,487.3	4,360.3	126.98	35.338	
11,811.0	6,908.4	6,726.6	6,726.0	138.4	2.0	62.85	235.1	225.6	4,498.2	4,371.0	127.22	35.357	
11,900.0	6,907.6	6,724.3	6,723.7	140.9	2.0	62.57	235.2	225.7	4,586.9	4,457.7	129.18	35.508	
11,909.4	6,907.5	6,724.0	6,723.4	141.1	2.0	62.54	235.2	225.7	4,596.2	4,466.8	129.39	35.523	
12,000.0	6,906.8	6,721.7	6,721.1	143.6	2.0	62.26	235.3	225.8	4,686.4	4,555.1	131.37	35.674	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,007.8	6,906.7	6,721.5	6,720.9	143.9	2.0	62.24	235.3	225.8	4,694.2	4,562.7	131.54	35.687		
12,100.0	6,905.9	6,719.2	6,718.6	146.4	2.0	61.96	235.4	225.8	4,786.0	4,652.5	133.55	35.838		
12,106.3	6,905.9	6,719.0	6,718.4	146.6	2.0	61.94	235.4	225.8	4,792.3	4,658.6	133.68	35.848		
12,200.0	6,905.1	6,700.0	6,699.4	149.2	2.0	59.72	236.1	226.4	4,885.6	4,752.1	133.57	36.577		
12,204.7	6,905.1	6,700.0	6,699.4	149.4	2.0	59.72	236.1	226.4	4,890.3	4,756.6	133.69	36.581		
12,300.0	6,904.3	6,700.0	6,699.4	152.0	2.0	59.72	236.1	226.4	4,985.2	4,849.2	136.01	36.654		
12,303.1	6,904.3	6,700.0	6,699.4	152.1	2.0	59.72	236.1	226.4	4,988.4	4,852.3	136.08	36.657		
12,400.0	6,903.4	6,700.0	6,699.4	154.8	2.0	59.72	236.1	226.4	5,084.9	4,946.4	138.45	36.728		
12,401.5	6,903.4	6,700.0	6,699.4	154.8	2.0	59.72	236.1	226.4	5,086.4	4,947.9	138.48	36.729		
12,500.0	6,902.6	6,700.0	6,699.4	157.6	2.0	59.72	236.1	226.4	5,184.5	5,043.6	140.88	36.800		
12,598.4	6,901.8	6,700.0	6,699.4	160.3	2.0	59.72	236.1	226.4	5,282.5	5,139.3	143.28	36.868		
12,600.0	6,901.8	6,700.0	6,699.4	160.4	2.0	59.72	236.1	226.4	5,284.1	5,140.8	143.32	36.869		
12,696.8	6,901.0	6,700.0	6,699.4	163.1	2.0	59.72	236.1	226.4	5,380.6	5,234.9	145.68	36.934		
12,700.0	6,900.9	6,700.0	6,699.4	163.2	2.0	59.72	236.1	226.4	5,383.8	5,238.0	145.76	36.936		
12,795.2	6,900.1	6,700.0	6,699.4	165.8	2.0	59.72	236.1	226.4	5,478.7	5,330.6	148.09	36.997		
12,800.0	6,900.1	6,700.0	6,699.4	166.0	2.0	59.72	236.1	226.4	5,483.5	5,335.3	148.20	37.000		
12,893.7	6,899.3	6,700.0	6,699.4	168.6	2.0	59.72	236.1	226.4	5,576.8	5,426.4	150.49	37.059		
12,900.0	6,899.3	6,700.0	6,699.4	168.8	2.0	59.72	236.1	226.4	5,583.1	5,432.5	150.64	37.062		
12,992.1	6,898.5	6,700.0	6,699.4	171.3	2.0	59.72	236.1	226.4	5,675.0	5,522.1	152.89	37.118		
13,000.0	6,898.4	6,700.0	6,699.4	171.6	2.0	59.72	236.1	226.4	5,682.8	5,529.8	153.08	37.123		
13,090.5	6,897.7	6,700.0	6,699.4	174.1	2.0	59.72	236.1	226.4	5,773.1	5,617.8	155.29	37.176		
13,100.0	6,897.6	6,700.0	6,699.4	174.4	2.0	59.72	236.1	226.4	5,782.5	5,627.0	155.52	37.181		
13,188.9	6,896.9	6,700.0	6,699.4	176.8	2.0	59.72	236.1	226.4	5,871.2	5,713.5	157.69	37.232		
13,200.0	6,896.8	6,700.0	6,699.4	177.2	2.0	59.72	236.1	226.4	5,882.3	5,724.3	157.96	37.238		
13,287.4	6,896.0	6,700.0	6,699.4	179.6	2.0	59.72	236.1	226.4	5,969.4	5,809.3	160.10	37.286		
13,300.0	6,895.9	6,700.0	6,699.4	180.0	2.0	59.72	236.1	226.4	5,982.0	5,821.6	160.41	37.293		
13,385.8	6,895.2	6,700.0	6,699.4	182.4	2.0	59.72	236.1	226.4	6,067.6	5,905.1	162.50	37.338		
13,400.0	6,895.1	6,700.0	6,699.4	182.7	2.0	59.73	236.1	226.4	6,081.7	5,918.9	162.85	37.346		
13,484.2	6,894.4	6,700.0	6,699.4	185.1	2.0	59.73	236.1	226.4	6,165.7	6,000.8	164.91	37.389		
13,500.0	6,894.3	6,700.0	6,699.4	185.5	2.0	59.73	236.1	226.4	6,181.5	6,016.2	165.29	37.397		
13,582.6	6,893.6	6,700.0	6,699.4	187.9	2.0	59.73	236.1	226.4	6,263.9	6,096.6	167.31	37.439		
13,600.0	6,893.4	6,700.0	6,699.4	188.3	2.0	59.73	236.1	226.4	6,281.2	6,113.5	167.73	37.447		
13,681.1	6,892.8	6,700.0	6,699.4	190.6	2.0	59.73	236.1	226.4	6,362.1	6,192.4	169.71	37.487		
13,700.0	6,892.6	6,681.2	6,680.7	191.1	2.0	57.62	236.7	227.0	6,380.9	6,214.0	166.97	38.217		
13,779.5	6,891.9	6,679.4	6,678.9	193.4	2.0	57.43	236.7	227.0	6,460.2	6,291.7	168.56	38.327		
13,800.0	6,891.8	6,679.0	6,678.4	193.9	2.0	57.38	236.7	227.0	6,480.7	6,311.7	168.97	38.355		
13,877.9	6,891.1	6,677.2	6,676.7	196.1	2.0	57.19	236.8	227.1	6,558.4	6,387.9	170.52	38.461		
13,900.0	6,890.9	6,676.8	6,676.2	196.7	2.0	57.14	236.8	227.1	6,580.4	6,409.5	170.96	38.491		
13,976.3	6,890.3	6,675.1	6,674.5	198.9	2.0	56.96	236.9	227.1	6,656.6	6,484.1	172.48	38.594		
14,000.0	6,890.1	6,674.6	6,674.0	199.5	2.0	56.90	236.9	227.1	6,680.2	6,507.3	172.94	38.626		
14,074.8	6,889.5	6,672.9	6,672.4	201.6	2.0	56.73	236.9	227.2	6,754.8	6,580.4	174.42	38.726		
14,100.0	6,889.3	6,672.4	6,671.8	202.3	2.0	56.67	237.0	227.2	6,780.0	6,605.0	174.92	38.760		
14,173.2	6,888.7	6,670.8	6,670.3	204.4	2.0	56.50	237.0	227.2	6,853.0	6,676.6	176.36	38.857		
14,200.0	6,888.4	6,670.2	6,669.7	205.1	2.0	56.44	237.0	227.3	6,879.7	6,702.9	176.89	38.892		
14,271.6	6,887.8	6,668.7	6,668.2	207.1	2.0	56.27	237.1	227.3	6,951.2	6,772.9	178.30	38.986		
14,300.0	6,887.6	6,668.1	6,667.6	207.9	2.0	56.21	237.1	227.3	6,979.5	6,800.7	178.86	39.023		
14,370.0	6,887.0	6,666.6	6,666.1	209.9	2.0	56.05	237.1	227.4	7,049.4	6,869.2	180.23	39.114		
14,400.0	6,886.8	6,666.0	6,665.5	210.7	2.0	55.99	237.2	227.4	7,079.3	6,898.5	180.81	39.153		
14,468.5	6,886.2	6,664.6	6,664.0	212.6	2.0	55.84	237.2	227.4	7,147.7	6,965.5	182.15	39.241		
14,500.0	6,885.9	6,663.9	6,663.4	213.5	2.0	55.77	237.2	227.4	7,179.1	6,996.4	182.76	39.281		
14,566.9	6,885.4	6,662.5	6,662.0	215.4	2.0	55.62	237.3	227.5	7,245.9	7,061.8	184.06	39.367		
14,600.0	6,885.1	6,661.9	6,661.3	216.3	2.0	55.55	237.3	227.5	7,278.9	7,094.2	184.70	39.409		

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	6,661.6	6,661.1	216.7	2.0	55.53	237.3	227.5	7,291.9	7,106.9	184.96	39.425	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	79.25	298.8	1,574.4	1,602.7				
98.4	98.4	71.6	71.6	0.1	0.0	79.26	298.8	1,574.4	1,602.5	1,602.4	0.12	N/A	
100.0	100.0	73.1	73.1	0.1	0.0	79.26	298.8	1,574.5	1,602.5	1,602.4	0.12	N/A	
196.8	196.8	165.7	165.7	0.3	0.2	79.26	298.7	1,574.8	1,602.8	1,602.4	0.46	3,465.707	
200.0	200.0	168.7	168.7	0.3	0.2	79.26	298.7	1,574.8	1,602.9	1,602.4	0.47	3,376.919	
295.3	295.3	264.7	264.7	0.5	0.3	79.27	298.6	1,575.3	1,603.3	1,602.5	0.80	2,006.906	
300.0	300.0	269.6	269.6	0.5	0.3	79.27	298.6	1,575.3	1,603.3	1,602.5	0.81	1,970.083	
393.7	393.7	364.1	364.1	0.7	0.3	79.27	298.6	1,575.6	1,603.7	1,602.6	1.09	1,472.244	
400.0	400.0	370.3	370.3	0.8	0.3	79.27	298.6	1,575.6	1,603.7	1,602.6	1.11	1,448.484	
492.1	492.1	460.9	460.9	1.0	0.4	79.28	298.2	1,576.1	1,604.1	1,602.7	1.37	1,169.962	
500.0	500.0	468.6	468.6	1.0	0.4	79.29	298.2	1,576.1	1,604.1	1,602.7	1.39	1,150.957	
590.5	590.5	558.0	558.0	1.2	0.5	79.30	297.9	1,576.6	1,604.5	1,602.9	1.65	973.361	
600.0	600.0	567.4	567.4	1.2	0.5	79.30	297.9	1,576.7	1,604.6	1,602.9	1.67	958.137	
689.0	689.0	658.5	658.5	1.4	0.5	79.30	297.9	1,577.1	1,605.0	1,603.1	1.92	834.621	
700.0	700.0	670.0	669.9	1.4	0.5	79.30	297.9	1,577.2	1,605.1	1,603.1	1.95	821.458	
787.4	787.4	758.3	758.3	1.6	0.6	79.31	297.8	1,577.5	1,605.4	1,603.2	2.19	731.545	
800.0	800.0	770.9	770.9	1.7	0.6	79.31	297.8	1,577.5	1,605.4	1,603.2	2.23	720.275	
885.8	885.8	853.9	853.9	1.9	0.6	79.32	297.5	1,577.9	1,605.7	1,603.3	2.46	652.525	
900.0	900.0	867.4	867.4	1.9	0.6	79.33	297.4	1,578.0	1,605.8	1,603.3	2.50	642.603	
984.2	984.2	955.7	955.7	2.1	0.6	79.33	297.3	1,578.5	1,606.2	1,603.5	2.72	589.952	
1,000.0	1,000.0	973.2	973.2	2.1	0.7	79.34	297.2	1,578.5	1,606.3	1,603.5	2.76	581.110	
1,082.7	1,082.7	1,058.8	1,058.8	2.3	0.7	79.35	297.0	1,578.6	1,606.3	1,603.3	2.98	538.583	
1,100.0	1,100.0	1,076.2	1,076.2	2.3	0.7	79.35	296.9	1,578.6	1,606.3	1,603.3	3.03	530.436	
1,135.8	1,135.8	1,111.8	1,111.8	2.4	0.7	79.35	296.7	1,578.6	1,606.3	1,603.2	3.12	514.414	
1,150.0	1,150.0	1,125.7	1,125.6	2.4	0.7	79.36	296.7	1,578.7	1,606.3	1,603.1	3.16	508.338	
1,181.1	1,181.1	1,156.0	1,156.0	2.5	0.7	112.05	296.5	1,578.7	1,606.4	1,603.2	3.21	499.758	
1,200.0	1,200.0	1,174.4	1,174.4	2.6	0.7	112.06	296.4	1,578.7	1,606.5	1,603.2	3.26	492.449	
1,279.5	1,279.5	1,251.7	1,251.7	2.7	0.8	112.14	296.0	1,578.9	1,607.6	1,604.1	3.46	464.134	
1,300.0	1,299.9	1,271.6	1,271.6	2.8	0.8	112.17	295.9	1,579.0	1,608.0	1,604.5	3.52	457.390	
1,377.9	1,377.7	1,348.8	1,348.8	3.0	0.8	112.31	295.5	1,579.3	1,610.2	1,606.5	3.72	433.163	
1,400.0	1,399.7	1,370.8	1,370.8	3.0	0.8	112.36	295.4	1,579.4	1,610.9	1,607.2	3.77	426.793	
1,476.4	1,475.7	1,445.6	1,445.6	3.2	0.8	112.56	295.1	1,579.7	1,614.1	1,610.1	3.98	405.665	
1,500.0	1,499.1	1,468.4	1,468.4	3.2	0.9	112.63	295.0	1,579.8	1,615.3	1,611.3	4.04	399.601	
1,574.8	1,573.2	1,543.0	1,543.0	3.4	0.9	112.90	294.7	1,580.2	1,619.6	1,615.3	4.26	380.581	
1,600.0	1,598.2	1,568.8	1,568.8	3.5	0.9	113.00	294.6	1,580.3	1,621.2	1,616.8	4.33	374.588	
1,673.2	1,670.3	1,641.5	1,641.5	3.7	0.9	113.31	294.4	1,580.6	1,626.3	1,621.7	4.55	357.116	
1,700.0	1,696.6	1,667.5	1,667.5	3.8	0.9	113.44	294.3	1,580.7	1,628.4	1,623.8	4.64	351.203	
1,749.9	1,745.5	1,715.6	1,715.6	3.9	1.0	113.67	294.1	1,580.8	1,632.6	1,627.8	4.80	339.999	
1,771.6	1,766.8	1,736.5	1,736.5	4.0	1.0	113.82	294.0	1,580.9	1,634.5	1,629.7	4.88	335.200	
1,800.0	1,794.5	1,763.7	1,763.6	4.1	1.0	114.00	293.9	1,581.1	1,637.1	1,632.1	4.97	329.169	
1,870.1	1,863.1	1,831.4	1,831.4	4.3	1.0	114.46	293.7	1,581.4	1,643.5	1,638.3	5.22	314.684	
1,900.0	1,892.3	1,860.6	1,860.6	4.4	1.0	114.66	293.6	1,581.6	1,646.3	1,640.9	5.33	308.912	
1,968.5	1,959.4	1,925.7	1,925.7	4.7	1.0	115.10	293.3	1,581.9	1,652.7	1,647.1	5.58	296.044	
2,000.0	1,990.2	1,954.5	1,954.4	4.8	1.0	115.29	293.2	1,582.1	1,655.8	1,650.1	5.70	290.561	
2,066.9	2,055.6	2,016.3	2,016.3	5.1	1.1	115.71	292.9	1,582.7	1,662.4	1,656.5	5.95	279.299	
2,100.0	2,088.0	2,048.1	2,048.0	5.2	1.1	115.92	292.7	1,583.0	1,665.8	1,659.7	6.08	274.030	
2,165.3	2,151.9	2,110.4	2,110.3	5.4	1.1	116.34	292.4	1,583.6	1,672.5	1,666.2	6.33	264.087	
2,200.0	2,185.8	2,142.3	2,142.2	5.6	1.1	116.55	292.2	1,584.0	1,676.2	1,669.7	6.47	259.165	
2,263.8	2,248.2	2,201.1	2,201.0	5.8	1.1	116.94	291.8	1,584.8	1,683.1	1,676.4	6.72	250.490	
2,300.0	2,283.6	2,237.3	2,237.2	6.0	1.2	117.17	291.7	1,585.3	1,687.1	1,680.2	6.86	245.831	
2,362.2	2,344.5	2,299.4	2,299.3	6.2	1.2	117.57	291.4	1,586.1	1,693.9	1,686.8	7.11	238.167	
2,400.0	2,381.4	2,339.3	2,339.2	6.4	1.2	117.83	291.2	1,586.6	1,698.1	1,690.8	7.26	233.866	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,460.6	2,440.7	2,403.1	2,403.0	6.6	1.2	118.25	290.5	1,587.3	1,704.7	1,697.2	7.50	227.251	
2,500.0	2,479.2	2,442.5	2,442.5	6.8	1.2	118.52	289.9	1,587.6	1,708.9	1,701.3	7.66	223.222	
2,559.0	2,537.0	2,501.7	2,501.6	7.0	1.2	118.91	289.0	1,588.1	1,715.4	1,707.5	7.89	217.427	
2,600.0	2,577.1	2,541.3	2,541.2	7.2	1.3	119.17	288.4	1,588.4	1,719.8	1,711.8	8.05	213.627	
2,657.5	2,633.3	2,596.9	2,596.8	7.4	1.3	119.54	287.5	1,588.8	1,726.2	1,717.9	8.28	208.519	
2,700.0	2,674.9	2,637.0	2,636.9	7.6	1.3	119.80	286.9	1,589.1	1,731.0	1,722.5	8.45	204.927	
2,755.9	2,729.6	2,689.8	2,689.6	7.9	1.3	120.14	286.1	1,589.6	1,737.4	1,728.7	8.67	200.403	
2,800.0	2,772.7	2,731.2	2,731.1	8.0	1.3	120.41	285.5	1,590.0	1,742.5	1,733.7	8.84	197.005	
2,854.3	2,825.8	2,782.1	2,782.0	8.3	1.3	120.74	284.8	1,590.6	1,748.9	1,739.9	9.06	192.992	
2,900.0	2,870.5	2,827.5	2,827.4	8.5	1.4	121.03	284.1	1,591.1	1,754.4	1,745.2	9.24	189.782	
2,952.7	2,922.1	2,882.1	2,881.9	8.7	1.4	121.37	283.4	1,591.7	1,760.7	1,751.3	9.46	186.213	
3,000.0	2,968.3	2,931.6	2,931.4	8.9	1.4	121.67	282.9	1,592.1	1,766.3	1,756.7	9.64	183.173	
3,051.2	3,018.4	2,985.6	2,985.5	9.1	1.4	122.00	282.4	1,592.4	1,772.3	1,762.5	9.85	180.008	
3,100.0	3,066.1	3,036.1	3,036.0	9.3	1.4	122.30	281.9	1,592.7	1,778.0	1,768.0	10.04	177.143	
3,149.6	3,114.7	3,087.1	3,086.9	9.5	1.5	122.61	281.5	1,592.8	1,783.8	1,773.6	10.23	174.347	
3,200.0	3,164.0	3,136.2	3,136.1	9.8	1.5	122.90	281.0	1,592.9	1,789.7	1,779.2	10.43	171.629	
3,248.0	3,210.9	3,182.3	3,182.1	10.0	1.5	123.17	280.5	1,593.0	1,795.3	1,784.7	10.61	169.140	
3,300.0	3,261.8	3,232.2	3,232.0	10.2	1.5	123.47	279.9	1,593.1	1,801.5	1,790.7	10.82	166.554	
3,346.4	3,307.2	3,276.8	3,276.6	10.4	1.5	123.73	279.4	1,593.3	1,807.1	1,796.1	11.00	164.325	
3,400.0	3,359.6	3,328.2	3,328.1	10.6	1.5	124.04	278.8	1,593.4	1,813.6	1,802.4	11.20	161.858	
3,444.9	3,403.5	3,371.3	3,371.2	10.8	1.5	124.29	278.2	1,593.6	1,819.1	1,807.7	11.38	159.862	
3,500.0	3,457.4	3,422.9	3,422.8	11.1	1.6	124.59	277.6	1,593.8	1,825.9	1,814.4	11.59	157.503	
3,543.3	3,499.8	3,462.2	3,462.0	11.3	1.6	124.81	277.1	1,594.1	1,831.4	1,819.7	11.76	155.715	
3,600.0	3,555.2	3,513.5	3,513.3	11.5	1.6	125.11	276.3	1,594.5	1,838.8	1,826.8	11.98	153.467	
3,641.7	3,596.0	3,551.4	3,551.2	11.7	1.6	125.33	275.7	1,594.8	1,844.3	1,832.2	12.14	151.868	
3,700.0	3,653.0	3,604.6	3,604.4	11.9	1.6	125.64	274.8	1,595.4	1,852.2	1,839.8	12.37	149.725	
3,740.1	3,692.3	3,643.7	3,643.5	12.1	1.6	125.87	274.1	1,595.9	1,857.6	1,845.1	12.53	148.299	
3,800.0	3,750.8	3,702.1	3,701.9	12.4	1.7	126.20	273.2	1,596.6	1,865.9	1,853.1	12.76	146.249	
3,838.6	3,788.6	3,740.1	3,739.9	12.6	1.7	126.41	272.7	1,597.1	1,871.2	1,858.3	12.91	144.973	
3,900.0	3,848.7	3,800.7	3,800.5	12.8	1.7	126.75	271.8	1,597.8	1,879.7	1,866.6	13.14	143.011	
3,937.0	3,884.9	3,837.0	3,836.7	13.0	1.7	126.95	271.3	1,598.3	1,884.9	1,871.6	13.29	141.868	
4,000.0	3,946.5	3,898.7	3,898.5	13.3	1.7	127.29	270.3	1,599.0	1,893.7	1,880.2	13.53	139.989	
4,035.4	3,981.1	3,935.7	3,935.5	13.4	1.7	127.49	269.8	1,599.4	1,898.7	1,885.0	13.66	138.976	
4,100.0	4,044.3	4,003.0	4,002.7	13.7	1.8	127.86	268.6	1,599.9	1,907.6	1,893.7	13.91	137.186	
4,133.8	4,077.4	4,034.9	4,034.6	13.9	1.8	128.03	268.0	1,600.2	1,912.4	1,898.3	14.03	136.277	
4,200.0	4,142.1	4,097.2	4,096.9	14.2	1.8	128.37	266.9	1,600.7	1,921.7	1,907.4	14.28	134.563	
4,232.3	4,173.7	4,130.9	4,130.6	14.3	1.8	128.56	266.2	1,601.0	1,926.2	1,911.8	14.40	133.757	
4,300.0	4,239.9	4,202.1	4,201.7	14.6	1.8	128.94	264.9	1,601.4	1,935.7	1,921.1	14.65	132.112	
4,330.7	4,270.0	4,231.2	4,230.9	14.7	1.8	129.10	264.3	1,601.6	1,940.0	1,925.3	14.77	131.389	
4,400.0	4,337.7	4,297.0	4,296.6	15.0	1.9	129.45	262.9	1,602.0	1,949.9	1,934.8	15.02	129.812	
4,429.1	4,366.2	4,324.0	4,323.7	15.2	1.9	129.60	262.2	1,602.1	1,954.0	1,938.9	15.13	129.168	
4,500.0	4,435.6	4,389.6	4,389.3	15.5	1.9	129.96	260.5	1,602.6	1,964.3	1,948.9	15.39	127.654	
4,527.5	4,462.5	4,416.0	4,415.7	15.6	1.9	130.10	259.7	1,602.8	1,968.4	1,952.9	15.49	127.085	
4,600.0	4,533.4	4,487.2	4,486.8	15.9	1.9	130.48	257.9	1,603.3	1,979.1	1,963.3	15.75	125.632	
4,626.0	4,558.8	4,512.9	4,512.4	16.0	1.9	130.62	257.3	1,603.5	1,982.9	1,967.1	15.85	125.124	
4,673.6	4,605.3	4,560.3	4,559.8	16.3	1.9	130.85	256.6	1,604.0	1,990.0	1,974.0	16.02	124.206	
4,700.0	4,631.2	4,586.7	4,586.3	16.4	1.9	131.03	256.4	1,604.2	1,993.8	1,977.7	16.10	123.844	
4,724.4	4,655.1	4,610.6	4,610.2	16.4	2.0	131.19	256.4	1,604.5	1,997.2	1,981.1	16.16	123.594	
4,800.0	4,729.5	4,682.7	4,682.3	16.7	2.0	131.59	257.0	1,605.4	2,007.0	1,990.7	16.35	122.754	
4,822.8	4,752.1	4,700.0	4,699.6	16.7	2.0	131.68	257.3	1,605.6	2,009.8	1,993.4	16.40	122.535	
4,900.0	4,828.4	4,772.5	4,772.0	17.0	2.0	131.99	258.7	1,606.9	2,018.3	2,001.7	16.58	121.744	
4,921.2	4,849.5	4,791.3	4,790.8	17.0	2.0	132.06	259.1	1,607.3	2,020.4	2,003.8	16.62	121.558	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,927.8	4,857.5	4,857.0	17.2	2.0	132.27	260.7	1,608.9	2,027.8	2,011.0	16.78	120.822	
5,019.7	4,947.4	4,873.9	4,873.4	17.2	2.0	132.31	261.1	1,609.4	2,029.5	2,012.6	16.82	120.668	
5,100.0	5,027.5	4,951.0	4,950.4	17.4	2.0	132.44	263.4	1,611.8	2,035.6	2,018.7	16.97	119.971	
5,118.1	5,045.6	4,969.8	4,969.2	17.4	2.0	132.46	264.0	1,612.4	2,036.8	2,019.8	17.00	119.833	
5,200.0	5,127.4	5,052.9	5,052.2	17.6	2.0	132.51	266.5	1,615.0	2,041.1	2,023.9	17.13	119.134	
5,216.5	5,143.9	5,069.4	5,068.7	17.6	2.0	132.52	266.9	1,615.5	2,041.7	2,024.6	17.16	119.008	
5,273.4	5,200.8	5,127.2	5,126.5	17.7	2.0	99.83	268.0	1,617.1	2,043.5	2,026.8	16.74	122.086	
5,300.0	5,227.4	5,154.7	5,154.0	17.7	2.0	99.81	268.4	1,617.9	2,044.2	2,027.4	16.78	121.839	
5,314.9	5,242.3	5,170.2	5,169.5	17.7	2.0	99.81	268.6	1,618.3	2,044.5	2,027.7	16.80	121.679	
5,400.0	5,327.4	5,259.9	5,259.1	17.8	2.1	99.78	269.3	1,620.5	2,046.5	2,029.5	16.95	120.754	
5,413.4	5,340.8	5,274.1	5,273.3	17.9	2.1	99.77	269.4	1,620.8	2,046.8	2,029.8	16.97	120.606	
5,500.0	5,427.4	5,372.8	5,372.0	18.0	2.1	99.76	269.7	1,622.7	2,048.4	2,031.3	17.12	119.617	
5,511.8	5,439.2	5,386.6	5,385.8	18.0	2.1	99.76	269.6	1,622.9	2,048.6	2,031.4	17.15	119.477	
5,600.0	5,527.4	5,492.2	5,491.4	18.1	2.1	99.77	269.0	1,623.9	2,049.5	2,032.2	17.31	118.373	
5,610.2	5,537.6	5,503.8	5,502.9	18.1	2.1	99.77	268.9	1,624.0	2,049.5	2,032.2	17.33	118.239	
5,700.0	5,627.4	5,594.0	5,593.2	18.3	2.1	99.80	267.8	1,624.2	2,050.0	2,032.5	17.51	117.055	
5,708.6	5,636.0	5,600.0	5,599.2	18.3	2.1	99.80	267.8	1,624.3	2,050.0	2,032.5	17.53	116.946	
5,800.0	5,727.4	5,677.8	5,676.9	18.4	2.2	99.83	266.6	1,624.8	2,050.9	2,033.2	17.71	115.812	
5,807.1	5,734.5	5,683.6	5,682.8	18.4	2.2	99.83	266.5	1,624.8	2,051.0	2,033.2	17.72	115.727	
5,900.0	5,827.4	5,773.2	5,772.4	18.6	2.2	99.87	264.9	1,625.9	2,052.3	2,034.4	17.91	114.604	
5,905.5	5,832.9	5,778.7	5,777.9	18.6	2.2	99.88	264.8	1,626.0	2,052.4	2,034.5	17.92	114.538	
6,000.0	5,927.4	5,870.9	5,870.0	18.7	2.2	99.92	263.0	1,627.1	2,053.9	2,035.8	18.11	113.414	
6,003.9	5,931.3	5,874.7	5,873.8	18.7	2.2	99.92	262.9	1,627.2	2,054.0	2,035.8	18.12	113.367	
6,100.0	6,027.4	5,967.9	5,967.0	18.9	2.3	99.97	260.8	1,628.4	2,055.6	2,037.3	18.31	112.247	
6,102.3	6,029.7	5,970.2	5,969.2	18.9	2.3	99.98	260.7	1,628.4	2,055.6	2,037.3	18.32	112.219	
6,200.0	6,127.4	6,069.7	6,068.7	19.0	2.3	100.04	258.1	1,629.8	2,057.4	2,038.8	18.52	111.083	
6,200.8	6,128.2	6,070.5	6,069.5	19.0	2.3	100.04	258.0	1,629.8	2,057.4	2,038.9	18.52	111.073	
6,299.2	6,226.6	6,169.4	6,168.3	19.2	2.3	100.13	254.6	1,630.8	2,059.0	2,040.3	18.73	109.925	
6,301.4	6,228.8	6,171.5	6,170.5	19.2	2.3	100.14	254.5	1,630.8	2,059.0	2,040.3	18.74	109.900	
6,350.0	6,277.4	6,221.4	6,220.3	19.3	2.3	10.20	252.6	1,631.3	2,058.2	2,039.0	19.19	107.262	
6,397.6	6,324.7	6,272.5	6,271.4	19.3	2.4	10.34	250.6	1,631.7	2,054.2	2,035.0	19.20	106.982	
6,400.0	6,327.1	6,275.1	6,273.9	19.3	2.4	10.35	250.5	1,631.8	2,053.9	2,034.7	19.20	106.964	
6,450.0	6,376.3	6,326.4	6,325.2	19.3	2.4	10.57	248.2	1,632.1	2,046.2	2,026.9	19.21	106.518	
6,496.0	6,421.1	6,371.5	6,370.3	19.3	2.4	10.84	246.2	1,632.3	2,036.0	2,016.8	19.20	106.033	
6,500.0	6,424.9	6,375.4	6,374.1	19.3	2.4	10.87	246.0	1,632.3	2,035.0	2,015.8	19.20	105.990	
6,550.0	6,472.4	6,420.7	6,419.5	19.3	2.4	11.24	243.7	1,632.5	2,020.5	2,001.4	19.16	105.453	
6,594.5	6,513.8	6,457.8	6,456.5	19.3	2.4	11.64	241.8	1,632.7	2,005.0	1,986.0	19.09	105.018	
6,600.0	6,518.8	6,462.4	6,461.0	19.3	2.4	11.70	241.5	1,632.7	2,003.0	1,983.9	19.08	104.968	
6,650.0	6,563.8	6,503.1	6,501.7	19.3	2.4	12.26	239.3	1,633.1	1,982.3	1,963.4	18.96	104.569	
6,692.9	6,601.1	6,540.0	6,538.5	19.2	2.4	12.85	237.2	1,633.4	1,962.3	1,943.5	18.81	104.299	
6,700.0	6,607.1	6,546.0	6,544.5	19.2	2.4	12.96	236.8	1,633.4	1,958.7	1,940.0	18.79	104.264	
6,750.0	6,648.6	6,587.0	6,585.5	19.2	2.4	13.80	234.3	1,633.8	1,932.2	1,913.7	18.57	104.064	
6,791.3	6,681.4	6,617.9	6,616.3	19.1	2.5	14.62	232.3	1,634.0	1,908.3	1,889.9	18.35	103.968	
6,800.0	6,688.1	6,624.0	6,622.3	19.1	2.5	14.81	231.8	1,634.0	1,903.0	1,884.7	18.31	103.959	
6,850.0	6,725.3	6,657.9	6,656.2	19.1	2.5	16.01	229.4	1,634.3	1,871.2	1,853.2	18.01	103.909	
6,889.7	6,753.2	6,683.3	6,681.5	19.0	2.5	17.14	227.4	1,634.6	1,844.2	1,826.4	17.76	103.849	
6,900.0	6,760.1	6,689.7	6,687.8	19.0	2.5	17.47	226.9	1,634.6	1,837.0	1,819.3	17.69	103.833	
6,950.0	6,792.3	6,720.3	6,718.4	19.0	2.5	19.26	224.4	1,634.9	1,800.5	1,783.2	17.38	103.582	
6,988.2	6,815.1	6,742.5	6,740.5	18.9	2.5	20.90	222.5	1,635.1	1,771.3	1,754.1	17.18	103.117	
7,000.0	6,821.8	6,749.0	6,747.0	18.9	2.5	21.46	221.9	1,635.2	1,762.0	1,744.9	17.12	102.924	
7,050.0	6,848.3	6,774.9	6,772.8	18.9	2.5	24.18	219.6	1,635.4	1,721.6	1,704.6	16.96	101.516	
7,086.6	6,865.9	6,792.0	6,789.8	18.9	2.5	26.59	218.0	1,635.6	1,690.9	1,673.9	16.96	99.726	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,100.0	6,871.9	6,797.9	6,795.6	18.9	2.5	27.58	217.4	1,635.6	1,679.4	1,662.5	16.98	98.911	
7,150.0	6,892.3	6,822.0	6,819.6	18.8	2.5	32.04	215.1	1,635.8	1,635.8	1,618.5	17.30	94.572	
7,185.0	6,904.7	6,836.8	6,834.3	18.8	2.5	35.89	213.7	1,635.9	1,604.5	1,586.7	17.75	90.391	
7,200.0	6,909.5	6,842.5	6,840.0	18.9	2.5	37.74	213.2	1,635.9	1,590.9	1,572.9	18.00	88.406	
7,250.0	6,923.4	6,858.9	6,856.4	19.3	2.5	45.01	211.6	1,636.0	1,544.9	1,525.8	19.10	80.864	
7,283.4	6,930.8	6,867.6	6,865.1	19.8	2.5	50.90	210.8	1,636.0	1,513.7	1,493.6	20.04	75.534	
7,300.0	6,933.9	6,871.2	6,868.7	20.0	2.5	54.15	210.5	1,636.0	1,498.1	1,477.6	20.54	72.946	
7,350.0	6,940.9	6,879.5	6,876.8	20.8	2.5	65.21	209.7	1,636.0	1,450.7	1,428.7	22.05	65.790	
7,381.9	6,943.6	6,882.6	6,879.9	21.4	2.5	73.06	209.4	1,636.0	1,420.4	1,397.4	22.94	61.924	
7,400.0	6,944.5	6,883.6	6,881.0	21.7	2.5	77.68	209.3	1,636.0	1,403.1	1,379.7	23.40	59.968	
7,432.4	6,945.0	6,884.2	6,881.5	22.3	2.5	86.00	209.2	1,636.0	1,372.1	1,347.9	24.24	56.607	
7,480.3	6,944.6	6,883.7	6,881.1	23.2	2.5	85.94	209.3	1,636.0	1,326.5	1,301.4	25.13	52.791	
7,500.0	6,944.4	6,883.5	6,880.9	23.6	2.5	85.91	209.3	1,636.0	1,307.8	1,282.3	25.49	51.300	
7,578.7	6,943.7	6,882.8	6,880.2	25.2	2.5	85.82	209.4	1,636.0	1,233.2	1,206.1	27.07	45.557	
7,600.0	6,943.6	6,882.6	6,880.0	25.6	2.5	85.79	209.4	1,636.0	1,213.2	1,185.7	27.50	44.122	
7,677.1	6,942.9	6,882.0	6,879.3	27.3	2.5	85.69	209.4	1,636.0	1,140.8	1,111.7	29.15	39.138	
7,700.0	6,942.7	6,881.8	6,879.1	27.8	2.5	85.67	209.5	1,636.0	1,119.5	1,089.9	29.64	37.772	
7,775.6	6,942.1	6,881.1	6,878.5	29.5	2.5	85.57	209.5	1,636.0	1,049.5	1,018.2	31.34	33.491	
7,800.0	6,941.9	6,880.9	6,878.3	30.1	2.5	85.54	209.5	1,636.0	1,027.1	995.2	31.89	32.211	
7,874.0	6,941.3	6,880.3	6,877.6	31.8	2.5	85.46	209.6	1,636.0	959.6	926.0	33.61	28.549	
7,900.0	6,941.1	6,880.1	6,877.4	32.4	2.5	85.43	209.6	1,636.0	936.2	901.9	34.22	27.357	
7,972.4	6,940.4	6,879.5	6,876.8	34.2	2.5	85.34	209.7	1,636.0	871.6	835.6	35.96	24.237	
8,000.0	6,940.2	6,879.2	6,876.6	34.9	2.5	85.31	209.7	1,636.0	847.3	810.7	36.62	23.137	
8,070.8	6,939.6	6,878.7	6,876.0	36.6	2.5	85.23	209.8	1,636.0	786.0	747.6	38.36	20.488	
8,100.0	6,939.4	6,878.4	6,875.8	37.3	2.5	85.20	209.8	1,636.0	761.2	722.1	39.08	19.479	
8,169.3	6,938.8	6,877.9	6,875.3	39.1	2.5	85.12	209.8	1,636.0	703.7	662.9	40.81	17.243	
8,200.0	6,938.5	6,877.6	6,875.0	39.8	2.5	85.09	209.8	1,636.0	679.0	637.4	41.58	16.329	
8,267.7	6,938.0	6,877.1	6,874.5	41.6	2.5	85.01	209.9	1,636.0	626.2	582.9	43.30	14.462	
8,300.0	6,937.7	6,876.9	6,874.3	42.4	2.5	84.98	209.9	1,636.0	602.1	558.0	44.12	13.647	
8,366.1	6,937.2	6,876.4	6,873.8	44.1	2.5	84.91	210.0	1,636.0	555.3	509.5	45.82	12.120	
8,400.0	6,936.9	6,876.1	6,873.5	45.0	2.5	84.87	210.0	1,636.0	532.9	486.3	46.69	11.416	
8,464.5	6,936.3	6,875.6	6,873.0	46.6	2.5	84.81	210.0	1,636.0	494.0	445.6	48.36	10.214	
8,500.0	6,936.0	6,875.4	6,872.8	47.6	2.5	84.77	210.1	1,636.0	474.9	425.7	49.28	9.638	
8,563.0	6,935.5	6,874.9	6,872.3	49.2	2.5	84.71	210.1	1,636.0	446.1	395.2	50.93	8.760	
8,600.0	6,935.2	6,874.6	6,872.1	50.2	2.5	84.67	210.1	1,636.0	432.5	380.6	51.89	8.335	
8,661.4	6,934.7	6,874.2	6,871.6	51.8	2.5	84.61	210.2	1,636.0	416.4	362.9	53.51	7.782	
8,700.0	6,934.4	6,873.9	6,871.3	52.8	2.5	84.57	210.2	1,636.0	410.6	356.1	54.52	7.531	
8,742.4	6,934.0	6,873.6	6,871.0	54.0	2.5	84.53	210.2	1,636.0	408.4	352.8	55.65	7.340 CC	
8,759.8	6,933.9	6,873.5	6,870.9	54.4	2.5	84.51	210.2	1,636.0	408.8	352.7	56.11	7.286 ES	
8,800.0	6,933.5	6,873.2	6,870.7	55.5	2.5	84.47	210.3	1,636.0	412.5	355.3	57.17	7.215 SF	
8,858.2	6,933.0	6,872.8	6,870.3	57.1	2.5	84.42	210.3	1,636.0	424.6	365.8	58.72	7.230	
8,900.0	6,932.7	6,872.6	6,870.0	58.2	2.5	84.38	210.3	1,636.0	437.8	378.0	59.83	7.317	
8,956.7	6,932.2	6,872.2	6,869.6	59.7	2.5	84.32	210.4	1,636.0	461.2	399.9	61.34	7.519	
9,000.0	6,931.8	6,871.9	6,869.3	60.9	2.5	84.28	210.4	1,636.0	482.9	420.4	62.50	7.726	
9,055.1	6,931.4	6,871.5	6,868.9	62.4	2.5	84.23	210.4	1,636.0	514.4	450.4	63.98	8.040	
9,100.0	6,931.0	6,871.2	6,868.7	63.6	2.5	84.19	210.5	1,636.0	542.9	477.7	65.18	8.329	
9,153.5	6,930.6	6,870.9	6,868.3	65.0	2.5	84.14	210.5	1,636.0	579.5	512.9	66.62	8.699	
9,200.0	6,930.2	6,870.6	6,868.0	66.3	2.5	84.10	210.5	1,636.0	613.4	545.5	67.87	9.038	
9,251.9	6,929.7	6,870.3	6,867.7	67.7	2.5	84.05	210.6	1,636.0	653.0	583.8	69.27	9.428	
9,300.0	6,929.3	6,870.0	6,867.4	69.0	2.5	84.01	210.6	1,636.0	691.2	620.6	70.56	9.795	
9,350.4	6,928.9	6,869.7	6,867.1	70.4	2.5	83.97	210.6	1,636.0	732.4	660.5	71.92	10.183	
9,400.0	6,928.5	6,869.4	6,866.8	71.7	2.5	83.93	210.6	1,636.0	774.1	700.9	73.26	10.566	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,448.8	6,928.1	6,869.1	6,866.5	73.0	2.5	83.88	210.7	1,636.0	816.0	741.4	74.59	10.940	
9,500.0	6,927.7	6,868.7	6,866.2	74.4	2.5	83.84	210.7	1,636.0	860.7	784.7	75.97	11.329	
9,547.2	6,927.3	6,868.5	6,865.9	75.7	2.5	83.80	210.7	1,636.0	902.5	825.3	77.25	11.683	
9,600.0	6,926.8	6,868.2	6,865.6	77.2	2.5	83.76	210.8	1,636.0	949.9	871.2	78.68	12.072	
9,645.6	6,926.4	6,867.9	6,865.3	78.4	2.5	83.72	210.8	1,636.0	991.3	911.4	79.92	12.403	
9,700.0	6,926.0	6,867.6	6,865.0	79.9	2.5	83.68	210.8	1,636.0	1,041.1	959.7	81.40	12.790	
9,744.1	6,925.6	6,867.3	6,864.7	81.1	2.5	83.64	210.8	1,636.0	1,081.7	999.1	82.60	13.096	
9,800.0	6,925.2	6,867.0	6,864.4	82.6	2.5	83.59	210.9	1,636.0	1,133.7	1,049.6	84.12	13.478	
9,842.5	6,924.8	6,866.8	6,864.2	83.8	2.5	83.56	210.9	1,636.0	1,173.5	1,088.2	85.28	13.761	
9,900.0	6,924.3	6,866.4	6,863.9	85.4	2.5	83.52	210.9	1,636.0	1,227.5	1,140.7	86.84	14.135	
9,940.9	6,924.0	6,866.2	6,863.6	86.5	2.5	83.48	210.9	1,636.0	1,266.2	1,178.2	87.96	14.395	
10,000.0	6,923.5	6,865.9	6,863.3	88.1	2.5	83.44	211.0	1,636.0	1,322.3	1,232.7	89.57	14.762	
10,039.3	6,923.2	6,865.7	6,863.1	89.2	2.5	83.41	211.0	1,636.0	1,359.7	1,269.1	90.64	15.001	
10,100.0	6,922.6	6,865.3	6,862.8	90.9	2.5	83.36	211.0	1,636.0	1,417.7	1,325.4	92.30	15.360	
10,137.8	6,922.3	6,865.1	6,862.6	91.9	2.5	83.33	211.0	1,636.0	1,453.9	1,360.6	93.33	15.578	
10,200.0	6,921.8	6,864.8	6,862.3	93.7	2.5	83.29	211.1	1,636.0	1,513.7	1,418.7	95.03	15.929	
10,236.2	6,921.5	6,864.6	6,862.1	94.7	2.5	83.26	211.1	1,636.0	1,548.6	1,452.6	96.02	16.128	
10,300.0	6,921.0	6,864.3	6,861.7	96.4	2.5	83.21	211.1	1,636.0	1,610.3	1,512.5	97.76	16.471	
10,334.6	6,920.7	6,864.1	6,861.6	97.4	2.5	83.19	211.1	1,636.0	1,643.8	1,545.1	98.71	16.652	
10,400.0	6,920.1	6,863.8	6,861.2	99.2	2.5	83.14	211.2	1,636.0	1,707.2	1,606.7	100.50	16.987	
10,433.0	6,919.9	6,863.6	6,861.1	100.1	2.5	83.12	211.2	1,636.0	1,739.3	1,637.9	101.40	17.152	
10,500.0	6,919.3	6,863.3	6,860.7	101.9	2.5	83.07	211.2	1,636.0	1,804.4	1,701.2	103.24	17.479	
10,531.5	6,919.0	6,863.1	6,860.6	102.8	2.5	83.05	211.2	1,636.0	1,835.1	1,731.0	104.10	17.629	
10,600.0	6,918.5	6,862.8	6,860.2	104.7	2.5	83.00	211.3	1,636.0	1,902.0	1,796.0	105.97	17.947	
10,629.9	6,918.2	6,862.6	6,860.1	105.5	2.5	82.98	211.3	1,636.0	1,931.2	1,824.4	106.79	18.083	
10,700.0	6,917.6	6,862.3	6,859.7	107.5	2.5	82.93	211.3	1,636.0	1,999.7	1,891.0	108.71	18.395	
10,728.3	6,917.4	6,862.1	6,859.6	108.3	2.5	82.92	211.3	1,636.0	2,027.5	1,918.0	109.49	18.517	
10,800.0	6,916.8	6,861.8	6,859.3	110.3	2.5	82.87	211.4	1,636.0	2,097.7	1,986.3	111.45	18.821	
10,826.7	6,916.6	6,861.7	6,859.1	111.0	2.5	82.85	211.4	1,636.0	2,124.0	2,011.8	112.19	18.932	
10,900.0	6,916.0	6,861.3	6,858.8	113.0	2.5	82.80	211.4	1,636.0	2,195.9	2,081.7	114.20	19.229	
10,925.2	6,915.8	6,861.2	6,858.7	113.7	2.5	82.78	211.4	1,636.0	2,220.6	2,105.8	114.89	19.329	
11,000.0	6,915.1	6,860.9	6,858.3	115.8	2.5	82.74	211.4	1,636.0	2,294.2	2,177.3	116.94	19.619	
11,023.6	6,914.9	6,860.7	6,858.2	116.5	2.5	82.72	211.5	1,636.0	2,317.5	2,199.9	117.59	19.708	
11,100.0	6,914.3	6,860.4	6,857.9	118.6	2.5	82.67	211.5	1,636.0	2,392.7	2,273.0	119.68	19.992	
11,122.0	6,914.1	6,860.3	6,857.8	119.2	2.5	82.66	211.5	1,636.0	2,414.4	2,294.1	120.29	20.072	
11,200.0	6,913.5	6,860.0	6,857.4	121.4	2.5	82.61	211.5	1,636.0	2,491.3	2,368.9	122.43	20.349	
11,220.4	6,913.3	6,859.9	6,857.3	121.9	2.5	82.60	211.5	1,636.0	2,511.5	2,388.5	122.99	20.420	
11,300.0	6,912.6	6,859.5	6,857.0	124.1	2.5	82.55	211.6	1,636.0	2,590.0	2,464.8	125.17	20.691	
11,318.9	6,912.5	6,859.4	6,856.9	124.7	2.5	82.54	211.6	1,636.0	2,608.6	2,482.9	125.69	20.754	
11,400.0	6,911.8	6,859.1	6,856.5	126.9	2.5	82.49	211.6	1,636.0	2,688.8	2,560.9	127.92	21.019	
11,417.3	6,911.6	6,859.0	6,856.5	127.4	2.5	82.48	211.6	1,636.0	2,705.9	2,577.5	128.40	21.075	
11,500.0	6,911.0	6,858.6	6,856.1	129.7	2.5	82.43	211.7	1,636.0	2,787.7	2,657.0	130.67	21.334	
11,515.7	6,910.8	6,858.6	6,856.1	130.2	2.5	82.42	211.7	1,636.0	2,803.2	2,672.1	131.10	21.382	
11,600.0	6,910.1	6,858.2	6,855.7	132.5	2.5	82.37	211.7	1,636.0	2,886.6	2,753.2	133.41	21.637	
11,614.1	6,910.0	6,858.2	6,855.6	132.9	2.5	82.36	211.7	1,636.0	2,900.6	2,766.8	133.80	21.678	
11,700.0	6,909.3	6,857.8	6,855.3	135.3	2.5	82.31	211.7	1,636.0	2,985.6	2,849.5	136.16	21.927	
11,712.6	6,909.2	6,857.8	6,855.2	135.6	2.5	82.30	211.7	1,636.0	2,998.1	2,861.6	136.51	21.963	
11,800.0	6,908.5	6,857.4	6,854.9	138.1	2.5	82.25	211.8	1,636.0	3,084.7	2,945.8	138.91	22.207	
11,811.0	6,908.4	6,857.4	6,854.8	138.4	2.5	82.25	211.8	1,636.0	3,095.6	2,956.4	139.21	22.237	
11,900.0	6,907.6	6,857.0	6,854.5	140.9	2.5	82.20	211.8	1,636.0	3,183.9	3,042.2	141.66	22.476	
11,909.4	6,907.5	6,857.0	6,854.4	141.1	2.5	82.19	211.8	1,636.0	3,193.2	3,051.3	141.92	22.501	
12,000.0	6,906.8	6,856.6	6,854.1	143.6	2.5	82.14	211.9	1,636.0	3,283.1	3,138.7	144.40	22.735	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,007.8	6,906.7	6,856.6	6,854.1	143.9	2.5	82.14	211.9	1,636.0	3,290.9	3,146.2	144.62	22.755	
12,100.0	6,905.9	6,856.2	6,853.7	146.4	2.5	82.09	211.9	1,636.0	3,382.3	3,235.2	147.15	22.985	
12,106.3	6,905.9	6,856.2	6,853.7	146.6	2.5	82.09	211.9	1,636.0	3,388.5	3,241.2	147.33	23.000	
12,200.0	6,905.1	6,855.8	6,853.3	149.2	2.5	82.04	211.9	1,636.0	3,481.6	3,331.7	149.90	23.226	
12,204.7	6,905.1	6,855.8	6,853.3	149.4	2.5	82.03	211.9	1,636.0	3,486.3	3,336.2	150.03	23.237	
12,300.0	6,904.3	6,855.5	6,852.9	152.0	2.5	81.98	212.0	1,636.0	3,580.9	3,428.3	152.65	23.458	
12,303.1	6,904.3	6,855.4	6,852.9	152.1	2.5	81.98	212.0	1,636.0	3,584.0	3,431.3	152.74	23.465	
12,400.0	6,903.4	6,855.1	6,852.6	154.8	2.5	81.93	212.0	1,636.0	3,680.3	3,524.9	155.40	23.683	
12,401.5	6,903.4	6,855.1	6,852.6	154.8	2.5	81.93	212.0	1,636.0	3,681.8	3,526.4	155.44	23.686	
12,500.0	6,902.6	6,854.7	6,852.2	157.6	2.5	81.88	212.0	1,636.0	3,779.7	3,621.5	158.15	23.899	
12,598.4	6,901.8	6,854.4	6,851.8	160.3	2.5	81.83	212.1	1,636.0	3,877.5	3,716.7	160.85	24.106	
12,600.0	6,901.8	6,854.3	6,851.8	160.4	2.5	81.83	212.1	1,636.0	3,879.1	3,718.2	160.90	24.109	
12,696.8	6,901.0	6,854.0	6,851.5	163.1	2.5	81.78	212.1	1,635.9	3,975.4	3,811.9	163.56	24.305	
12,700.0	6,900.9	6,854.0	6,851.5	163.2	2.5	81.78	212.1	1,635.9	3,978.6	3,814.9	163.65	24.312	
12,795.2	6,900.1	6,853.7	6,851.2	165.8	2.5	81.73	212.1	1,635.9	4,073.3	3,907.1	166.27	24.499	
12,800.0	6,900.1	6,853.6	6,851.1	166.0	2.5	81.73	212.1	1,635.9	4,078.1	3,911.7	166.40	24.508	
12,893.7	6,899.3	6,853.3	6,850.8	168.6	2.5	81.69	212.2	1,635.9	4,171.3	4,002.3	168.97	24.686	
12,900.0	6,899.3	6,853.3	6,850.8	168.8	2.5	81.68	212.2	1,635.9	4,177.6	4,008.4	169.15	24.698	
12,992.1	6,898.5	6,853.0	6,850.5	171.3	2.5	81.64	212.2	1,635.9	4,269.2	4,097.6	171.68	24.868	
13,000.0	6,898.4	6,853.0	6,850.5	171.6	2.5	81.64	212.2	1,635.9	4,277.1	4,105.2	171.90	24.882	
13,090.5	6,897.7	6,852.6	6,850.1	174.1	2.5	81.59	212.2	1,635.9	4,367.2	4,192.8	174.39	25.044	
13,100.0	6,897.6	6,852.6	6,850.1	174.4	2.5	81.59	212.2	1,635.9	4,376.7	4,202.0	174.65	25.060	
13,188.9	6,896.9	6,852.3	6,849.8	176.8	2.5	81.55	212.3	1,635.9	4,465.2	4,288.1	177.09	25.214	
13,200.0	6,896.8	6,852.3	6,849.8	177.2	2.5	81.54	212.3	1,635.9	4,476.2	4,298.8	177.40	25.233	
13,287.4	6,896.0	6,852.0	6,849.5	179.6	2.5	81.50	212.3	1,635.9	4,563.2	4,383.4	179.80	25.380	
13,300.0	6,895.9	6,852.0	6,849.5	180.0	2.5	81.50	212.3	1,635.9	4,575.8	4,395.7	180.14	25.401	
13,385.8	6,895.2	6,851.7	6,849.2	182.4	2.5	81.46	212.3	1,635.9	4,661.3	4,478.8	182.50	25.541	
13,400.0	6,895.1	6,851.6	6,849.1	182.7	2.5	81.45	212.3	1,635.9	4,675.4	4,492.5	182.89	25.564	
13,484.2	6,894.4	6,851.4	6,848.9	185.1	2.5	81.42	212.4	1,635.9	4,759.3	4,574.1	185.21	25.697	
13,500.0	6,894.3	6,851.3	6,848.8	185.5	2.5	81.41	212.4	1,635.9	4,775.0	4,589.4	185.64	25.722	
13,582.6	6,893.6	6,851.1	6,848.6	187.9	2.5	81.37	212.4	1,635.9	4,857.4	4,669.5	187.91	25.849	
13,600.0	6,893.4	6,851.0	6,848.5	188.3	2.5	81.37	212.4	1,635.9	4,874.7	4,686.3	188.39	25.875	
13,681.1	6,892.8	6,850.8	6,848.3	190.6	2.5	81.33	212.4	1,635.9	4,955.5	4,764.9	190.62	25.997	
13,700.0	6,892.6	6,850.7	6,848.2	191.1	2.5	81.32	212.4	1,635.9	4,974.3	4,783.2	191.14	26.024	
13,779.5	6,891.9	6,850.4	6,848.0	193.4	2.5	81.29	212.4	1,635.9	5,053.6	4,860.3	193.33	26.140	
13,800.0	6,891.8	6,850.4	6,847.9	193.9	2.5	81.28	212.4	1,635.9	5,074.0	4,880.1	193.89	26.170	
13,877.9	6,891.1	6,850.2	6,847.7	196.1	2.5	81.25	212.5	1,635.9	5,151.7	4,955.7	196.03	26.280	
13,900.0	6,890.9	6,850.1	6,847.6	196.7	2.5	81.24	212.5	1,635.9	5,173.7	4,977.1	196.64	26.311	
13,976.3	6,890.3	6,849.9	6,847.4	198.9	2.5	81.21	212.5	1,635.9	5,249.8	5,051.1	198.74	26.416	
14,000.0	6,890.1	6,849.8	6,847.3	199.5	2.5	81.20	212.5	1,635.9	5,273.4	5,074.0	199.39	26.448	
14,074.8	6,889.5	6,849.6	6,847.1	201.6	2.5	81.17	212.5	1,635.9	5,347.9	5,146.5	201.44	26.548	
14,100.0	6,889.3	6,849.5	6,847.0	202.3	2.5	81.16	212.5	1,635.9	5,373.1	5,171.0	202.14	26.581	
14,173.2	6,888.7	6,849.3	6,846.8	204.4	2.5	81.13	212.6	1,635.9	5,446.1	5,241.9	204.15	26.677	
14,200.0	6,888.4	6,849.2	6,846.7	205.1	2.5	81.12	212.6	1,635.9	5,472.8	5,267.9	204.89	26.712	
14,271.6	6,887.8	6,849.0	6,846.5	207.1	2.5	81.09	212.6	1,635.9	5,544.2	5,337.4	206.85	26.803	
14,300.0	6,887.6	6,848.9	6,846.4	207.9	2.5	81.08	212.6	1,635.9	5,572.5	5,364.9	207.63	26.838	
14,370.0	6,887.0	6,848.7	6,846.2	209.9	2.5	81.05	212.6	1,635.9	5,642.4	5,432.8	209.56	26.925	
14,400.0	6,886.8	6,848.6	6,846.2	210.7	2.5	81.04	212.6	1,635.9	5,672.3	5,461.9	210.38	26.962	
14,468.5	6,886.2	6,848.4	6,846.0	212.6	2.5	81.01	212.6	1,635.9	5,740.6	5,528.3	212.26	27.044	
14,500.0	6,885.9	6,848.4	6,845.9	213.5	2.5	81.00	212.6	1,635.9	5,772.0	5,558.9	213.13	27.082	
14,566.9	6,885.4	6,848.2	6,845.7	215.4	2.5	80.97	212.7	1,635.9	5,838.7	5,623.8	214.97	27.161	
14,600.0	6,885.1	6,848.1	6,845.6	216.3	2.5	80.96	212.7	1,635.9	5,871.8	5,655.9	215.88	27.199	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,613.0	6,885.0	6,848.0	6,845.6	216.7	2.5	80.96	212.7	1,635.9	5,884.7	5,668.5	216.24	27.214	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	119.65	-834.2	1,465.8	1,686.7				
98.4	98.4	68.7	68.7	0.1	0.0	119.65	-834.5	1,465.8	1,686.7	1,686.5	0.12	N/A	
100.0	100.0	70.2	70.2	0.1	0.0	119.65	-834.5	1,465.8	1,686.7	1,686.5	0.12	N/A	
196.8	196.8	170.3	170.3	0.3	0.2	119.68	-835.3	1,465.7	1,687.0	1,686.5	0.47	3,609.536	
200.0	200.0	173.8	173.7	0.3	0.2	119.68	-835.3	1,465.7	1,687.0	1,686.5	0.48	3,515.095	
295.3	295.3	264.0	264.0	0.5	0.3	119.70	-836.0	1,465.5	1,687.2	1,686.4	0.78	2,150.376	
300.0	300.0	268.2	268.2	0.5	0.3	119.70	-836.0	1,465.5	1,687.2	1,686.4	0.80	2,113.108	
393.7	393.7	359.9	359.9	0.7	0.3	119.72	-836.6	1,465.8	1,687.8	1,686.7	1.08	1,568.874	
400.0	400.0	366.4	366.4	0.8	0.3	119.72	-836.7	1,465.8	1,687.8	1,686.7	1.09	1,542.047	
492.1	492.1	457.6	457.6	1.0	0.4	119.73	-837.1	1,466.1	1,688.3	1,687.0	1.36	1,242.737	
500.0	500.0	465.3	465.2	1.0	0.4	119.73	-837.2	1,466.2	1,688.4	1,687.0	1.38	1,222.921	
590.5	590.5	558.9	558.8	1.2	0.5	119.75	-838.2	1,466.2	1,688.9	1,687.3	1.64	1,031.046	
600.0	600.0	569.0	569.0	1.2	0.5	119.76	-838.3	1,466.2	1,689.0	1,687.3	1.67	1,014.273	
689.0	689.0	668.3	668.3	1.4	0.5	119.78	-839.0	1,466.0	1,689.1	1,687.2	1.91	882.818	
700.0	700.0	680.8	680.8	1.4	0.5	119.79	-839.2	1,465.9	1,689.1	1,687.1	1.94	869.015	
767.8	767.8	743.9	743.8	1.6	0.5	119.82	-839.8	1,465.3	1,688.9	1,686.8	2.12	795.523	
787.4	787.4	760.7	760.7	1.6	0.6	119.83	-840.0	1,465.2	1,688.9	1,686.8	2.17	776.732	
800.0	800.0	771.6	771.5	1.7	0.6	119.83	-840.1	1,465.2	1,689.0	1,686.7	2.21	765.122	
885.8	885.8	865.2	865.1	1.9	0.6	119.87	-841.3	1,464.8	1,689.2	1,686.7	2.44	693.336	
900.0	900.0	882.7	882.6	1.9	0.6	119.88	-841.4	1,464.6	1,689.1	1,686.7	2.47	682.612	
961.5	961.5	937.5	937.4	2.0	0.6	119.90	-841.9	1,464.1	1,688.9	1,686.3	2.63	642.275	
984.2	984.2	955.4	955.4	2.1	0.6	119.91	-842.1	1,464.1	1,689.0	1,686.3	2.69	628.869	
1,000.0	1,000.0	967.9	967.8	2.1	0.6	119.91	-842.2	1,464.1	1,689.0	1,686.3	2.72	619.916	
1,082.7	1,082.7	1,048.0	1,047.9	2.3	0.7	119.93	-843.1	1,464.3	1,689.7	1,686.7	2.94	574.873	
1,100.0	1,100.0	1,067.8	1,067.7	2.3	0.7	119.94	-843.3	1,464.3	1,689.8	1,686.8	2.99	565.838	
1,150.0	1,150.0	1,120.2	1,120.1	2.4	0.7	119.95	-843.8	1,464.2	1,689.9	1,686.8	3.12	541.598	
1,181.1	1,181.1	1,148.9	1,148.8	2.5	0.7	152.65	-844.1	1,464.2	1,690.2	1,687.0	3.16	534.262	
1,200.0	1,200.0	1,166.3	1,166.3	2.6	0.7	152.66	-844.3	1,464.2	1,690.5	1,687.3	3.21	526.248	
1,279.5	1,279.5	1,242.3	1,242.3	2.7	0.7	152.69	-845.1	1,464.3	1,693.3	1,689.9	3.42	495.142	
1,300.0	1,299.9	1,262.4	1,262.4	2.8	0.8	152.70	-845.3	1,464.4	1,694.4	1,690.9	3.47	487.732	
1,377.9	1,377.7	1,338.8	1,338.7	3.0	0.8	152.74	-846.0	1,464.7	1,699.6	1,695.9	3.68	461.254	
1,400.0	1,399.7	1,360.3	1,360.3	3.0	0.8	152.76	-846.1	1,464.8	1,701.4	1,697.7	3.74	454.490	
1,476.4	1,475.7	1,435.3	1,435.2	3.2	0.8	152.82	-846.8	1,465.3	1,709.0	1,705.0	3.95	432.542	
1,500.0	1,499.1	1,458.6	1,458.6	3.2	0.8	152.84	-847.0	1,465.4	1,711.7	1,707.7	4.01	426.345	
1,574.8	1,573.2	1,539.2	1,539.1	3.4	0.9	152.94	-848.0	1,465.6	1,721.3	1,717.1	4.22	407.889	
1,600.0	1,598.2	1,569.2	1,569.2	3.5	0.9	152.99	-848.4	1,465.6	1,724.9	1,720.6	4.29	402.217	
1,673.2	1,670.3	1,644.2	1,644.1	3.7	0.9	153.12	-849.3	1,465.1	1,736.0	1,731.5	4.49	386.546	
1,700.0	1,696.6	1,669.0	1,669.0	3.8	0.9	153.16	-849.6	1,465.0	1,740.5	1,735.9	4.56	381.351	
1,749.9	1,745.5	1,714.7	1,714.6	3.9	0.9	153.23	-850.2	1,464.8	1,749.6	1,744.9	4.71	371.717	
1,771.6	1,766.8	1,734.2	1,734.1	4.0	0.9	153.30	-850.4	1,464.8	1,753.7	1,748.9	4.77	367.800	
1,800.0	1,794.5	1,759.5	1,759.4	4.1	0.9	153.38	-850.7	1,464.8	1,759.2	1,754.3	4.85	362.941	
1,870.1	1,863.1	1,824.1	1,824.0	4.3	1.0	153.60	-851.5	1,464.9	1,772.8	1,767.8	5.05	351.298	
1,900.0	1,892.3	1,853.4	1,853.3	4.4	1.0	153.70	-851.8	1,465.0	1,778.6	1,773.5	5.13	346.831	
1,968.5	1,959.4	1,920.7	1,920.6	4.7	1.0	153.90	-852.1	1,465.5	1,792.0	1,786.7	5.33	336.117	
2,000.0	1,990.2	1,951.8	1,951.7	4.8	1.0	153.99	-852.2	1,465.7	1,798.2	1,792.8	5.42	331.602	
2,066.9	2,055.6	2,018.2	2,018.1	5.1	1.0	154.19	-852.5	1,466.1	1,811.3	1,805.7	5.62	322.242	
2,100.0	2,088.0	2,051.2	2,051.1	5.2	1.0	154.29	-852.7	1,466.3	1,817.7	1,812.0	5.72	317.880	
2,165.3	2,151.9	2,115.8	2,115.7	5.4	1.1	154.49	-853.5	1,466.3	1,830.5	1,824.6	5.91	309.611	
2,200.0	2,185.8	2,148.9	2,148.7	5.6	1.1	154.60	-854.0	1,466.3	1,837.2	1,831.2	6.01	305.451	
2,263.8	2,248.2	2,210.7	2,210.6	5.8	1.1	154.80	-854.8	1,466.3	1,849.7	1,843.5	6.21	297.974	
2,300.0	2,283.6	2,248.7	2,248.5	6.0	1.1	154.92	-855.3	1,466.3	1,856.8	1,850.5	6.32	293.973	
2,362.2	2,344.5	2,313.2	2,313.1	6.2	1.1	155.12	-856.1	1,466.1	1,868.9	1,862.4	6.50	287.329	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,400.0	2,381.4	2,351.0	2,350.9	6.4	1.1	155.24	-856.6	1,465.9	1,876.2	1,869.6	6.62	283.536	
2,460.6	2,440.7	2,410.6	2,410.5	6.6	1.2	155.41	-857.2	1,465.8	1,887.9	1,881.1	6.80	277.626	
2,500.0	2,479.2	2,446.6	2,446.5	6.8	1.2	155.52	-857.6	1,465.7	1,895.5	1,888.6	6.92	273.960	
2,559.0	2,537.0	2,500.6	2,500.4	7.0	1.2	155.68	-858.3	1,465.6	1,907.0	1,899.9	7.10	268.648	
2,600.0	2,577.1	2,540.2	2,540.1	7.2	1.2	155.80	-858.9	1,465.5	1,915.1	1,907.9	7.22	265.094	
2,657.5	2,633.3	2,595.9	2,595.8	7.4	1.2	155.97	-859.6	1,465.5	1,926.4	1,919.0	7.40	260.272	
2,700.0	2,674.9	2,639.7	2,639.5	7.6	1.3	156.09	-860.1	1,465.5	1,934.8	1,927.3	7.53	256.859	
2,755.9	2,729.6	2,697.6	2,697.5	7.9	1.3	156.25	-860.5	1,465.6	1,945.7	1,938.0	7.71	252.505	
2,800.0	2,772.7	2,734.1	2,733.9	8.0	1.3	156.34	-860.7	1,465.7	1,954.4	1,946.6	7.84	249.222	
2,854.3	2,825.8	2,778.3	2,778.1	8.3	1.3	156.45	-861.1	1,466.0	1,965.3	1,957.3	8.01	245.316	
2,900.0	2,870.5	2,821.5	2,821.4	8.5	1.3	156.57	-861.6	1,466.3	1,974.7	1,966.5	8.15	242.162	
2,952.7	2,922.1	2,881.4	2,881.2	8.7	1.3	156.73	-862.3	1,466.6	1,985.3	1,977.0	8.32	238.588	
3,000.0	2,968.3	2,930.6	2,930.4	8.9	1.4	156.86	-862.9	1,466.6	1,994.7	1,986.2	8.47	235.618	
3,051.2	3,018.4	2,981.4	2,981.2	9.1	1.4	157.00	-863.6	1,466.6	2,004.9	1,996.2	8.62	232.494	
3,100.0	3,066.1	3,028.3	3,028.1	9.3	1.4	157.13	-864.3	1,466.4	2,014.6	2,005.8	8.77	229.635	
3,149.6	3,114.7	3,075.1	3,074.9	9.5	1.4	157.26	-865.1	1,466.3	2,024.5	2,015.5	8.93	226.816	
3,200.0	3,164.0	3,128.5	3,128.3	9.8	1.4	157.40	-865.9	1,466.2	2,034.5	2,025.4	9.08	224.078	
3,248.0	3,210.9	3,185.6	3,185.4	10.0	1.4	157.56	-866.8	1,465.8	2,043.9	2,034.7	9.23	221.549	
3,300.0	3,261.8	3,230.5	3,230.3	10.2	1.5	157.68	-867.5	1,465.4	2,054.0	2,044.6	9.38	218.924	
3,346.4	3,307.2	3,266.0	3,265.8	10.4	1.5	157.78	-868.2	1,465.1	2,063.3	2,053.7	9.52	216.671	
3,400.0	3,359.6	3,308.2	3,307.9	10.6	1.5	157.90	-869.3	1,465.0	2,074.2	2,064.5	9.68	214.165	
3,444.9	3,403.5	3,348.9	3,348.6	10.8	1.5	158.02	-870.3	1,464.9	2,083.5	2,073.6	9.83	212.042	
3,500.0	3,457.4	3,400.0	3,399.7	11.1	1.5	158.16	-871.7	1,464.9	2,095.0	2,085.0	10.00	209.540	
3,543.3	3,499.8	3,452.6	3,452.4	11.3	1.5	158.31	-873.1	1,464.8	2,104.0	2,093.8	10.13	207.673	
3,600.0	3,555.2	3,518.3	3,518.0	11.5	1.6	158.49	-874.8	1,464.2	2,115.4	2,105.1	10.30	205.310	
3,641.7	3,596.0	3,558.6	3,558.3	11.7	1.6	158.61	-875.9	1,463.7	2,123.7	2,113.3	10.43	203.649	
3,700.0	3,653.0	3,614.4	3,614.0	11.9	1.6	158.77	-877.4	1,463.1	2,135.4	2,124.8	10.60	201.394	
3,740.1	3,692.3	3,651.6	3,651.2	12.1	1.6	158.87	-878.4	1,462.7	2,143.5	2,132.8	10.73	199.862	
3,800.0	3,750.8	3,708.2	3,707.9	12.4	1.6	159.03	-880.0	1,462.1	2,155.7	2,144.8	10.91	197.652	
3,838.6	3,788.6	3,750.6	3,750.1	12.6	1.6	159.15	-881.1	1,461.7	2,163.5	2,152.5	11.02	196.255	
3,900.0	3,848.7	3,820.8	3,820.4	12.8	1.7	159.33	-882.6	1,461.0	2,175.8	2,164.6	11.21	194.099	
3,937.0	3,884.9	3,867.7	3,867.3	13.0	1.7	159.45	-883.3	1,460.4	2,183.0	2,171.6	11.32	192.863	
4,000.0	3,946.5	3,932.8	3,932.4	13.3	1.7	159.61	-884.1	1,459.4	2,195.0	2,183.4	11.50	190.798	
4,035.4	3,981.1	3,963.7	3,963.2	13.4	1.7	159.68	-884.5	1,458.9	2,201.7	2,190.1	11.61	189.668	
4,100.0	4,044.3	4,028.4	4,027.9	13.7	1.7	159.85	-885.7	1,457.9	2,214.3	2,202.5	11.80	187.675	
4,133.8	4,077.4	4,070.5	4,070.0	13.9	1.7	159.95	-886.3	1,457.1	2,220.7	2,208.8	11.90	186.638	
4,200.0	4,142.1	4,143.1	4,142.6	14.2	1.7	160.12	-886.9	1,455.7	2,233.0	2,220.9	12.09	184.676	
4,232.3	4,173.7	4,175.8	4,175.3	14.3	1.8	160.20	-887.2	1,455.1	2,239.0	2,226.8	12.18	183.749	
4,300.0	4,239.9	4,237.6	4,237.0	14.6	1.8	160.34	-887.7	1,453.8	2,251.5	2,239.1	12.38	181.824	
4,330.7	4,270.0	4,263.9	4,263.3	14.7	1.8	160.40	-887.9	1,453.3	2,257.3	2,244.8	12.47	180.969	
4,400.0	4,337.7	4,337.7	4,337.2	15.0	1.8	160.56	-888.5	1,452.2	2,270.4	2,257.7	12.68	179.118	
4,429.1	4,366.2	4,378.4	4,377.9	15.2	1.8	160.64	-888.5	1,451.5	2,275.8	2,263.0	12.76	178.358	
4,500.0	4,435.6	4,459.0	4,458.5	15.5	1.8	160.81	-888.2	1,449.8	2,288.4	2,275.4	12.96	176.544	
4,527.5	4,462.5	4,488.4	4,487.8	15.6	1.8	160.87	-888.2	1,449.0	2,293.2	2,280.2	13.04	175.858	
4,600.0	4,533.4	4,556.3	4,555.7	15.9	1.8	161.02	-888.2	1,447.2	2,306.0	2,292.8	13.25	174.050	
4,626.0	4,558.8	4,580.1	4,579.4	16.0	1.8	161.06	-888.2	1,446.6	2,310.6	2,297.3	13.32	173.414	
4,673.6	4,605.3	4,622.5	4,621.9	16.3	1.8	161.15	-888.0	1,445.8	2,319.1	2,305.7	13.46	172.262	
4,700.0	4,631.2	4,645.6	4,645.0	16.4	1.8	161.22	-887.9	1,445.3	2,323.8	2,310.3	13.52	171.877	
4,724.4	4,655.1	4,667.0	4,666.4	16.4	1.8	161.29	-887.9	1,444.9	2,327.9	2,314.4	13.56	171.617	
4,800.0	4,729.5	4,754.4	4,753.8	16.7	1.8	161.50	-887.5	1,443.4	2,339.5	2,325.8	13.70	170.780	
4,822.8	4,752.1	4,787.3	4,786.6	16.7	1.8	161.56	-887.1	1,442.8	2,342.5	2,328.7	13.74	170.540	
4,900.0	4,828.4	4,856.8	4,856.1	17.0	1.8	161.69	-886.0	1,441.5	2,351.1	2,337.2	13.86	169.643	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,921.2	4,849.5	4,874.5	4,873.8	17.0	1.8	161.72	-885.7	1,441.3	2,353.2	2,339.3	13.89	169.414	
5,000.0	4,927.8	4,950.7	4,950.0	17.2	1.8	161.81	-884.2	1,440.6	2,359.8	2,345.8	14.01	168.471	
5,019.7	4,947.4	4,971.4	4,970.7	17.2	1.8	161.83	-883.8	1,440.4	2,361.2	2,347.1	14.03	168.242	
5,100.0	5,027.5	5,038.7	5,038.0	17.4	1.8	161.88	-882.5	1,439.8	2,365.4	2,351.2	14.14	167.230	
5,118.1	5,045.6	5,051.8	5,051.1	17.4	1.8	161.88	-882.3	1,439.7	2,366.1	2,351.9	14.17	167.017	
5,200.0	5,127.4	5,115.2	5,114.5	17.6	1.8	161.91	-881.7	1,439.6	2,368.6	2,354.3	14.27	165.979	
5,216.5	5,143.9	5,131.3	5,130.6	17.6	1.8	161.91	-881.5	1,439.6	2,368.8	2,354.6	14.29	165.765	
5,273.4	5,200.8	5,186.9	5,186.2	17.7	1.8	129.21	-880.9	1,439.8	2,369.1	2,350.1	19.06	124.297	
5,300.0	5,227.4	5,211.1	5,210.4	17.7	1.8	129.20	-880.6	1,440.0	2,369.0	2,350.0	19.09	124.077	
5,314.9	5,242.3	5,223.7	5,222.9	17.7	1.8	129.20	-880.5	1,440.1	2,369.0	2,349.9	19.11	123.941	
5,339.1	5,266.5	5,244.0	5,243.3	17.8	1.8	129.19	-880.2	1,440.2	2,369.0	2,349.8	19.15	123.724	
5,400.0	5,327.4	5,300.0	5,299.3	17.8	1.8	129.17	-879.5	1,440.9	2,369.1	2,349.9	19.23	123.190	
5,413.4	5,340.8	5,308.4	5,307.6	17.9	1.8	129.17	-879.4	1,441.0	2,369.1	2,349.9	19.25	123.071	
5,500.0	5,427.4	5,400.0	5,399.2	18.0	1.8	129.12	-878.1	1,442.4	2,369.3	2,350.0	19.37	122.320	
5,511.8	5,439.2	5,400.0	5,399.2	18.0	1.8	129.12	-878.1	1,442.4	2,369.4	2,350.0	19.39	122.212	
5,600.0	5,527.4	5,478.5	5,477.7	18.1	1.8	129.07	-876.9	1,444.0	2,370.0	2,350.4	19.51	121.456	
5,610.2	5,537.6	5,486.3	5,485.6	18.1	1.8	129.07	-876.8	1,444.2	2,370.1	2,350.5	19.53	121.370	
5,700.0	5,627.4	5,554.9	5,554.1	18.3	1.8	129.03	-876.1	1,446.2	2,371.5	2,351.9	19.66	120.633	
5,708.6	5,636.0	5,561.5	5,560.7	18.3	1.8	129.02	-876.1	1,446.4	2,371.7	2,352.0	19.67	120.564	
5,800.0	5,727.4	5,656.2	5,655.3	18.4	1.8	128.97	-876.0	1,449.3	2,373.9	2,354.1	19.81	119.839	
5,807.1	5,734.5	5,665.9	5,665.0	18.4	1.8	128.97	-876.0	1,449.6	2,374.0	2,354.2	19.82	119.780	
5,900.0	5,827.4	5,764.6	5,763.7	18.6	1.8	128.95	-876.4	1,451.3	2,375.5	2,355.6	19.97	118.973	
5,905.5	5,832.9	5,769.8	5,768.9	18.6	1.8	128.95	-876.5	1,451.4	2,375.6	2,355.7	19.98	118.925	
6,000.0	5,927.4	5,870.6	5,869.7	18.7	1.9	128.96	-877.9	1,452.4	2,377.2	2,357.0	20.14	118.045	
6,003.9	5,931.3	5,875.0	5,874.1	18.7	1.9	128.96	-877.9	1,452.4	2,377.2	2,357.1	20.14	118.007	
6,100.0	6,027.4	5,956.4	5,955.5	18.9	1.9	128.99	-879.4	1,452.8	2,378.7	2,358.4	20.31	117.105	
6,102.3	6,029.7	5,958.2	5,957.3	18.9	1.9	128.99	-879.5	1,452.9	2,378.8	2,358.5	20.32	117.084	
6,200.0	6,127.4	6,063.2	6,062.3	19.0	1.9	129.03	-882.4	1,453.5	2,381.0	2,360.5	20.50	116.163	
6,200.8	6,128.2	6,064.4	6,063.4	19.0	1.9	129.03	-882.4	1,453.5	2,381.0	2,360.5	20.50	116.155	
6,299.2	6,226.6	6,185.9	6,184.9	19.2	2.0	129.09	-885.1	1,453.1	2,382.1	2,361.4	20.69	115.140	
6,301.4	6,228.8	6,188.4	6,187.4	19.2	2.0	129.09	-885.1	1,453.1	2,382.1	2,361.4	20.69	115.117	
6,350.0	6,277.4	6,229.4	6,228.4	19.3	2.0	39.17	-885.8	1,453.0	2,381.2	2,364.6	16.57	143.669	
6,397.6	6,324.7	6,265.6	6,264.6	19.3	2.0	39.39	-886.5	1,453.0	2,378.1	2,361.5	16.61	143.158	
6,400.0	6,327.1	6,267.4	6,266.4	19.3	2.0	39.41	-886.5	1,453.0	2,377.9	2,361.3	16.61	143.127	
6,450.0	6,376.3	6,306.9	6,305.9	19.3	2.0	39.82	-887.4	1,453.2	2,372.1	2,355.5	16.66	142.355	
6,496.0	6,421.1	6,353.1	6,352.1	19.3	2.0	40.41	-888.5	1,453.4	2,364.6	2,347.8	16.71	141.488	
6,500.0	6,424.9	6,357.1	6,356.0	19.3	2.0	40.47	-888.6	1,453.4	2,363.8	2,347.1	16.72	141.411	
6,550.0	6,472.4	6,408.6	6,407.5	19.3	2.0	41.33	-889.7	1,453.8	2,352.9	2,336.1	16.76	140.359	
6,594.5	6,513.8	6,466.9	6,465.8	19.3	2.0	42.38	-890.8	1,454.0	2,340.9	2,324.1	16.81	139.291	
6,600.0	6,518.8	6,474.0	6,473.0	19.3	2.0	42.52	-890.9	1,454.0	2,339.2	2,322.4	16.81	139.156	
6,650.0	6,563.8	6,520.9	6,519.8	19.3	2.0	43.84	-891.5	1,453.9	2,322.9	2,306.1	16.85	137.873	
6,692.9	6,601.1	6,550.3	6,549.3	19.2	2.1	45.06	-892.0	1,453.9	2,307.2	2,290.3	16.88	136.683	
6,700.0	6,607.1	6,555.1	6,554.1	19.2	2.1	45.28	-892.1	1,453.9	2,304.5	2,287.6	16.88	136.483	
6,750.0	6,648.6	6,588.0	6,586.9	19.2	2.1	46.94	-892.8	1,453.9	2,284.1	2,267.2	16.94	134.871	
6,791.3	6,681.4	6,617.1	6,616.0	19.1	2.1	48.53	-893.5	1,454.0	2,265.9	2,248.9	17.00	133.262	
6,800.0	6,688.1	6,623.7	6,622.6	19.1	2.1	48.89	-893.6	1,454.0	2,261.9	2,244.8	17.02	132.908	
6,850.0	6,725.3	6,660.1	6,659.0	19.1	2.1	51.12	-894.4	1,454.2	2,237.8	2,220.7	17.15	130.472	
6,889.7	6,753.2	6,687.5	6,686.4	19.0	2.1	53.08	-895.0	1,454.4	2,217.6	2,200.3	17.31	128.114	
6,900.0	6,760.1	6,694.3	6,693.2	19.0	2.1	53.61	-895.1	1,454.4	2,212.2	2,194.8	17.35	127.486	
6,950.0	6,792.3	6,730.0	6,728.9	19.0	2.1	56.43	-895.8	1,454.8	2,185.0	2,167.4	17.64	123.865	
6,988.2	6,815.1	6,755.7	6,754.6	18.9	2.1	58.76	-896.2	1,454.9	2,163.4	2,145.5	17.93	120.670	
7,000.0	6,821.8	6,763.3	6,762.2	18.9	2.1	59.51	-896.3	1,455.0	2,156.6	2,138.6	18.02	119.680	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,050.0	6,848.3	6,793.3	6,792.2	18.9	2.1	62.81	-896.8	1,455.1	2,127.1	2,108.6	18.49	115.047	
7,086.6	6,865.9	6,813.2	6,812.1	18.9	2.1	65.36	-897.2	1,455.2	2,104.9	2,086.0	18.89	111.404	
7,100.0	6,871.9	6,820.0	6,818.9	18.9	2.1	66.31	-897.3	1,455.3	2,096.7	2,077.6	19.04	110.113	
7,150.0	6,892.3	6,843.3	6,842.2	18.8	2.1	69.94	-897.6	1,455.4	2,065.6	2,046.0	19.67	105.036	
7,185.0	6,904.7	6,857.5	6,856.3	18.8	2.1	72.53	-897.8	1,455.4	2,043.7	2,023.5	20.15	101.416	
7,200.0	6,909.5	6,862.9	6,861.8	18.9	2.1	73.64	-897.9	1,455.4	2,034.2	2,013.9	20.35	99.944	
7,250.0	6,923.4	6,878.8	6,877.6	19.3	2.2	77.33	-898.1	1,455.5	2,002.7	1,981.6	21.10	94.915	
7,283.4	6,930.8	6,887.2	6,886.1	19.8	2.2	79.77	-898.1	1,455.5	1,981.6	1,959.9	21.64	91.581	
7,300.0	6,933.9	6,890.8	6,889.6	20.0	2.2	80.95	-898.2	1,455.5	1,971.1	1,949.2	21.90	89.988	
7,350.0	6,940.9	6,898.9	6,897.8	20.8	2.2	84.42	-898.3	1,455.6	1,939.9	1,917.2	22.77	85.179	
7,381.9	6,943.6	6,902.0	6,900.9	21.4	2.2	86.53	-898.3	1,455.6	1,920.3	1,896.9	23.37	82.167	
7,400.0	6,944.5	6,903.1	6,902.0	21.7	2.2	87.68	-898.3	1,455.6	1,909.2	1,885.5	23.71	80.517	
7,432.4	6,945.0	6,903.7	6,902.6	22.3	2.2	89.66	-898.3	1,455.6	1,889.7	1,865.3	24.35	77.597	
7,480.3	6,944.6	6,903.4	6,902.3	23.2	2.2	89.65	-898.3	1,455.6	1,861.5	1,836.2	25.24	73.737	
7,500.0	6,944.4	6,903.3	6,902.2	23.6	2.2	89.65	-898.3	1,455.6	1,850.1	1,824.5	25.61	72.237	
7,578.7	6,943.7	6,902.8	6,901.7	25.2	2.2	89.63	-898.3	1,455.6	1,806.1	1,778.9	27.20	66.410	
7,600.0	6,943.6	6,902.7	6,901.6	25.6	2.2	89.62	-898.3	1,455.6	1,794.6	1,767.0	27.62	64.965	
7,677.1	6,942.9	6,902.3	6,901.1	27.3	2.2	89.61	-898.3	1,455.6	1,754.4	1,725.2	29.28	59.912	
7,700.0	6,942.7	6,902.1	6,901.0	27.8	2.2	89.60	-898.3	1,455.6	1,743.0	1,713.3	29.78	58.539	
7,775.6	6,942.1	6,901.7	6,900.5	29.5	2.2	89.58	-898.3	1,455.6	1,706.9	1,675.5	31.48	54.221	
7,800.0	6,941.9	6,901.5	6,900.4	30.1	2.2	89.58	-898.3	1,455.6	1,695.8	1,663.8	32.03	52.941	
7,874.0	6,941.3	6,901.1	6,899.9	31.8	2.2	89.56	-898.3	1,455.6	1,663.9	1,630.1	33.77	49.276	
7,900.0	6,941.1	6,900.9	6,899.8	32.4	2.2	89.56	-898.3	1,455.6	1,653.3	1,619.0	34.38	48.095	
7,972.4	6,940.4	6,900.5	6,899.4	34.2	2.2	89.54	-898.3	1,455.6	1,625.7	1,589.6	36.12	45.003	
8,000.0	6,940.2	6,900.3	6,899.2	34.9	2.2	89.53	-898.3	1,455.6	1,615.9	1,579.1	36.79	43.923	
8,070.8	6,939.6	6,899.9	6,898.8	36.6	2.2	89.52	-898.3	1,455.6	1,592.7	1,554.1	38.54	41.326	
8,100.0	6,939.4	6,899.7	6,898.6	37.3	2.2	89.51	-898.3	1,455.6	1,583.9	1,544.7	39.26	40.346	
8,169.3	6,938.8	6,899.3	6,898.2	39.1	2.2	89.50	-898.3	1,455.6	1,565.1	1,524.1	41.00	38.173	
8,200.0	6,938.5	6,899.1	6,898.0	39.8	2.2	89.49	-898.3	1,455.6	1,557.7	1,515.9	41.77	37.290	
8,267.7	6,938.0	6,898.7	6,897.6	41.6	2.2	89.47	-898.3	1,455.6	1,543.4	1,499.9	43.50	35.480	
8,300.0	6,937.7	6,898.6	6,897.4	42.4	2.2	89.47	-898.3	1,455.6	1,537.6	1,493.2	44.32	34.689	
8,366.1	6,937.2	6,898.2	6,897.0	44.1	2.2	89.45	-898.3	1,455.6	1,527.7	1,481.7	46.03	33.188	
8,400.0	6,936.9	6,898.0	6,896.8	45.0	2.2	89.44	-898.3	1,455.6	1,523.7	1,476.8	46.91	32.484	
8,464.5	6,936.3	6,897.6	6,896.5	46.6	2.2	89.43	-898.3	1,455.6	1,518.2	1,469.7	48.59	31.246	
8,500.0	6,936.0	6,897.4	6,896.3	47.6	2.2	89.42	-898.3	1,455.5	1,516.4	1,466.9	49.52	30.625	
8,561.7	6,935.5	6,897.0	6,895.9	49.2	2.2	89.41	-898.2	1,455.5	1,515.1	1,464.0	51.14	29.628 CC	
8,563.0	6,935.5	6,897.0	6,895.9	49.2	2.2	89.41	-898.2	1,455.5	1,515.1	1,464.0	51.17	29.609	
8,600.0	6,935.2	6,896.8	6,895.7	50.2	2.2	89.40	-898.2	1,455.5	1,515.6	1,463.5	52.14	29.065 ES	
8,661.4	6,934.7	6,896.4	6,895.3	51.8	2.2	89.39	-898.2	1,455.5	1,518.4	1,464.6	53.77	28.238	
8,700.0	6,934.4	6,896.2	6,895.1	52.8	2.2	89.38	-898.2	1,455.5	1,521.4	1,466.6	54.79	27.767	
8,759.8	6,933.9	6,895.9	6,894.7	54.4	2.2	89.37	-898.2	1,455.5	1,528.0	1,471.6	56.39	27.099	
8,800.0	6,933.5	6,895.6	6,894.5	55.5	2.2	89.36	-898.2	1,455.5	1,533.8	1,476.3	57.46	26.694	
8,858.2	6,933.0	6,895.3	6,894.2	57.1	2.2	89.34	-898.2	1,455.5	1,543.9	1,484.9	59.02	26.160	
8,900.0	6,932.7	6,895.1	6,893.9	58.2	2.2	89.33	-898.2	1,455.5	1,552.4	1,492.3	60.14	25.816	
8,956.7	6,932.2	6,894.7	6,893.6	59.7	2.2	89.32	-898.2	1,455.5	1,565.8	1,504.1	61.66	25.394	
9,000.0	6,931.8	6,894.5	6,893.4	60.9	2.2	89.31	-898.2	1,455.5	1,577.2	1,514.4	62.82	25.105	
9,055.1	6,931.4	6,894.2	6,893.0	62.4	2.2	89.30	-898.2	1,455.5	1,593.4	1,529.1	64.31	24.776	
9,100.0	6,931.0	6,893.9	6,892.8	63.6	2.2	89.29	-898.2	1,455.5	1,607.9	1,542.4	65.52	24.539	
9,153.5	6,930.6	6,893.6	6,892.5	65.0	2.2	89.28	-898.2	1,455.5	1,626.6	1,559.6	66.97	24.287	
9,200.0	6,930.2	6,893.3	6,892.2	66.3	2.2	89.27	-898.2	1,455.5	1,644.1	1,575.8	68.23	24.095	
9,251.9	6,929.7	6,893.0	6,891.9	67.7	2.2	89.26	-898.2	1,455.5	1,664.9	1,595.3	69.65	23.906	
9,300.0	6,929.3	6,892.8	6,891.6	69.0	2.2	89.25	-898.2	1,455.5	1,685.4	1,614.5	70.95	23.755	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,350.4	6,928.9	6,892.5	6,891.4	70.4	2.2	89.24	-898.2	1,455.5	1,708.1	1,635.8	72.32	23.618	
9,400.0	6,928.5	6,892.2	6,891.1	71.7	2.2	89.23	-898.2	1,455.5	1,731.6	1,657.9	73.67	23.503	
9,448.8	6,928.1	6,891.9	6,890.8	73.0	2.2	89.22	-898.2	1,455.5	1,755.7	1,680.7	75.01	23.407	
9,500.0	6,927.7	6,891.6	6,890.5	74.4	2.2	89.21	-898.2	1,455.5	1,782.1	1,705.7	76.41	23.325	
9,547.2	6,927.3	6,891.4	6,890.2	75.7	2.2	89.20	-898.2	1,455.5	1,807.4	1,729.7	77.70	23.263	
9,600.0	6,926.8	6,891.1	6,889.9	77.2	2.2	89.18	-898.2	1,455.5	1,836.7	1,757.6	79.14	23.208	
9,645.6	6,926.4	6,890.8	6,889.7	78.4	2.2	89.17	-898.2	1,455.5	1,862.9	1,782.5	80.39	23.173	
9,700.0	6,926.0	6,890.5	6,889.4	79.9	2.2	89.16	-898.2	1,455.5	1,895.1	1,813.2	81.88	23.144	
9,744.1	6,925.6	6,890.3	6,889.1	81.1	2.2	89.15	-898.2	1,455.5	1,921.9	1,838.8	83.09	23.129	
9,800.0	6,925.2	6,890.0	6,888.8	82.6	2.2	89.14	-898.2	1,455.5	1,956.8	1,872.1	84.63	23.122 SF	
9,842.5	6,924.8	6,889.7	6,888.6	83.8	2.2	89.13	-898.2	1,455.5	1,983.9	1,898.1	85.80	23.124	
9,900.0	6,924.3	6,889.4	6,888.3	85.4	2.2	89.12	-898.2	1,455.5	2,021.5	1,934.1	87.38	23.136	
9,940.9	6,924.0	6,889.2	6,888.0	86.5	2.2	89.11	-898.2	1,455.5	2,048.8	1,960.3	88.50	23.150	
10,000.0	6,923.5	6,888.8	6,887.7	88.1	2.2	89.10	-898.2	1,455.5	2,089.1	1,998.9	90.13	23.178	
10,039.3	6,923.2	6,888.6	6,887.5	89.2	2.2	89.09	-898.2	1,455.5	2,116.3	2,025.1	91.21	23.202	
10,100.0	6,922.6	6,888.3	6,887.2	90.9	2.2	89.08	-898.2	1,455.5	2,159.1	2,066.2	92.89	23.245	
10,137.8	6,922.3	6,888.1	6,886.9	91.9	2.2	89.07	-898.2	1,455.5	2,186.2	2,092.3	93.93	23.275	
10,200.0	6,921.8	6,887.7	6,886.6	93.7	2.2	89.06	-898.2	1,455.5	2,231.5	2,135.8	95.65	23.331	
10,236.2	6,921.5	6,887.5	6,886.4	94.7	2.2	89.05	-898.1	1,455.5	2,258.2	2,161.5	96.65	23.366	
10,300.0	6,921.0	6,887.2	6,886.0	96.4	2.2	89.04	-898.1	1,455.5	2,305.9	2,207.5	98.41	23.432	
10,334.6	6,920.7	6,887.0	6,885.9	97.4	2.2	89.03	-898.1	1,455.5	2,332.1	2,232.7	99.37	23.470	
10,400.0	6,920.1	6,886.6	6,885.5	99.2	2.2	89.02	-898.1	1,455.5	2,382.2	2,281.0	101.17	23.546	
10,433.0	6,919.9	6,886.4	6,885.3	100.1	2.2	89.01	-898.1	1,455.5	2,407.8	2,305.7	102.09	23.585	
10,500.0	6,919.3	6,886.1	6,884.9	101.9	2.2	89.00	-898.1	1,455.5	2,460.2	2,356.2	103.94	23.669	
10,531.5	6,919.0	6,885.9	6,884.8	102.8	2.2	88.99	-898.1	1,455.5	2,485.0	2,380.2	104.81	23.709	
10,600.0	6,918.5	6,885.5	6,884.4	104.7	2.2	88.98	-898.1	1,455.5	2,539.7	2,433.0	106.71	23.800	
10,629.9	6,918.2	6,885.4	6,884.2	105.5	2.2	88.97	-898.1	1,455.5	2,563.8	2,456.2	107.54	23.840	
10,700.0	6,917.6	6,885.0	6,883.9	107.5	2.2	88.95	-898.1	1,455.5	2,620.6	2,511.2	109.48	23.937	
10,728.3	6,917.4	6,884.8	6,883.7	108.3	2.2	88.95	-898.1	1,455.5	2,643.8	2,533.5	110.27	23.976	
10,800.0	6,916.8	6,884.4	6,883.3	110.3	2.2	88.93	-898.1	1,455.5	2,702.8	2,590.6	112.25	24.078	
10,826.7	6,916.6	6,884.3	6,883.2	111.0	2.2	88.93	-898.1	1,455.5	2,725.0	2,612.0	113.00	24.116	
10,900.0	6,916.0	6,883.9	6,882.8	113.0	2.2	88.91	-898.1	1,455.5	2,786.2	2,671.2	115.03	24.222	
10,925.2	6,915.8	6,883.8	6,882.6	113.7	2.2	88.91	-898.1	1,455.5	2,807.4	2,691.6	115.73	24.258	
11,000.0	6,915.1	6,883.4	6,882.2	115.8	2.2	88.89	-898.1	1,455.5	2,870.7	2,752.8	117.81	24.368	
11,023.6	6,914.9	6,883.2	6,882.1	116.5	2.2	88.89	-898.1	1,455.5	2,890.7	2,772.3	118.46	24.402	
11,100.0	6,914.3	6,882.8	6,881.7	118.6	2.2	88.87	-898.1	1,455.5	2,956.1	2,835.5	120.58	24.515	
11,122.0	6,914.1	6,882.7	6,881.6	119.2	2.2	88.87	-898.1	1,455.5	2,975.0	2,853.8	121.20	24.547	
11,200.0	6,913.5	6,882.3	6,881.2	121.4	2.2	88.85	-898.1	1,455.5	3,042.4	2,919.0	123.36	24.662	
11,220.4	6,913.3	6,882.2	6,881.1	121.9	2.2	88.85	-898.1	1,455.5	3,060.1	2,936.2	123.93	24.692	
11,300.0	6,912.6	6,881.8	6,880.6	124.1	2.2	88.83	-898.1	1,455.5	3,129.5	3,003.3	126.14	24.809	
11,318.9	6,912.5	6,881.7	6,880.5	124.7	2.2	88.83	-898.1	1,455.5	3,146.0	3,019.3	126.67	24.836	
11,400.0	6,911.8	6,881.2	6,880.1	126.9	2.2	88.81	-898.1	1,455.5	3,217.3	3,088.4	128.93	24.955	
11,417.3	6,911.6	6,881.1	6,880.0	127.4	2.2	88.81	-898.1	1,455.5	3,232.6	3,103.2	129.41	24.980	
11,500.0	6,911.0	6,880.7	6,879.6	129.7	2.2	88.79	-898.1	1,455.5	3,305.9	3,174.2	131.71	25.100	
11,515.7	6,910.8	6,880.6	6,879.5	130.2	2.2	88.79	-898.1	1,455.5	3,319.9	3,187.7	132.15	25.123	
11,600.0	6,910.1	6,880.2	6,879.0	132.5	2.2	88.77	-898.1	1,455.5	3,395.1	3,260.6	134.49	25.244	
11,614.1	6,910.0	6,880.1	6,879.0	132.9	2.2	88.77	-898.1	1,455.5	3,407.7	3,272.8	134.89	25.264	
11,700.0	6,909.3	6,879.6	6,878.5	135.3	2.2	88.75	-898.1	1,455.5	3,484.8	3,347.6	137.28	25.386	
11,712.6	6,909.2	6,879.6	6,878.4	135.6	2.2	88.75	-898.1	1,455.5	3,496.2	3,358.5	137.63	25.403	
11,800.0	6,908.5	6,879.1	6,878.0	138.1	2.2	88.73	-898.1	1,455.5	3,575.2	3,435.1	140.06	25.526	
11,811.0	6,908.4	6,879.1	6,877.9	138.4	2.2	88.73	-898.1	1,455.5	3,585.1	3,444.8	140.37	25.541	
11,900.0	6,907.6	6,878.6	6,877.5	140.9	2.2	88.71	-898.0	1,455.5	3,666.0	3,523.1	142.85	25.663	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,909.4	6,907.5	6,878.5	6,877.4	141.1	2.2	88.71	-898.0	1,455.5	3,674.6	3,531.5	143.11	25.676	
12,000.0	6,906.8	6,878.1	6,876.9	143.6	2.2	88.69	-898.0	1,455.5	3,757.3	3,611.6	145.64	25.799	
12,007.8	6,906.7	6,878.0	6,876.9	143.9	2.2	88.69	-898.0	1,455.5	3,764.4	3,618.6	145.85	25.810	
12,100.0	6,905.9	6,877.6	6,876.4	146.4	2.2	88.67	-898.0	1,455.5	3,849.0	3,700.6	148.42	25.932	
12,106.3	6,905.9	6,877.5	6,876.4	146.6	2.2	88.67	-898.0	1,455.5	3,854.8	3,706.2	148.60	25.941	
12,200.0	6,905.1	6,877.0	6,875.9	149.2	2.2	88.65	-898.0	1,455.5	3,941.1	3,789.9	151.21	26.063	
12,204.7	6,905.1	6,877.0	6,875.9	149.4	2.2	88.65	-898.0	1,455.5	3,945.4	3,794.1	151.34	26.070	
12,300.0	6,904.3	6,876.5	6,875.4	152.0	2.2	88.64	-898.0	1,455.5	4,033.6	3,879.6	154.00	26.192	
12,303.1	6,904.3	6,876.5	6,875.4	152.1	2.2	88.63	-898.0	1,455.5	4,036.5	3,882.4	154.09	26.196	
12,400.0	6,903.4	6,876.0	6,874.9	154.8	2.2	88.62	-898.0	1,455.5	4,126.4	3,969.7	156.79	26.318	
12,401.5	6,903.4	6,876.0	6,874.9	154.8	2.2	88.62	-898.0	1,455.5	4,127.9	3,971.1	156.83	26.320	
12,500.0	6,902.6	6,875.5	6,874.4	157.6	2.2	88.60	-898.0	1,455.5	4,219.6	4,060.0	159.58	26.442	
12,598.4	6,901.8	6,875.0	6,873.9	160.3	2.2	88.58	-898.0	1,455.5	4,311.6	4,149.3	162.33	26.561	
12,600.0	6,901.8	6,875.0	6,873.8	160.4	2.2	88.58	-898.0	1,455.5	4,313.1	4,150.7	162.37	26.563	
12,696.8	6,901.0	6,874.5	6,873.3	163.1	2.2	88.56	-898.0	1,455.5	4,403.9	4,238.8	165.08	26.678	
12,700.0	6,900.9	6,874.5	6,873.3	163.2	2.2	88.56	-898.0	1,455.5	4,406.9	4,241.7	165.16	26.682	
12,795.2	6,900.1	6,874.0	6,872.8	165.8	2.2	88.54	-898.0	1,455.5	4,496.4	4,328.6	167.82	26.793	
12,800.0	6,900.1	6,874.0	6,872.8	166.0	2.2	88.54	-898.0	1,455.5	4,500.9	4,332.9	167.96	26.798	
12,893.7	6,899.3	6,873.5	6,872.3	168.6	2.2	88.52	-898.0	1,455.5	4,589.2	4,418.6	170.57	26.905	
12,900.0	6,899.3	6,873.4	6,872.3	168.8	2.2	88.52	-898.0	1,455.5	4,595.2	4,424.4	170.75	26.912	
12,992.1	6,898.5	6,873.0	6,871.8	171.3	2.2	88.50	-898.0	1,455.5	4,682.2	4,508.9	173.32	27.015	
13,000.0	6,898.4	6,872.9	6,871.8	171.6	2.2	88.50	-898.0	1,455.5	4,689.7	4,516.2	173.54	27.024	
13,090.5	6,897.7	6,872.5	6,871.4	174.1	2.2	88.48	-898.0	1,455.5	4,775.5	4,599.4	176.07	27.123	
13,100.0	6,897.6	6,872.4	6,871.3	174.4	2.2	88.48	-898.0	1,455.5	4,784.5	4,608.1	176.33	27.133	
13,188.9	6,896.9	6,872.0	6,870.9	176.8	2.2	88.47	-898.0	1,455.5	4,868.9	4,690.1	178.82	27.228	
13,200.0	6,896.8	6,871.9	6,870.8	177.2	2.2	88.46	-898.0	1,455.5	4,879.4	4,700.3	179.13	27.240	
13,287.4	6,896.0	6,871.5	6,870.4	179.6	2.2	88.45	-898.0	1,455.5	4,962.5	4,781.0	181.57	27.331	
13,300.0	6,895.9	6,871.4	6,870.3	180.0	2.2	88.44	-898.0	1,455.5	4,974.6	4,792.6	181.92	27.345	
13,385.8	6,895.2	6,871.0	6,869.9	182.4	2.2	88.43	-898.0	1,455.5	5,056.4	4,872.0	184.32	27.433	
13,400.0	6,895.1	6,870.9	6,869.8	182.7	2.2	88.43	-898.0	1,455.5	5,069.9	4,885.2	184.72	27.447	
13,484.2	6,894.4	6,870.5	6,869.4	185.1	2.2	88.41	-898.0	1,455.5	5,150.3	4,963.3	187.07	27.532	
13,500.0	6,894.3	6,870.4	6,869.3	185.5	2.2	88.41	-898.0	1,455.5	5,165.4	4,977.9	187.51	27.547	
13,582.6	6,893.6	6,870.0	6,868.9	187.9	2.2	88.39	-897.9	1,455.5	5,244.5	5,054.7	189.82	27.629	
13,600.0	6,893.4	6,869.9	6,868.8	188.3	2.2	88.39	-897.9	1,455.5	5,261.1	5,070.8	190.31	27.646	
13,681.1	6,892.8	6,869.5	6,868.4	190.6	2.2	88.37	-897.9	1,455.5	5,338.8	5,146.2	192.57	27.724	
13,700.0	6,892.6	6,869.4	6,868.3	191.1	2.2	88.37	-897.9	1,455.5	5,356.9	5,163.8	193.10	27.742	
13,779.5	6,891.9	6,869.1	6,867.9	193.4	2.2	88.35	-897.9	1,455.5	5,433.2	5,237.9	195.32	27.817	
13,800.0	6,891.8	6,868.9	6,867.8	193.9	2.2	88.35	-897.9	1,455.5	5,452.9	5,257.0	195.90	27.836	
13,877.9	6,891.1	6,868.6	6,867.4	196.1	2.2	88.34	-897.9	1,455.5	5,527.8	5,329.8	198.07	27.908	
13,900.0	6,890.9	6,868.5	6,867.3	196.7	2.2	88.33	-897.9	1,455.5	5,549.1	5,350.4	198.69	27.928	
13,976.3	6,890.3	6,868.1	6,867.0	198.9	2.2	88.32	-897.9	1,455.5	5,622.5	5,421.7	200.83	27.997	
14,000.0	6,890.1	6,868.0	6,866.8	199.5	2.2	88.31	-897.9	1,455.5	5,645.3	5,443.8	201.49	28.018	
14,074.8	6,889.5	6,867.6	6,866.5	201.6	2.2	88.30	-897.9	1,455.5	5,717.4	5,513.8	203.58	28.084	
14,100.0	6,889.3	6,867.5	6,866.3	202.3	2.2	88.30	-897.9	1,455.5	5,741.7	5,537.4	204.28	28.107	
14,173.2	6,888.7	6,867.1	6,866.0	204.4	2.2	88.28	-897.9	1,455.4	5,812.4	5,606.0	206.33	28.170	
14,200.0	6,888.4	6,867.0	6,865.9	205.1	2.2	88.28	-897.9	1,455.4	5,838.2	5,631.1	207.08	28.193	
14,271.6	6,887.8	6,866.6	6,865.5	207.1	2.2	88.26	-897.9	1,455.4	5,907.4	5,698.3	209.08	28.254	
14,300.0	6,887.6	6,866.5	6,865.4	207.9	2.2	88.26	-897.9	1,455.4	5,934.9	5,725.0	209.88	28.278	
14,370.0	6,887.0	6,866.2	6,865.0	209.9	2.2	88.25	-897.9	1,455.4	6,002.6	5,790.8	211.84	28.336	
14,400.0	6,886.8	6,866.0	6,864.9	210.7	2.2	88.24	-897.9	1,455.4	6,031.6	5,818.9	212.67	28.361	
14,468.5	6,886.2	6,865.7	6,864.6	212.6	2.2	88.23	-897.9	1,455.4	6,097.9	5,883.3	214.59	28.417	
14,500.0	6,885.9	6,865.5	6,864.4	213.5	2.2	88.22	-897.9	1,455.4	6,128.4	5,913.0	215.47	28.442	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 usft
Survey Program: 100-GYD_CT												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,566.9	6,885.4	6,865.2	6,864.1	215.4	2.2	88.21	-897.9	1,455.4	6,193.3	5,975.9	217.34	28.496	
14,600.0	6,885.1	6,865.1	6,863.9	216.3	2.2	88.21	-897.9	1,455.4	6,225.4	6,007.1	218.27	28.522	
14,613.0	6,885.0	6,865.0	6,863.9	216.7	2.2	88.20	-897.9	1,455.4	6,238.0	6,019.4	218.63	28.532	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+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	79.36	1,563.6	8,325.4	8,471.0				
98.4	98.4	70.4	70.4	0.1	0.5	79.36	1,563.6	8,325.4	8,470.9	8,470.4	0.53	N/A	
100.0	100.0	72.0	72.0	0.1	0.5	79.36	1,563.6	8,325.4	8,470.9	8,470.4	0.55	N/A	
196.8	196.8	168.8	168.8	0.3	2.3	79.36	1,563.6	8,325.4	8,470.9	8,468.3	2.62	3,234.890	
200.0	200.0	172.0	172.0	0.3	2.4	79.36	1,563.6	8,325.4	8,470.9	8,468.2	2.70	3,134.660	
295.3	295.3	267.3	267.3	0.5	4.5	79.36	1,563.6	8,325.4	8,470.9	8,465.9	5.00	1,694.905	
300.0	300.0	272.0	272.0	0.5	4.6	79.36	1,563.6	8,325.4	8,470.9	8,465.8	5.11	1,658.744	
393.7	393.7	365.7	365.7	0.7	6.5	79.36	1,563.6	8,325.4	8,470.9	8,463.7	7.24	1,169.811	
400.0	400.0	372.0	372.0	0.8	6.6	79.36	1,563.6	8,325.4	8,470.9	8,463.5	7.38	1,147.194	
492.1	492.1	464.1	464.1	1.0	8.5	79.36	1,563.6	8,325.4	8,470.9	8,461.5	9.46	895.153	
500.0	500.0	472.0	472.0	1.0	8.7	79.36	1,563.6	8,325.4	8,470.9	8,461.3	9.64	878.680	
590.5	590.5	562.5	562.5	1.2	10.5	79.36	1,563.6	8,325.4	8,470.9	8,459.3	11.68	725.466	
600.0	600.0	572.0	572.0	1.2	10.7	79.36	1,563.6	8,325.4	8,470.9	8,459.0	11.89	712.511	
689.0	689.0	661.0	661.0	1.4	12.5	79.36	1,563.6	8,325.4	8,470.9	8,457.0	13.89	610.045	
700.0	700.0	672.0	672.0	1.4	12.7	79.36	1,563.6	8,325.4	8,470.9	8,456.8	14.13	599.369	
787.4	787.4	759.4	759.4	1.6	14.5	79.36	1,563.6	8,325.4	8,470.9	8,454.8	16.09	526.389	
800.0	800.0	772.0	772.0	1.7	14.7	79.36	1,563.6	8,325.4	8,470.9	8,454.6	16.37	517.311	
885.8	885.8	857.8	857.8	1.9	16.4	79.36	1,563.6	8,325.4	8,470.9	8,452.6	18.30	462.949	
900.0	900.0	872.0	872.0	1.9	16.7	79.36	1,563.6	8,325.4	8,470.9	8,452.3	18.62	455.052	
984.2	984.2	956.2	956.2	2.1	18.4	79.36	1,563.6	8,325.4	8,470.9	8,450.4	20.50	413.176	
1,000.0	1,000.0	972.0	972.0	2.1	18.7	79.36	1,563.6	8,325.4	8,470.9	8,450.1	20.85	406.189	
1,082.7	1,082.7	1,054.7	1,054.7	2.3	20.4	79.36	1,563.6	8,325.4	8,470.9	8,448.2	22.71	373.079	
1,100.0	1,100.0	1,072.0	1,072.0	2.3	20.8	79.36	1,563.6	8,325.4	8,470.9	8,447.8	23.09	366.814	
1,150.0	1,150.0	1,122.0	1,122.0	2.4	21.8	79.36	1,563.6	8,325.4	8,470.9	8,446.7	24.21	349.859	
1,181.1	1,181.1	1,153.1	1,153.1	2.5	22.4	112.05	1,563.6	8,325.4	8,471.0	8,446.1	24.91	340.099	
1,200.0	1,200.0	1,172.0	1,172.0	2.6	22.8	112.05	1,563.6	8,325.4	8,471.1	8,445.8	25.33	334.436	
1,279.5	1,279.5	1,251.5	1,251.5	2.7	24.4	112.05	1,563.6	8,325.4	8,472.0	8,444.9	27.10	312.607	
1,300.0	1,299.9	1,271.9	1,271.9	2.8	24.8	112.05	1,563.6	8,325.4	8,472.4	8,444.9	27.56	307.456	
1,377.9	1,377.7	1,349.7	1,349.7	3.0	26.3	112.05	1,563.6	8,325.4	8,474.3	8,445.1	29.29	289.342	
1,400.0	1,399.7	1,371.7	1,371.7	3.0	26.8	112.04	1,563.6	8,325.4	8,475.0	8,445.3	29.78	284.617	
1,476.4	1,475.7	1,447.7	1,447.7	3.2	28.3	112.04	1,563.6	8,325.4	8,477.9	8,446.5	31.47	269.389	
1,500.0	1,499.1	1,471.1	1,471.1	3.2	28.8	112.04	1,563.6	8,325.4	8,479.0	8,447.0	31.99	265.023	
1,574.8	1,573.2	1,545.2	1,545.2	3.4	30.3	112.03	1,563.6	8,325.4	8,482.8	8,449.1	33.65	252.068	
1,600.0	1,598.2	1,570.2	1,570.2	3.5	30.8	112.02	1,563.6	8,325.4	8,484.2	8,450.0	34.21	248.005	
1,673.2	1,670.3	1,642.3	1,642.3	3.7	32.2	112.01	1,563.6	8,325.4	8,488.9	8,453.1	35.84	236.865	
1,700.0	1,696.6	1,668.6	1,668.6	3.8	32.8	112.01	1,563.6	8,325.4	8,490.8	8,454.4	36.43	233.061	
1,749.9	1,745.5	1,717.5	1,717.5	3.9	33.7	112.00	1,563.6	8,325.4	8,494.6	8,457.1	37.54	226.261	
1,771.6	1,766.8	1,738.8	1,738.8	4.0	34.2	112.03	1,563.6	8,325.4	8,496.4	8,458.3	38.04	223.361	
1,800.0	1,794.5	1,766.5	1,766.5	4.1	34.7	112.06	1,563.6	8,325.4	8,498.6	8,459.9	38.68	219.698	
1,870.1	1,863.1	1,835.1	1,835.1	4.3	36.1	112.15	1,563.6	8,325.4	8,504.2	8,463.9	40.29	211.097	
1,900.0	1,892.3	1,864.3	1,864.3	4.4	36.7	112.19	1,563.6	8,325.4	8,506.6	8,465.6	40.97	207.628	
1,968.5	1,959.4	1,931.4	1,931.4	4.7	38.1	112.28	1,563.6	8,325.4	8,512.1	8,469.5	42.55	200.058	
2,000.0	1,990.2	1,962.2	1,962.2	4.8	38.7	112.32	1,563.6	8,325.4	8,514.6	8,471.3	43.27	196.763	
2,066.9	2,055.6	2,027.6	2,027.6	5.1	40.0	112.40	1,563.6	8,325.4	8,520.0	8,475.2	44.82	190.084	
2,100.0	2,088.0	2,060.0	2,060.0	5.2	40.6	112.45	1,563.6	8,325.4	8,522.7	8,477.1	45.59	186.947	
2,165.3	2,151.9	2,123.9	2,123.9	5.4	41.9	112.53	1,563.6	8,325.4	8,528.0	8,480.9	47.11	181.030	
2,200.0	2,185.8	2,157.8	2,157.8	5.6	42.6	112.57	1,563.6	8,325.4	8,530.8	8,482.9	47.91	178.044	
2,263.8	2,248.2	2,220.2	2,220.2	5.8	43.9	112.65	1,563.6	8,325.4	8,536.0	8,486.6	49.40	172.787	
2,300.0	2,283.6	2,255.6	2,255.6	6.0	44.6	112.70	1,563.6	8,325.4	8,538.9	8,488.7	50.25	169.940	
2,362.2	2,344.5	2,316.5	2,316.5	6.2	45.8	112.78	1,563.6	8,325.4	8,544.0	8,492.3	51.70	165.256	
2,400.0	2,381.4	2,353.4	2,353.4	6.4	46.5	112.82	1,563.6	8,325.4	8,547.1	8,494.5	52.59	162.536	
2,460.6	2,440.7	2,412.7	2,412.7	6.6	47.7	112.90	1,563.6	8,325.4	8,552.1	8,498.1	54.01	158.351	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,500.0	2,479.2	2,451.2	2,451.2	6.8	48.5	112.95	1,563.6	8,325.4	8,555.4	8,500.4	54.93	155.750	
2,559.0	2,537.0	2,509.0	2,509.0	7.0	49.7	113.02	1,563.6	8,325.4	8,560.2	8,503.9	56.32	152.001	
2,600.0	2,577.1	2,549.1	2,549.1	7.2	50.5	113.08	1,563.6	8,325.4	8,563.6	8,506.4	57.28	149.509	
2,657.5	2,633.3	2,605.3	2,605.3	7.4	51.6	113.15	1,563.6	8,325.4	8,568.4	8,509.8	58.63	146.143	
2,700.0	2,674.9	2,646.9	2,646.9	7.6	52.4	113.20	1,563.6	8,325.4	8,572.0	8,512.3	59.63	143.752	
2,755.9	2,729.6	2,701.6	2,701.6	7.9	53.5	113.27	1,563.6	8,325.4	8,576.6	8,515.7	60.95	140.724	
2,800.0	2,772.7	2,744.7	2,744.7	8.0	54.4	113.33	1,563.6	8,325.4	8,580.3	8,518.3	61.98	138.426	
2,854.3	2,825.8	2,797.8	2,797.8	8.3	55.5	113.39	1,563.6	8,325.4	8,584.9	8,521.6	63.27	135.697	
2,900.0	2,870.5	2,842.5	2,842.5	8.5	56.4	113.45	1,563.6	8,325.4	8,588.7	8,524.4	64.34	133.487	
2,952.7	2,922.1	2,894.1	2,894.1	8.7	57.4	113.52	1,563.6	8,325.4	8,593.2	8,527.6	65.59	131.023	
3,000.0	2,968.3	2,940.3	2,940.3	8.9	58.3	113.58	1,563.6	8,325.4	8,597.2	8,530.5	66.70	128.894	
3,051.2	3,018.4	2,990.4	2,990.4	9.1	59.4	113.64	1,563.6	8,325.4	8,601.5	8,533.6	67.91	126.665	
3,100.0	3,066.1	3,038.1	3,038.1	9.3	60.3	113.70	1,563.6	8,325.4	8,605.7	8,536.6	69.06	124.612	
3,149.6	3,114.7	3,086.7	3,086.7	9.5	61.3	113.76	1,563.6	8,325.4	8,609.9	8,539.7	70.23	122.594	
3,200.0	3,164.0	3,136.0	3,136.0	9.8	62.3	113.83	1,563.6	8,325.4	8,614.2	8,542.8	71.42	120.612	
3,248.0	3,210.9	3,182.9	3,182.9	10.0	63.2	113.88	1,563.6	8,325.4	8,618.3	8,545.8	72.56	118.783	
3,300.0	3,261.8	3,233.8	3,233.8	10.2	64.2	113.95	1,563.6	8,325.4	8,622.8	8,549.0	73.78	116.867	
3,346.4	3,307.2	3,279.2	3,279.2	10.4	65.2	114.01	1,563.6	8,325.4	8,626.8	8,551.9	74.88	115.207	
3,400.0	3,359.6	3,331.6	3,331.6	10.6	66.2	114.07	1,563.6	8,325.4	8,631.4	8,555.2	76.15	113.353	
3,444.9	3,403.5	3,375.5	3,375.5	10.8	67.1	114.13	1,563.6	8,325.4	8,635.3	8,558.1	77.21	111.846	
3,500.0	3,457.4	3,429.4	3,429.4	11.1	68.2	114.20	1,563.6	8,325.4	8,640.0	8,561.5	78.51	110.051	
3,543.3	3,499.8	3,471.8	3,471.8	11.3	69.0	114.25	1,563.6	8,325.4	8,643.8	8,564.3	79.53	108.682	
3,600.0	3,555.2	3,527.2	3,527.2	11.5	70.2	114.32	1,563.6	8,325.4	8,648.7	8,567.9	80.87	106.942	
3,641.7	3,596.0	3,568.0	3,568.0	11.7	71.0	114.37	1,563.6	8,325.4	8,652.4	8,570.5	81.86	105.698	
3,700.0	3,653.0	3,625.0	3,625.0	11.9	72.1	114.44	1,563.6	8,325.4	8,657.5	8,574.2	83.24	104.010	
3,740.1	3,692.3	3,664.3	3,664.3	12.1	72.9	114.49	1,563.6	8,325.4	8,661.0	8,576.8	84.19	102.878	
3,800.0	3,750.8	3,722.8	3,722.8	12.4	74.1	114.57	1,563.6	8,325.4	8,666.3	8,580.7	85.60	101.239	
3,838.6	3,788.6	3,760.6	3,760.6	12.6	74.8	114.61	1,563.6	8,325.4	8,669.7	8,583.1	86.51	100.211	
3,900.0	3,848.7	3,820.7	3,820.7	12.8	76.1	114.69	1,563.6	8,325.4	8,675.1	8,587.1	87.97	98.618	
3,937.0	3,884.9	3,856.9	3,856.9	13.0	76.8	114.73	1,563.6	8,325.4	8,678.4	8,589.5	88.84	97.684	
4,000.0	3,946.5	3,918.5	3,918.5	13.3	78.0	114.81	1,563.6	8,325.4	8,683.9	8,593.6	90.33	96.135	
4,035.4	3,981.1	3,953.1	3,953.1	13.4	78.7	114.85	1,563.6	8,325.4	8,687.1	8,595.9	91.17	95.286	
4,100.0	4,044.3	4,016.3	4,016.3	13.7	80.0	114.93	1,563.6	8,325.4	8,692.9	8,600.2	92.70	93.778	
4,133.8	4,077.4	4,049.4	4,049.4	13.9	80.7	114.97	1,563.6	8,325.4	8,695.9	8,602.4	93.50	93.008	
4,200.0	4,142.1	4,114.1	4,114.1	14.2	82.0	115.05	1,563.6	8,325.4	8,701.8	8,606.7	95.06	91.540	
4,232.3	4,173.7	4,145.7	4,145.7	14.3	82.6	115.09	1,563.6	8,325.4	8,704.7	8,608.9	95.82	90.841	
4,300.0	4,239.9	4,211.9	4,211.9	14.6	83.9	115.18	1,563.6	8,325.4	8,710.8	8,613.4	97.42	89.410	
4,330.7	4,270.0	4,242.0	4,242.0	14.7	84.5	115.21	1,563.6	8,325.4	8,713.5	8,615.4	98.15	88.777	
4,400.0	4,337.7	4,309.7	4,309.7	15.0	85.9	115.30	1,563.6	8,325.4	8,719.8	8,620.0	99.79	87.383	
4,429.1	4,366.2	4,338.2	4,338.2	15.2	86.5	115.33	1,563.6	8,325.4	8,722.4	8,622.0	100.48	86.810	
4,500.0	4,435.6	4,407.6	4,407.6	15.5	87.9	115.42	1,563.6	8,325.4	8,728.9	8,626.7	102.15	85.449	
4,527.5	4,462.5	4,434.5	4,434.5	15.6	88.4	115.45	1,563.6	8,325.4	8,731.4	8,628.6	102.80	84.932	
4,600.0	4,533.4	4,505.4	4,505.4	15.9	89.8	115.54	1,563.6	8,325.4	8,738.0	8,633.5	104.52	83.604	
4,626.0	4,558.8	4,530.8	4,530.8	16.0	90.3	115.57	1,563.6	8,325.4	8,740.3	8,635.2	105.13	83.138	
4,673.6	4,605.3	4,577.3	4,577.3	16.3	91.3	115.63	1,563.6	8,325.4	8,744.7	8,638.4	106.25	82.299	
4,700.0	4,631.2	4,603.2	4,603.2	16.4	91.8	115.70	1,563.6	8,325.4	8,747.1	8,640.2	106.90	81.827	
4,724.4	4,655.1	4,627.1	4,627.1	16.4	92.3	115.77	1,563.6	8,325.4	8,749.2	8,641.7	107.47	81.407	
4,800.0	4,729.5	4,701.5	4,701.5	16.7	93.8	115.95	1,563.6	8,325.4	8,755.1	8,645.8	109.26	80.127	
4,822.8	4,752.1	4,724.1	4,724.1	16.7	94.2	116.00	1,563.6	8,325.4	8,756.7	8,646.9	109.80	79.753	
4,900.0	4,828.4	4,800.4	4,800.4	17.0	95.8	116.16	1,563.6	8,325.4	8,761.6	8,650.0	111.60	78.510	
4,921.2	4,849.5	4,821.5	4,821.5	17.0	96.2	116.19	1,563.6	8,325.4	8,762.8	8,650.7	112.09	78.178	
5,000.0	4,927.8	4,899.8	4,899.8	17.2	97.8	116.31	1,563.6	8,325.4	8,766.6	8,652.7	113.89	76.973	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT VETTING PM F-#26-7 - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,019.7	4,947.4	4,919.4	4,919.4	17.2	98.1	116.34	1,563.6	8,325.4	8,767.4	8,653.1	114.34	76.681	
5,100.0	5,027.5	4,999.5	4,999.5	17.4	99.8	116.42	1,563.6	8,325.4	8,770.1	8,653.9	116.14	75.513	
5,118.1	5,045.6	5,017.6	5,017.6	17.4	100.1	116.43	1,563.6	8,325.4	8,770.5	8,654.0	116.54	75.258	
5,200.0	5,127.4	5,099.4	5,099.4	17.6	101.8	116.48	1,563.6	8,325.4	8,772.0	8,653.7	118.34	74.128	
5,216.5	5,143.9	5,115.9	5,115.9	17.6	102.1	116.48	1,563.6	8,325.4	8,772.2	8,653.5	118.69	73.907	
5,273.4	5,200.8	5,172.8	5,172.8	17.7	103.2	83.80	1,563.6	8,325.4	8,772.4	8,655.5	116.88	75.053	
5,300.0	5,227.4	5,199.4	5,199.4	17.7	103.8	83.80	1,563.6	8,325.4	8,772.4	8,655.0	117.46	74.684	
5,314.9	5,242.3	5,214.3	5,214.3	17.7	104.1	83.80	1,563.6	8,325.4	8,772.4	8,654.6	117.79	74.476	
5,400.0	5,327.4	5,299.4	5,299.4	17.8	105.8	83.80	1,563.6	8,325.4	8,772.4	8,652.8	119.66	73.314	
5,413.4	5,340.8	5,312.8	5,312.8	17.9	106.1	83.80	1,563.6	8,325.4	8,772.4	8,652.5	119.95	73.134	
5,500.0	5,427.4	5,399.4	5,399.4	18.0	107.8	83.80	1,563.6	8,325.4	8,772.4	8,650.6	121.85	71.993	
5,511.8	5,439.2	5,411.2	5,411.2	18.0	108.0	83.80	1,563.6	8,325.4	8,772.4	8,650.3	122.11	71.840	
5,600.0	5,527.4	5,499.4	5,499.4	18.1	109.8	83.80	1,563.6	8,325.4	8,772.4	8,648.4	124.05	70.718	
5,610.2	5,537.6	5,509.6	5,509.6	18.1	110.0	83.80	1,563.6	8,325.4	8,772.4	8,648.1	124.27	70.590	
5,700.0	5,627.4	5,599.4	5,599.4	18.3	111.8	83.80	1,563.6	8,325.4	8,772.4	8,646.2	126.25	69.487	
5,708.6	5,636.0	5,608.0	5,608.0	18.3	112.0	83.80	1,563.6	8,325.4	8,772.4	8,646.0	126.44	69.382	
5,800.0	5,727.4	5,699.4	5,699.4	18.4	113.8	83.80	1,563.6	8,325.4	8,772.4	8,644.0	128.45	68.297	
5,807.1	5,734.5	5,706.5	5,706.5	18.4	114.0	83.80	1,563.6	8,325.4	8,772.4	8,643.8	128.60	68.214	
5,900.0	5,827.4	5,799.4	5,799.4	18.6	115.8	83.80	1,563.6	8,325.4	8,772.4	8,641.8	130.65	67.147	
5,905.5	5,832.9	5,804.9	5,804.9	18.6	116.0	83.80	1,563.6	8,325.4	8,772.4	8,641.7	130.77	67.085	
6,000.0	5,927.4	5,899.4	5,899.4	18.7	117.9	83.80	1,563.6	8,325.4	8,772.4	8,639.6	132.85	66.034	
6,003.9	5,931.3	5,903.3	5,903.3	18.7	117.9	83.80	1,563.6	8,325.4	8,772.4	8,639.5	132.93	65.991	
6,100.0	6,027.4	5,999.4	5,999.4	18.9	119.9	83.80	1,563.6	8,325.4	8,772.4	8,637.4	135.05	64.958	
6,102.3	6,029.7	6,001.7	6,001.7	18.9	119.9	83.80	1,563.6	8,325.4	8,772.4	8,637.3	135.10	64.933	
6,200.0	6,127.4	6,099.4	6,099.4	19.0	121.9	83.80	1,563.6	8,325.4	8,772.4	8,635.2	137.25	63.915	
6,200.8	6,128.2	6,100.2	6,100.2	19.0	121.9	83.80	1,563.6	8,325.4	8,772.4	8,635.2	137.27	63.907	
6,299.2	6,226.6	6,198.6	6,198.6	19.2	123.9	83.80	1,563.6	8,325.4	8,772.4	8,633.0	139.44	62.913	
6,301.4	6,228.8	6,200.8	6,200.8	19.2	123.9	83.80	1,563.6	8,325.4	8,772.4	8,632.9	139.49	62.891	
6,350.0	6,277.4	6,249.4	6,249.4	19.3	124.9	-6.21	1,563.6	8,325.4	8,770.8	8,627.9	142.86	61.394	
6,397.6	6,324.7	6,296.7	6,296.7	19.3	125.8	-6.26	1,563.6	8,325.4	8,766.0	8,623.1	142.90	61.342	
6,400.0	6,327.1	6,299.1	6,299.1	19.3	125.9	-6.26	1,563.6	8,325.4	8,765.7	8,622.8	142.89	61.346	
6,450.0	6,376.3	6,348.3	6,348.3	19.3	126.9	-6.34	1,563.6	8,325.4	8,757.2	8,614.9	142.22	61.576	
6,496.0	6,421.1	6,393.1	6,393.1	19.3	127.8	-6.45	1,563.6	8,325.4	8,746.3	8,605.3	140.97	62.044	
6,500.0	6,424.9	6,396.9	6,396.9	19.3	127.9	-6.46	1,563.6	8,325.4	8,745.2	8,604.4	140.83	62.096	
6,550.0	6,472.4	6,444.4	6,444.4	19.3	128.8	-6.62	1,563.6	8,325.4	8,730.0	8,591.2	138.74	62.924	
6,594.5	6,513.8	6,485.8	6,485.8	19.3	129.6	-6.79	1,563.6	8,325.4	8,713.6	8,577.4	136.28	63.939	
6,600.0	6,518.8	6,490.8	6,490.8	19.3	129.8	-6.82	1,563.6	8,325.4	8,711.4	8,575.5	135.94	64.085	
6,650.0	6,563.8	6,535.8	6,535.8	19.3	130.7	-7.07	1,563.6	8,325.4	8,689.7	8,557.3	132.44	65.613	
6,692.9	6,601.1	6,573.1	6,573.1	19.2	131.4	-7.33	1,563.6	8,325.4	8,668.7	8,539.8	128.90	67.250	
6,700.0	6,607.1	6,579.1	6,579.1	19.2	131.5	-7.38	1,563.6	8,325.4	8,665.0	8,536.7	128.27	67.552	
6,750.0	6,648.6	6,620.6	6,620.6	19.2	132.4	-7.75	1,563.6	8,325.4	8,637.3	8,513.8	123.46	69.960	
6,791.3	6,681.4	6,653.4	6,653.4	19.1	133.0	-8.12	1,563.6	8,325.4	8,612.2	8,493.2	119.03	72.352	
6,800.0	6,688.1	6,660.1	6,660.1	19.1	133.2	-8.21	1,563.6	8,325.4	8,606.8	8,488.7	118.05	72.905	
6,850.0	6,725.3	6,697.3	6,697.3	19.1	133.9	-8.76	1,563.6	8,325.4	8,573.6	8,461.5	112.12	76.470	
6,889.7	6,753.2	6,725.2	6,725.2	19.0	134.5	-9.29	1,563.6	8,325.4	8,545.4	8,438.3	107.08	79.808	
6,900.0	6,760.1	6,732.1	6,732.1	19.0	134.6	-9.45	1,563.6	8,325.4	8,537.9	8,432.2	105.74	80.747	
6,950.0	6,792.3	6,764.3	6,764.3	19.0	135.3	-10.29	1,563.6	8,325.4	8,499.9	8,400.9	99.05	85.818	
6,988.2	6,815.1	6,787.1	6,787.1	18.9	135.7	-11.08	1,563.6	8,325.4	8,469.5	8,375.6	93.85	90.245	
7,000.0	6,821.8	6,793.8	6,793.8	18.9	135.8	-11.35	1,563.6	8,325.4	8,459.8	8,367.5	92.24	91.710	
7,050.0	6,848.3	6,820.3	6,820.3	18.9	136.4	-12.71	1,563.6	8,325.4	8,417.7	8,332.1	85.65	98.280	
7,086.6	6,865.9	6,837.9	6,837.9	18.9	136.7	-13.97	1,563.6	8,325.4	8,385.8	8,304.5	81.25	103.206	
7,100.0	6,871.9	6,843.9	6,843.9	18.9	136.9	-14.50	1,563.6	8,325.4	8,373.9	8,294.1	79.80	104.935	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,150.0	6,892.3	6,864.3	6,864.3	18.8	137.3	-16.91	1,563.6	8,325.4	8,328.6	8,252.9	75.62	110.133	
7,185.0	6,904.7	6,876.7	6,876.7	18.8	137.5	-19.16	1,563.6	8,325.4	8,296.0	8,221.5	74.51	111.342	
7,200.0	6,909.5	6,881.5	6,881.5	18.9	137.6	-20.31	1,563.6	8,325.4	8,281.9	8,207.2	74.71	110.859	
7,250.0	6,923.4	6,895.4	6,895.4	19.3	137.9	-25.39	1,563.6	8,325.4	8,234.2	8,154.7	79.57	103.483	
7,283.4	6,930.8	6,902.8	6,902.8	19.8	138.0	-30.37	1,563.6	8,325.4	8,201.8	8,114.1	87.76	93.459	
7,300.0	6,933.9	6,905.9	6,905.9	20.0	138.1	-33.55	1,563.6	8,325.4	8,185.7	8,092.0	93.69	87.370	
7,350.0	6,940.9	6,912.9	6,912.9	20.8	138.2	-47.73	1,563.6	8,325.4	8,136.5	8,016.0	120.49	67.529	
7,381.9	6,943.6	6,915.6	6,915.6	21.4	138.3	-62.15	1,563.6	8,325.4	8,105.0	7,962.5	142.52	56.867	
7,400.0	6,944.5	6,916.5	6,916.5	21.7	138.3	-72.64	1,563.6	8,325.4	8,087.0	7,933.6	153.40	52.719	
7,432.4	6,945.0	6,917.0	6,917.0	22.3	138.3	-94.05	1,563.6	8,325.4	8,054.8	7,894.8	160.00	50.342	
7,480.3	6,944.6	6,916.6	6,916.6	23.2	138.3	-94.02	1,563.6	8,325.4	8,007.3	7,846.4	160.89	49.769	
7,500.0	6,944.4	6,916.4	6,916.4	23.6	138.3	-94.01	1,563.6	8,325.4	7,987.7	7,826.4	161.25	49.535	
7,578.7	6,943.7	6,915.7	6,915.7	25.2	138.3	-93.97	1,563.6	8,325.4	7,909.5	7,746.7	162.83	48.575	
7,600.0	6,943.6	6,915.6	6,915.6	25.6	138.3	-93.96	1,563.6	8,325.4	7,888.4	7,725.2	163.26	48.319	
7,677.1	6,942.9	6,914.9	6,914.9	27.3	138.3	-93.92	1,563.6	8,325.4	7,811.8	7,646.9	164.91	47.370	
7,700.0	6,942.7	6,914.7	6,914.7	27.8	138.3	-93.91	1,563.6	8,325.4	7,789.2	7,623.8	165.40	47.093	
7,775.6	6,942.1	6,914.1	6,914.1	29.5	138.3	-93.87	1,563.6	8,325.4	7,714.1	7,547.0	167.10	46.165	
7,800.0	6,941.9	6,913.9	6,913.9	30.1	138.3	-93.86	1,563.6	8,325.4	7,689.9	7,522.3	167.65	45.869	
7,874.0	6,941.3	6,913.3	6,913.3	31.8	138.2	-93.82	1,563.6	8,325.4	7,616.5	7,447.1	169.38	44.967	
7,900.0	6,941.1	6,913.1	6,913.1	32.4	138.2	-93.81	1,563.6	8,325.4	7,590.7	7,420.7	169.99	44.655	
7,972.4	6,940.4	6,912.4	6,912.4	34.2	138.2	-93.77	1,563.6	8,325.4	7,518.8	7,347.1	171.73	43.783	
8,000.0	6,940.2	6,912.2	6,912.2	34.9	138.2	-93.76	1,563.6	8,325.4	7,491.5	7,319.1	172.39	43.456	
8,070.8	6,939.6	6,911.6	6,911.6	36.6	138.2	-93.72	1,563.6	8,325.4	7,421.2	7,247.1	174.13	42.618	
8,100.0	6,939.4	6,911.4	6,911.4	37.3	138.2	-93.71	1,563.6	8,325.4	7,392.3	7,217.4	174.85	42.277	
8,169.3	6,938.8	6,910.8	6,910.8	39.1	138.2	-93.67	1,563.6	8,325.4	7,323.6	7,147.0	176.59	41.473	
8,200.0	6,938.5	6,910.5	6,910.5	39.8	138.2	-93.66	1,563.6	8,325.4	7,293.1	7,115.8	177.36	41.121	
8,267.7	6,938.0	6,910.0	6,910.0	41.6	138.2	-93.62	1,563.6	8,325.4	7,226.0	7,046.9	179.08	40.351	
8,300.0	6,937.7	6,909.7	6,909.7	42.4	138.2	-93.61	1,563.6	8,325.4	7,194.0	7,014.1	179.90	39.989	
8,366.1	6,937.2	6,909.2	6,909.2	44.1	138.2	-93.57	1,563.6	8,325.4	7,128.5	6,946.8	181.60	39.253	
8,400.0	6,936.9	6,908.9	6,908.9	45.0	138.2	-93.56	1,563.6	8,325.4	7,094.9	6,912.4	182.48	38.881	
8,464.5	6,936.3	6,908.3	6,908.3	46.6	138.1	-93.52	1,563.6	8,325.4	7,030.9	6,846.8	184.15	38.180	
8,500.0	6,936.0	6,908.0	6,908.0	47.6	138.1	-93.51	1,563.6	8,325.4	6,995.8	6,810.7	185.08	37.800	
8,563.0	6,935.5	6,907.5	6,907.5	49.2	138.1	-93.47	1,563.6	8,325.4	6,933.4	6,746.7	186.73	37.131	
8,600.0	6,935.2	6,907.2	6,907.2	50.2	138.1	-93.46	1,563.6	8,325.4	6,896.7	6,709.0	187.70	36.744	
8,661.4	6,934.7	6,906.7	6,906.7	51.8	138.1	-93.42	1,563.6	8,325.4	6,835.9	6,646.6	189.32	36.108	
8,700.0	6,934.4	6,906.4	6,906.4	52.8	138.1	-93.41	1,563.6	8,325.4	6,797.7	6,607.4	190.34	35.714	
8,759.8	6,933.9	6,905.9	6,905.9	54.4	138.1	-93.37	1,563.6	8,325.4	6,738.5	6,546.5	191.93	35.110	
8,800.0	6,933.5	6,905.5	6,905.5	55.5	138.1	-93.35	1,563.6	8,325.4	6,698.7	6,505.7	192.99	34.709	
8,858.2	6,933.0	6,905.0	6,905.0	57.1	138.1	-93.32	1,563.6	8,325.4	6,641.0	6,446.5	194.55	34.136	
8,900.0	6,932.7	6,904.7	6,904.7	58.2	138.1	-93.30	1,563.6	8,325.4	6,599.7	6,404.0	195.66	33.730	
8,956.7	6,932.2	6,904.2	6,904.2	59.7	138.1	-93.28	1,563.6	8,325.4	6,543.6	6,346.4	197.18	33.186	
9,000.0	6,931.8	6,903.8	6,903.8	60.9	138.1	-93.25	1,563.6	8,325.4	6,500.8	6,302.4	198.34	32.775	
9,055.1	6,931.4	6,903.4	6,903.4	62.4	138.0	-93.23	1,563.6	8,325.4	6,446.3	6,246.4	199.83	32.259	
9,100.0	6,931.0	6,903.0	6,903.0	63.6	138.0	-93.20	1,563.6	8,325.4	6,401.8	6,200.8	201.04	31.844	
9,153.5	6,930.6	6,902.6	6,902.6	65.0	138.0	-93.18	1,563.6	8,325.4	6,348.9	6,146.4	202.48	31.356	
9,200.0	6,930.2	6,902.2	6,902.2	66.3	138.0	-93.15	1,563.6	8,325.4	6,303.0	6,099.2	203.74	30.937	
9,251.9	6,929.7	6,901.7	6,901.7	67.7	138.0	-93.13	1,563.6	8,325.4	6,251.6	6,046.5	205.14	30.474	
9,300.0	6,929.3	6,901.3	6,901.3	69.0	138.0	-93.10	1,563.6	8,325.4	6,204.1	5,997.7	206.45	30.052	
9,350.4	6,928.9	6,900.9	6,900.9	70.4	138.0	-93.08	1,563.6	8,325.4	6,154.3	5,946.5	207.81	29.615	
9,400.0	6,928.5	6,900.5	6,900.5	71.7	138.0	-93.05	1,563.6	8,325.4	6,105.3	5,896.2	209.16	29.189	
9,448.8	6,928.1	6,900.1	6,900.1	73.0	138.0	-93.03	1,563.6	8,325.4	6,057.1	5,846.6	210.49	28.776	
9,500.0	6,927.7	6,899.7	6,899.7	74.4	138.0	-93.00	1,563.6	8,325.4	6,006.5	5,794.7	211.88	28.348	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,547.2	6,927.3	6,899.3	6,899.3	75.7	138.0	-92.98	1,563.6	8,325.4	5,959.9	5,746.7	213.17	27.958	
9,600.0	6,926.8	6,898.8	6,898.8	77.2	138.0	-92.95	1,563.6	8,325.4	5,907.8	5,693.2	214.61	27.528	
9,645.6	6,926.4	6,898.4	6,898.4	78.4	137.9	-92.93	1,563.6	8,325.4	5,862.8	5,646.9	215.86	27.160	
9,700.0	6,926.0	6,898.0	6,898.0	79.9	137.9	-92.90	1,563.6	8,325.4	5,809.1	5,591.8	217.35	26.728	
9,744.1	6,925.6	6,897.6	6,897.6	81.1	137.9	-92.88	1,563.6	8,325.4	5,765.7	5,547.1	218.55	26.381	
9,800.0	6,925.2	6,897.2	6,897.2	82.6	137.9	-92.85	1,563.6	8,325.4	5,710.5	5,490.4	220.08	25.947	
9,842.5	6,924.8	6,896.8	6,896.8	83.8	137.9	-92.83	1,563.6	8,325.4	5,668.6	5,447.3	221.25	25.621	
9,900.0	6,924.3	6,896.3	6,896.3	85.4	137.9	-92.80	1,563.6	8,325.4	5,611.9	5,389.1	222.83	25.185	
9,940.9	6,924.0	6,896.0	6,896.0	86.5	137.9	-92.78	1,563.6	8,325.4	5,571.6	5,347.6	223.95	24.879	
10,000.0	6,923.5	6,895.5	6,895.5	88.1	137.9	-92.75	1,563.6	8,325.4	5,513.4	5,287.8	225.57	24.442	
10,039.3	6,923.2	6,895.2	6,895.2	89.2	137.9	-92.73	1,563.6	8,325.4	5,474.6	5,248.0	226.65	24.154	
10,100.0	6,922.6	6,894.6	6,894.6	90.9	137.9	-92.69	1,563.6	8,325.4	5,414.9	5,186.6	228.32	23.716	
10,137.8	6,922.3	6,894.3	6,894.3	91.9	137.9	-92.68	1,563.6	8,325.4	5,377.7	5,148.3	229.36	23.447	
10,200.0	6,921.8	6,893.8	6,893.8	93.7	137.9	-92.64	1,563.6	8,325.4	5,316.5	5,085.4	231.07	23.008	
10,236.2	6,921.5	6,893.5	6,893.5	94.7	137.8	-92.63	1,563.6	8,325.4	5,280.9	5,048.8	232.07	22.755	
10,300.0	6,921.0	6,893.0	6,893.0	96.4	137.8	-92.59	1,563.6	8,325.4	5,218.1	4,984.3	233.83	22.316	
10,334.6	6,920.7	6,892.7	6,892.7	97.4	137.8	-92.58	1,563.6	8,325.4	5,184.1	4,949.3	234.78	22.080	
10,400.0	6,920.1	6,892.1	6,892.1	99.2	137.8	-92.54	1,563.6	8,325.4	5,119.8	4,883.2	236.58	21.640	
10,433.0	6,919.9	6,891.9	6,891.9	100.1	137.8	-92.53	1,563.6	8,325.4	5,087.3	4,849.8	237.50	21.421	
10,500.0	6,919.3	6,891.3	6,891.3	101.9	137.8	-92.49	1,563.6	8,325.4	5,021.6	4,782.2	239.34	20.980	
10,531.5	6,919.0	6,891.0	6,891.0	102.8	137.8	-92.48	1,563.6	8,325.4	4,990.7	4,750.4	240.21	20.776	
10,600.0	6,918.5	6,890.5	6,890.5	104.7	137.8	-92.44	1,563.6	8,325.4	4,923.4	4,681.3	242.11	20.336	
10,629.9	6,918.2	6,890.2	6,890.2	105.5	137.8	-92.43	1,563.6	8,325.4	4,894.1	4,651.1	242.93	20.146	
10,700.0	6,917.6	6,889.6	6,889.6	107.5	137.8	-92.39	1,563.6	8,325.4	4,825.3	4,580.4	244.87	19.705	
10,728.3	6,917.4	6,889.4	6,889.4	108.3	137.8	-92.38	1,563.6	8,325.4	4,797.5	4,551.9	245.65	19.530	
10,800.0	6,916.8	6,888.8	6,888.8	110.3	137.8	-92.34	1,563.6	8,325.4	4,727.3	4,479.6	247.64	19.090	
10,826.7	6,916.6	6,888.6	6,888.6	111.0	137.7	-92.33	1,563.6	8,325.4	4,701.1	4,452.7	248.38	18.927	
10,900.0	6,916.0	6,888.0	6,888.0	113.0	137.7	-92.29	1,563.6	8,325.4	4,629.4	4,379.0	250.41	18.487	
10,925.2	6,915.8	6,887.8	6,887.8	113.7	137.7	-92.28	1,563.6	8,325.4	4,604.7	4,353.6	251.10	18.338	
11,000.0	6,915.1	6,887.1	6,887.1	115.8	137.7	-92.24	1,563.6	8,325.4	4,531.5	4,278.3	253.17	17.899	
11,023.6	6,914.9	6,886.9	6,886.9	116.5	137.7	-92.23	1,563.6	8,325.4	4,508.4	4,254.6	253.83	17.762	
11,100.0	6,914.3	6,886.3	6,886.3	118.6	137.7	-92.19	1,563.6	8,325.4	4,433.8	4,177.8	255.95	17.323	
11,122.0	6,914.1	6,886.1	6,886.1	119.2	137.7	-92.18	1,563.6	8,325.4	4,412.3	4,155.7	256.56	17.198	
11,200.0	6,913.5	6,885.5	6,885.5	121.4	137.7	-92.14	1,563.6	8,325.4	4,336.1	4,077.4	258.72	16.760	
11,220.4	6,913.3	6,885.3	6,885.3	121.9	137.7	-92.13	1,563.6	8,325.4	4,316.2	4,056.9	259.28	16.647	
11,300.0	6,912.6	6,884.6	6,884.6	124.1	137.7	-92.09	1,563.6	8,325.4	4,238.6	3,977.1	261.49	16.209	
11,318.9	6,912.5	6,884.5	6,884.5	124.7	137.7	-92.08	1,563.6	8,325.4	4,220.2	3,958.2	262.01	16.107	
11,400.0	6,911.8	6,883.8	6,883.8	126.9	137.7	-92.04	1,563.6	8,325.4	4,141.2	3,876.9	264.27	15.671	
11,417.3	6,911.6	6,883.6	6,883.6	127.4	137.7	-92.03	1,563.6	8,325.4	4,124.4	3,859.6	264.75	15.579	
11,500.0	6,911.0	6,883.0	6,883.0	129.7	137.6	-91.99	1,563.6	8,325.4	4,043.9	3,776.9	267.04	15.143	
11,515.7	6,910.8	6,882.8	6,882.8	130.2	137.6	-91.98	1,563.6	8,325.4	4,028.6	3,761.2	267.48	15.062	
11,600.0	6,910.1	6,882.1	6,882.1	132.5	137.6	-91.93	1,563.6	8,325.4	3,946.8	3,677.0	269.82	14.628	
11,614.1	6,910.0	6,882.0	6,882.0	132.9	137.6	-91.93	1,563.6	8,325.4	3,933.0	3,662.8	270.21	14.555	
11,700.0	6,909.3	6,881.3	6,881.3	135.3	137.6	-91.88	1,563.6	8,325.4	3,849.8	3,577.2	272.60	14.123	
11,712.6	6,909.2	6,881.2	6,881.2	135.6	137.6	-91.88	1,563.6	8,325.4	3,837.6	3,564.6	272.95	14.060	
11,800.0	6,908.5	6,880.5	6,880.5	138.1	137.6	-91.83	1,563.6	8,325.4	3,752.9	3,477.6	275.37	13.628	
11,811.0	6,908.4	6,880.4	6,880.4	138.4	137.6	-91.83	1,563.6	8,325.4	3,742.3	3,466.6	275.68	13.575	
11,900.0	6,907.6	6,879.6	6,879.6	140.9	137.6	-91.78	1,563.6	8,325.4	3,656.3	3,378.1	278.15	13.145	
11,909.4	6,907.5	6,879.5	6,879.5	141.1	137.6	-91.78	1,563.6	8,325.4	3,647.1	3,368.7	278.42	13.100	
12,000.0	6,906.8	6,878.8	6,878.8	143.6	137.6	-91.73	1,563.6	8,325.4	3,559.8	3,278.8	280.93	12.671	
12,007.8	6,906.7	6,878.7	6,878.7	143.9	137.6	-91.73	1,563.6	8,325.4	3,552.2	3,271.0	281.15	12.634	
12,100.0	6,905.9	6,877.9	6,877.9	146.4	137.5	-91.68	1,563.6	8,325.4	3,463.5	3,179.8	283.72	12.208	

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 BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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

Offset Design												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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,106.3	6,905.9	6,877.9	6,877.9	146.6	137.5	-91.68	1,563.6	8,325.4	3,457.4	3,173.5	283.89	12.179	
12,200.0	6,905.1	6,877.1	6,877.1	149.2	137.5	-91.63	1,563.6	8,325.4	3,367.4	3,080.9	286.50	11.754	
12,204.7	6,905.1	6,877.1	6,877.1	149.4	137.5	-91.63	1,563.6	8,325.4	3,362.9	3,076.3	286.63	11.733	
12,300.0	6,904.3	6,876.3	6,876.3	152.0	137.5	-91.58	1,563.6	8,325.4	3,271.5	2,982.3	289.28	11.309	
12,303.1	6,904.3	6,876.3	6,876.3	152.1	137.5	-91.58	1,563.6	8,325.4	3,268.6	2,979.2	289.37	11.296	
12,400.0	6,903.4	6,875.4	6,875.4	154.8	137.5	-91.53	1,563.6	8,325.4	3,176.0	2,883.9	292.06	10.874	
12,401.5	6,903.4	6,875.4	6,875.4	154.8	137.5	-91.53	1,563.6	8,325.4	3,174.5	2,882.4	292.10	10.868	
12,500.0	6,902.6	6,874.6	6,874.6	157.6	137.5	-91.48	1,563.6	8,325.4	3,080.7	2,785.8	294.84	10.448	
12,598.4	6,901.8	6,873.8	6,873.8	160.3	137.5	-91.43	1,563.6	8,325.4	2,987.2	2,689.6	297.58	10.038	
12,600.0	6,901.8	6,873.8	6,873.8	160.4	137.5	-91.43	1,563.6	8,325.4	2,985.7	2,688.0	297.63	10.031	
12,696.8	6,901.0	6,873.0	6,873.0	163.1	137.4	-91.38	1,563.6	8,325.4	2,894.0	2,593.7	300.32	9.636	
12,700.0	6,900.9	6,872.9	6,872.9	163.2	137.4	-91.38	1,563.6	8,325.4	2,891.0	2,590.6	300.41	9.623	
12,795.2	6,900.1	6,872.1	6,872.1	165.8	137.4	-91.33	1,563.6	8,325.4	2,801.2	2,498.1	303.07	9.243	
12,800.0	6,900.1	6,872.1	6,872.1	166.0	137.4	-91.33	1,563.6	8,325.4	2,796.7	2,493.5	303.20	9.224	
12,893.7	6,899.3	6,871.3	6,871.3	168.6	137.4	-91.28	1,563.6	8,325.4	2,708.7	2,402.9	305.81	8.858	
12,900.0	6,899.3	6,871.3	6,871.3	168.8	137.4	-91.28	1,563.6	8,325.4	2,702.8	2,396.8	305.98	8.833	
12,992.1	6,898.5	6,870.5	6,870.5	171.3	137.4	-91.23	1,563.6	8,325.4	2,616.8	2,308.2	308.55	8.481	
13,000.0	6,898.4	6,870.4	6,870.4	171.6	137.4	-91.23	1,563.6	8,325.4	2,609.4	2,300.6	308.77	8.451	
13,090.5	6,897.7	6,869.7	6,869.7	174.1	137.4	-91.18	1,563.6	8,325.4	2,525.3	2,214.0	311.29	8.112	
13,100.0	6,897.6	6,869.6	6,869.6	174.4	137.4	-91.18	1,563.6	8,325.4	2,516.5	2,204.9	311.55	8.077	
13,188.9	6,896.9	6,868.9	6,868.9	176.8	137.4	-91.13	1,563.6	8,325.4	2,434.3	2,120.3	314.03	7.752	
13,200.0	6,896.8	6,868.8	6,868.8	177.2	137.4	-91.13	1,563.6	8,325.4	2,424.1	2,109.8	314.34	7.712	
13,287.4	6,896.0	6,868.0	6,868.0	179.6	137.3	-91.08	1,563.6	8,325.4	2,343.9	2,027.2	316.77	7.399	
13,300.0	6,895.9	6,867.9	6,867.9	180.0	137.3	-91.08	1,563.6	8,325.4	2,332.4	2,015.3	317.13	7.355	
13,385.8	6,895.2	6,867.2	6,867.2	182.4	137.3	-91.03	1,563.6	8,325.4	2,254.2	1,934.7	319.52	7.055	
13,400.0	6,895.1	6,867.1	6,867.1	182.7	137.3	-91.02	1,563.6	8,325.4	2,241.4	1,921.5	319.91	7.006	
13,484.2	6,894.4	6,866.4	6,866.4	185.1	137.3	-90.98	1,563.6	8,325.4	2,165.3	1,843.1	322.26	6.719	
13,500.0	6,894.3	6,866.3	6,866.3	185.5	137.3	-90.97	1,563.6	8,325.4	2,151.1	1,828.4	322.70	6.666	
13,582.6	6,893.6	6,865.6	6,865.6	187.9	137.3	-90.93	1,563.6	8,325.4	2,077.2	1,752.2	325.00	6.391	
13,600.0	6,893.4	6,865.4	6,865.4	188.3	137.3	-90.92	1,563.6	8,325.4	2,061.8	1,736.3	325.49	6.335	
13,681.1	6,892.8	6,864.8	6,864.8	190.6	137.3	-90.88	1,563.6	8,325.4	1,990.1	1,662.4	327.75	6.072	
13,700.0	6,892.6	6,864.6	6,864.6	191.1	137.3	-90.87	1,563.6	8,325.4	1,973.5	1,645.2	328.27	6.012	
13,779.5	6,891.9	6,863.9	6,863.9	193.4	137.3	-90.83	1,563.6	8,325.4	1,904.2	1,573.7	330.49	5.762	
13,800.0	6,891.8	6,863.8	6,863.8	193.9	137.3	-90.82	1,563.6	8,325.4	1,886.4	1,555.3	331.06	5.698	
13,877.9	6,891.1	6,863.1	6,863.1	196.1	137.2	-90.78	1,563.6	8,325.4	1,819.4	1,486.2	333.23	5.460	
13,900.0	6,890.9	6,862.9	6,862.9	196.7	137.2	-90.77	1,563.6	8,325.4	1,800.6	1,466.8	333.85	5.393	
13,976.3	6,890.3	6,862.3	6,862.3	198.9	137.2	-90.73	1,563.6	8,325.4	1,736.1	1,400.1	335.98	5.167	
14,000.0	6,890.1	6,862.1	6,862.1	199.5	137.2	-90.72	1,563.6	8,325.4	1,716.3	1,379.7	336.64	5.099	
14,074.8	6,889.5	6,861.5	6,861.5	201.6	137.2	-90.68	1,563.6	8,325.4	1,654.5	1,315.8	338.72	4.885	
14,100.0	6,889.3	6,861.3	6,861.3	202.3	137.2	-90.67	1,563.6	8,325.4	1,633.9	1,294.4	339.42	4.814	
14,173.2	6,888.7	6,860.7	6,860.7	204.4	137.2	-90.63	1,563.6	8,325.4	1,574.8	1,233.3	341.46	4.612	
14,200.0	6,888.4	6,860.4	6,860.4	205.1	137.2	-90.62	1,563.6	8,325.4	1,553.5	1,211.2	342.21	4.539	
14,271.6	6,887.8	6,859.8	6,859.8	207.1	137.2	-90.58	1,563.6	8,325.4	1,497.3	1,153.1	344.21	4.350	
14,300.0	6,887.6	6,859.6	6,859.6	207.9	137.2	-90.57	1,563.6	8,325.4	1,475.4	1,130.4	345.00	4.277	
14,370.0	6,887.0	6,859.0	6,859.0	209.9	137.2	-90.54	1,563.6	8,325.4	1,422.4	1,075.5	346.95	4.100	
14,400.0	6,886.8	6,858.8	6,858.8	210.7	137.2	-90.52	1,563.6	8,325.4	1,400.2	1,052.4	347.79	4.026	
14,468.5	6,886.2	6,858.2	6,858.2	212.6	137.1	-90.49	1,563.6	8,325.4	1,350.5	1,000.9	349.70	3.862	
14,500.0	6,885.9	6,857.9	6,857.9	213.5	137.1	-90.47	1,563.6	8,325.4	1,328.3	977.7	350.58	3.789	
14,566.9	6,885.4	6,857.4	6,857.4	215.4	137.1	-90.44	1,563.6	8,325.4	1,282.2	929.8	352.44	3.638	
14,600.0	6,885.1	6,857.1	6,857.1	216.3	137.1	-90.42	1,563.6	8,325.4	1,260.1	906.8	353.36	3.566	
14,613.0	6,885.0	6,857.0	6,857.0	216.7	137.1	-90.41	1,563.6	8,325.4	1,251.6	897.9	353.73	3.538 CC, ES, SF	

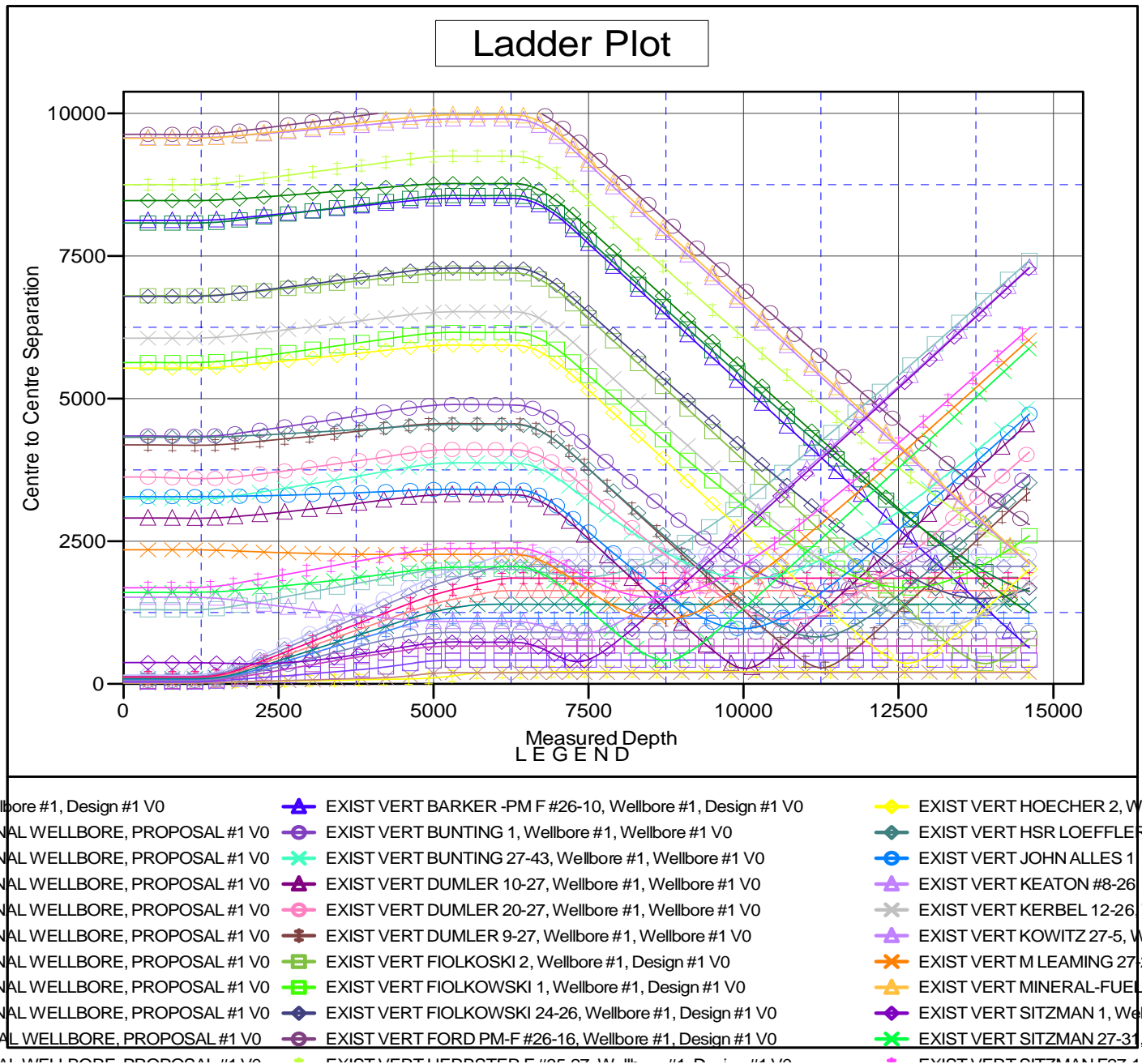
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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 Depths are relative to KB-EST @ 4680.0usft (Original Well ECoordinates are relative to: BOULTER FARMS 27G-332
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.54°

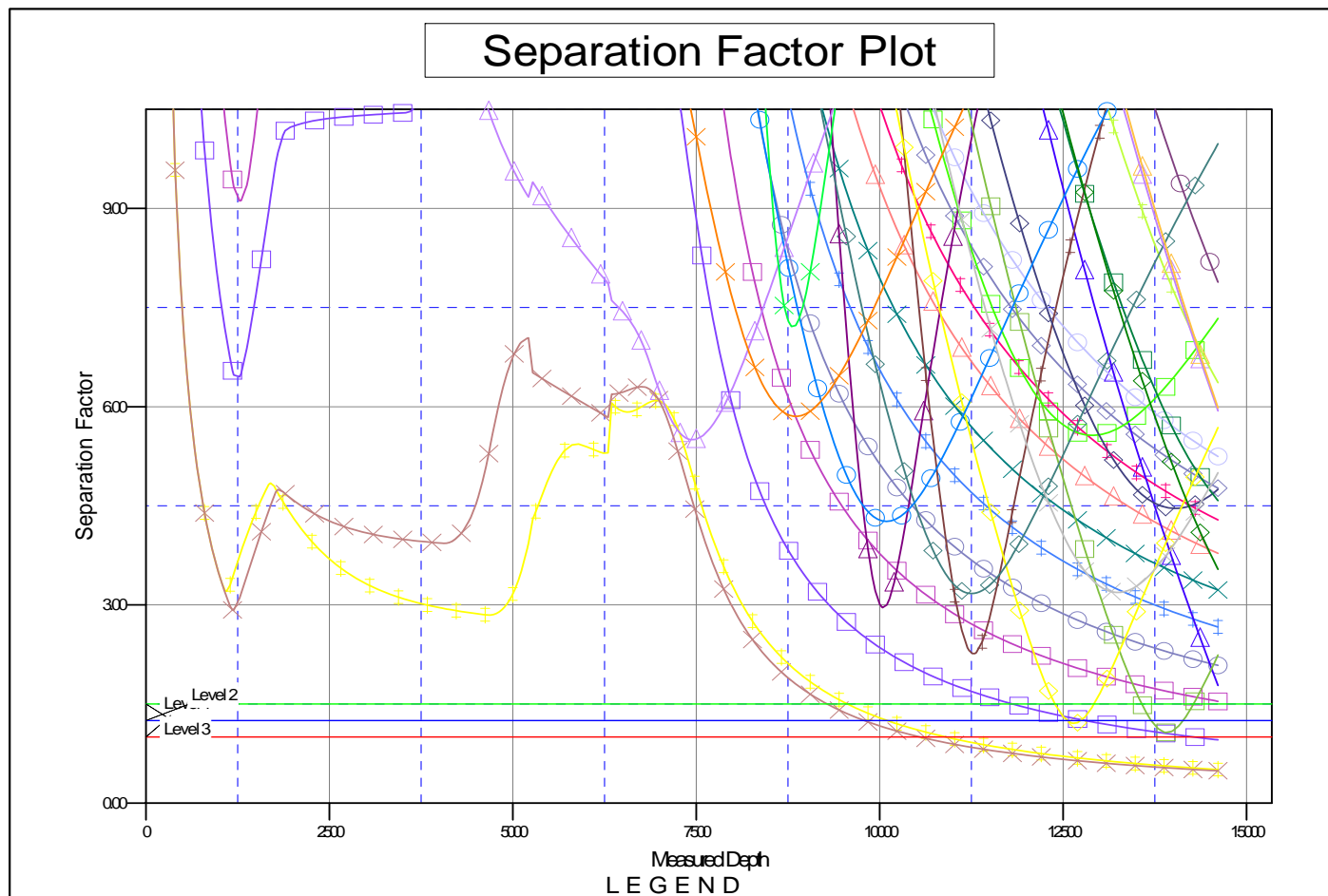


CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27G-332
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4680.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27G-332	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 Depths are relative to KB-EST @ 4680.0usft (Original Well ECoordinates are relative to: BOULTER FARMS 27G-332
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.54°



Wellbore #1, Design #1 V0	EXIST VERT BARKER -PM F #26-10, Wellbore #1, Design #1 V0	EXIST VERT HOECHER 2, Wellbore #1, Design #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT BUNTING 1, Wellbore #1, Wellbore #1 V0	EXIST VERT HSR LOEFFLER 1, Wellbore #1, Wellbore #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT BUNTING 27-43, Wellbore #1, Wellbore #1 V0	EXIST VERT JOHN ALLES 1, Wellbore #1, Wellbore #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT DUMLER 10-27, Wellbore #1, Wellbore #1 V0	EXIST VERT KEATON #8-26, Wellbore #1, Wellbore #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT DUMLER 20-27, Wellbore #1, Wellbore #1 V0	EXIST VERT KERBEL 12-26, Wellbore #1, Wellbore #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT DUMLER 9-27, Wellbore #1, Wellbore #1 V0	EXIST VERT KOWITZ 27-5, Wellbore #1, Wellbore #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT FOLKOSKI 2, Wellbore #1, Design #1 V0	EXIST VERT M LEAMING 27-2, Wellbore #1, Design #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT FOLKOWSKI 1, Wellbore #1, Design #1 V0	EXIST VERT MINERAL-FUELC, Wellbore #1, Design #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT FOLKOWSKI 24-26, Wellbore #1, Design #1 V0	EXIST VERT SITZMAN 1, Wellbore #1, Design #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT FORD PM-F #26-16, Wellbore #1, Design #1 V0	EXIST VERT SITZMAN 27-31, Wellbore #1, Design #1 V0
ORIGINAL WELLBORE, PROPOSAL #1 V0	EXIST VERT HOECHER 2, Wellbore #1, Design #1 V0	EXIST VERT SITZMAN 27-31, Wellbore #1, Design #1 V0