

PDC ENERGY

**WELD COUNTY, COLORADO
NW SW SEC. 27 T5N R65W 6th P.M.
BOULTER FARMS 27H-302**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

11 March, 2016



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	14,584.2	PROPOSAL #1 (ORIGINAL WELLBORE)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NW SW SEC. 27 T5N R65W 6th P.M.						
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	7,400.1	6,930.0	970.2	810.0	6.056	CC
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	7,403.7	6,930.0	970.2	810.0	6.054	ES
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Design #1	7,500.0	6,929.1	975.4	813.2	6.016	SF
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	1,038.0	1,037.0	76.5	72.1	17.439	CC
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	1,082.7	1,080.9	76.7	72.1	16.717	ES
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	14,584.2	14,544.9	1,105.4	672.6	2.554	SF
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	1,238.2	1,237.2	47.4	42.1	8.957	CC
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	1,279.5	1,278.2	47.5	42.0	8.675	ES
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	14,584.2	14,562.7	708.5	276.5	1.640	SF
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	1,138.1	1,137.1	61.9	57.1	12.803	CC
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	1,181.1	1,179.6	62.1	57.0	12.342	ES
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	14,584.2	14,613.0	903.5	470.1	2.085	SF
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	1,537.5	1,537.5	14.6	7.9	2.196	CC
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	14,584.2	14,528.9	256.9	-156.5	0.621	Level 1, ES, SF
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	1,444.1	1,443.1	14.6	8.4	2.345	CC
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	14,584.2	14,542.5	245.4	-180.3	0.576	Level 1, ES, SF
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	1,337.4	1,337.4	43.7	38.0	7.622	CC
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	1,377.9	1,377.6	43.8	37.9	7.419	ES
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	14,584.2	14,584.5	732.7	299.8	1.693	SF
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	1,338.3	1,337.3	29.1	23.4	5.080	CC
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	1,377.9	1,376.8	29.2	23.3	4.939	ES
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	14,584.2	14,589.5	488.2	54.6	1.126	Level 2, SF
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	1,437.5	1,437.5	29.1	23.0	4.712	CC
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	1,476.4	1,476.1	29.2	22.9	4.604	ES
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	14,584.2	14,619.3	492.4	59.8	1.138	Level 2, SF
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	1,137.3	1,137.3	72.9	68.0	15.067	CC
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	1,181.1	1,180.4	73.0	68.0	14.538	ES
BOULTER FARMS 27I-212 - ORIGINAL WELLBORE - P	14,584.2	14,668.5	1,159.0	726.2	2.678	SF
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	1,037.1	1,037.1	91.1	86.7	20.767	CC
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	1,082.7	1,081.7	91.3	86.7	19.928	ES
BOULTER FARMS 27I-302 - ORIGINAL WELLBORE - P	14,584.2	14,793.6	1,366.4	933.6	3.158	SF
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	1,237.4	1,237.4	58.3	53.0	11.028	CC
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	1,279.5	1,279.0	58.4	53.0	10.691	ES
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	14,584.2	14,691.6	951.2	518.4	2.198	SF
EXIST VERT BARKER -PM F #26-10 - Wellbore #1 - De	14,584.2	6,850.0	949.0	595.2	2.683	CC, ES, SF
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,293.0	6,847.4	723.9	597.2	5.714	CC
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,318.9	6,846.5	724.3	596.9	5.686	ES

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 @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NW SW SEC. 27 T5N R65W 6th P.M.						
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	11,400.0	6,843.7	731.7	602.1	5.645 SF	
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	10,084.8	6,880.3	949.5	856.6	10.220 CC	
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	10,100.0	6,880.2	949.6	856.3	10.176 ES	
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	10,334.6	6,878.4	981.8	882.0	9.836 SF	
EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #	10,001.5	6,945.3	633.1	542.5	6.987 CC, ES	
EXIST VERT DUMLER 10-27 - Wellbore #1 - Wellbore #	10,137.8	6,946.3	647.6	553.2	6.863 SF	
EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #	10,673.8	6,350.0	544.3	505.3	13.964 CC, ES	
EXIST VERT DUMLER 20-27 - Wellbore #1 - Wellbore #	10,728.3	6,350.0	547.0	507.6	13.882 SF	
EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1	11,234.2	6,900.0	620.6	495.7	4.971 CC, ES	
EXIST VERT DUMLER 9-27 - Wellbore #1 - Wellbore #1	11,318.9	6,900.0	626.3	499.1	4.924 SF	
EXIST VERT FIOLOKOSKI 2 - Wellbore #1 - Design #1	13,876.2	6,862.4	546.2	212.1	1.635 CC	
EXIST VERT FIOLOKOSKI 2 - Wellbore #1 - Design #1	13,900.0	6,862.2	546.8	212.0	1.633 ES, SF	
EXIST VERT FIOLOKOSKI 1 - Wellbore #1 - Design #1	12,608.6	6,875.8	780.2	481.3	2.610 CC, ES	
EXIST VERT FIOLOKOSKI 1 - Wellbore #1 - Design #1	12,696.8	6,875.0	785.1	483.8	2.605 SF	
EXIST VERT FIOLOKOSKI 24-26 - Wellbore #1 - Design #1	13,815.2	6,862.9	590.4	258.0	1.776 CC, ES, SF	
EXIST VERT FORD PM-F #26-16 - Wellbore #1 - Design #1	14,584.2	6,865.0	2,272.0	1,918.2	6.421 CC, ES, SF	
EXIST VERT HERBSTER F #35-27 - Wellbore #1 - Design #1	14,584.2	6,862.0	1,543.0	1,189.2	4.361 CC, ES, SF	
EXIST VERT HERBSTER PM F #26-15 - Wellbore #1 - Design #1	14,584.2	6,854.0	817.1	463.3	2.310 CC, ES, SF	
EXIST VERT HOECHER 2 - Wellbore #1 - Design #1	12,608.3	6,875.8	542.3	243.4	1.814 CC, ES, SF	
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design #1	11,153.4	6,878.0	1,726.0	1,467.6	6.679 CC	
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design #1	11,200.0	6,877.6	1,726.6	1,466.9	6.648 ES	
EXIST VERT HSR LOEFFLER 8-27 - Wellbore #1 - Design #1	11,500.0	6,874.9	1,760.4	1,492.4	6.568 SF	
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	9,952.5	6,903.9	1,871.5	1,646.1	8.300 CC	
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	10,000.0	6,903.4	1,872.2	1,645.4	8.255 ES	
EXIST VERT JOHN ALLES 1 - Wellbore #1 - Design #1	10,400.0	6,899.8	1,924.3	1,686.5	8.092 SF	
EXIST VERT KEATON #8-26 - Wellbore #1 - Design #1	14,584.2	6,852.0	2,552.2	2,198.5	7.215 CC, ES, SF	
EXIST VERT KERBEL 12-26 - Wellbore #1 - Design #1	13,126.7	6,869.2	98.8	-214.5	0.315 Level 1, CC, ES, SF	
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	1,650.0	1,633.0	1,579.7	1,544.2	44.498 CC	
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	1,771.6	1,754.6	1,581.3	1,543.2	41.429 ES	
EXIST VERT KOWITZ 27-5 - Wellbore #1 - Design #1	7,800.0	6,924.4	1,844.7	1,676.0	10.936 SF	
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design #1	8,651.2	6,923.7	2,031.7	1,841.4	10.674 CC	
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design #1	8,700.0	6,923.2	2,032.3	1,840.7	10.605 ES	
EXIST VERT M LEAMING 27-24 - Wellbore #1 - Design #1	9,251.9	6,918.2	2,118.7	1,912.2	10.262 SF	
EXIST VERT MINERAL-FUELCO #1 - Wellbore #1 - Design #1	14,584.2	6,856.0	2,100.7	1,747.3	5.943 CC, ES, SF	
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	1,665.8	1,642.9	420.3	415.9	95.226 CC	
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	1,673.2	1,650.4	420.3	415.9	94.849 ES	
EXIST VERT SITZMAN 1 - Wellbore #1 - Wellbore #1	7,578.7	6,936.8	586.0	558.6	21.361 SF	
EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #	8,712.3	6,955.7	491.2	435.4	8.801 CC, ES	
EXIST VERT SITZMAN 27-31 - Wellbore #1 - Wellbore #	8,800.0	6,954.6	498.9	440.8	8.579 SF	
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #	8,532.5	6,900.0	611.7	560.7	11.974 CC	
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #	8,563.0	6,900.0	612.5	560.6	11.802 ES	
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore #	8,700.0	6,900.0	634.3	578.7	11.419 SF	
EXIST VERT VETTING PM F #26-7 - Wellbore #1 - Design #1	14,584.2	6,851.0	2,023.1	1,669.4	5.719 CC, ES, SF	

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		Minimum		Separation		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)	Separation (usft)	Factor
0.0	0.0	0.0	0.0	0.0	0.0	164.86	-1,194.9	323.3	1,238.0			

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

Anticollision Report



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Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
98.4	98.4	83.4	83.4	0.1	0.4	164.86	-1,194.9	323.3	1,237.9	1,237.4	0.46	2,677.092	
100.0	100.0	85.0	85.0	0.1	0.4	164.86	-1,194.9	323.3	1,237.9	1,237.4	0.47	2,626.541	
196.8	196.8	181.8	181.8	0.3	2.5	164.86	-1,194.9	323.3	1,237.9	1,235.1	2.80	442.667	
200.0	200.0	185.0	185.0	0.3	2.6	164.86	-1,194.9	323.3	1,237.9	1,235.0	2.88	429.523	
295.3	295.3	280.3	280.3	0.5	4.6	164.86	-1,194.9	323.3	1,237.9	1,232.7	5.14	240.936	
300.0	300.0	285.0	285.0	0.5	4.7	164.86	-1,194.9	323.3	1,237.9	1,232.6	5.25	235.940	
393.7	393.7	378.7	378.7	0.7	6.6	164.86	-1,194.9	323.3	1,237.9	1,230.5	7.37	167.878	
400.0	400.0	385.0	385.0	0.8	6.8	164.86	-1,194.9	323.3	1,237.9	1,230.4	7.52	164.693	
492.1	492.1	477.1	477.1	1.0	8.6	164.86	-1,194.9	323.3	1,237.9	1,228.3	9.59	129.050	
500.0	500.0	485.0	485.0	1.0	8.8	164.86	-1,194.9	323.3	1,237.9	1,228.1	9.77	126.708	
590.5	590.5	575.5	575.5	1.2	10.6	164.86	-1,194.9	323.3	1,237.9	1,226.1	11.80	104.871	
600.0	600.0	585.0	585.0	1.2	10.8	164.86	-1,194.9	323.3	1,237.9	1,225.9	12.02	103.019	
689.0	689.0	674.0	674.0	1.4	12.6	164.86	-1,194.9	323.3	1,237.9	1,223.9	14.01	88.345	
700.0	700.0	685.0	685.0	1.4	12.8	164.86	-1,194.9	323.3	1,237.9	1,223.6	14.26	86.813	
787.4	787.4	772.4	772.4	1.6	14.6	164.86	-1,194.9	323.3	1,237.9	1,221.7	16.22	76.328	
800.0	800.0	785.0	785.0	1.7	14.8	164.86	-1,194.9	323.3	1,237.9	1,221.4	16.50	75.022	
885.8	885.8	870.8	870.8	1.9	16.6	164.86	-1,194.9	323.3	1,237.9	1,219.5	18.42	67.194	
900.0	900.0	885.0	885.0	1.9	16.9	164.86	-1,194.9	323.3	1,237.9	1,219.1	18.74	66.056	
984.2	984.2	969.2	969.2	2.1	18.6	164.86	-1,194.9	323.3	1,237.9	1,217.3	20.63	60.015	
1,000.0	1,000.0	985.0	985.0	2.1	18.9	164.86	-1,194.9	323.3	1,237.9	1,216.9	20.98	59.006	
1,082.7	1,082.7	1,067.7	1,067.7	2.3	20.5	164.86	-1,194.9	323.3	1,237.9	1,215.1	22.83	54.223	
1,100.0	1,100.0	1,085.0	1,085.0	2.3	20.9	164.86	-1,194.9	323.3	1,237.9	1,214.7	23.22	53.318	
1,181.1	1,181.1	1,166.1	1,166.1	2.5	22.5	164.86	-1,194.9	323.3	1,237.9	1,212.9	25.03	49.452	
1,200.0	1,200.0	1,185.0	1,185.0	2.6	22.9	164.86	-1,194.9	323.3	1,237.9	1,212.4	25.45	48.630	
1,279.5	1,279.5	1,264.5	1,264.5	2.7	24.5	164.86	-1,194.9	323.3	1,237.9	1,210.6	27.23	45.453	
1,300.0	1,300.0	1,285.0	1,285.0	2.8	24.9	164.86	-1,194.9	323.3	1,237.9	1,210.2	27.69	44.701	
1,377.9	1,377.9	1,362.9	1,362.9	3.0	26.5	164.86	-1,194.9	323.3	1,237.9	1,208.4	29.44	42.053	
1,400.0	1,400.0	1,385.0	1,385.0	3.0	26.9	164.86	-1,194.9	323.3	1,237.9	1,208.0	29.93	41.360	
1,476.4	1,476.4	1,461.4	1,461.4	3.2	28.5	164.86	-1,194.9	323.3	1,237.9	1,206.2	31.64	39.126	
1,500.0	1,500.0	1,485.0	1,485.0	3.2	28.9	164.86	-1,194.9	323.3	1,237.9	1,205.7	32.17	38.483	
1,574.8	1,574.8	1,559.8	1,559.8	3.4	30.4	164.86	-1,194.9	323.3	1,237.9	1,204.0	33.84	36.581	
1,600.0	1,600.0	1,585.0	1,585.0	3.5	30.9	164.86	-1,194.9	323.3	1,237.9	1,203.5	34.40	35.981	
1,650.0	1,650.0	1,635.0	1,635.0	3.6	32.0	164.86	-1,194.9	323.3	1,237.9	1,202.4	35.52	34.849	
1,673.2	1,673.2	1,658.2	1,658.2	3.6	32.4	-75.56	-1,194.9	323.3	1,237.9	1,201.8	36.04	34.350	
1,700.0	1,700.0	1,685.0	1,685.0	3.7	33.0	-75.58	-1,194.9	323.3	1,237.8	1,201.1	36.63	33.792	
1,771.6	1,771.6	1,756.6	1,756.6	3.8	34.4	-75.68	-1,194.9	323.3	1,237.2	1,199.0	38.20	32.387	
1,800.0	1,799.9	1,784.9	1,784.9	3.9	35.0	-75.75	-1,194.9	323.3	1,236.9	1,198.1	38.82	31.861	
1,870.1	1,869.9	1,854.9	1,854.9	4.0	36.4	-75.97	-1,194.9	323.3	1,235.8	1,195.4	40.36	30.618	
1,900.0	1,899.7	1,884.7	1,884.7	4.1	37.0	-76.09	-1,194.9	323.3	1,235.2	1,194.2	41.02	30.113	
1,968.5	1,967.8	1,952.8	1,952.8	4.2	38.3	-76.43	-1,194.9	323.3	1,233.6	1,191.1	42.53	29.007	
2,000.0	1,999.1	1,984.1	1,984.1	4.3	39.0	-76.61	-1,194.9	323.3	1,232.7	1,189.5	43.22	28.523	
2,066.9	2,065.5	2,050.5	2,050.5	4.4	40.3	-77.05	-1,194.9	323.3	1,230.7	1,186.0	44.70	27.532	
2,100.0	2,098.2	2,083.2	2,083.2	4.5	41.0	-77.30	-1,194.9	323.3	1,229.6	1,184.1	45.43	27.065	
2,165.3	2,162.6	2,147.6	2,147.6	4.7	42.3	-77.84	-1,194.9	323.3	1,227.2	1,180.3	46.89	26.173	
2,200.0	2,196.6	2,181.6	2,181.6	4.7	42.9	-78.15	-1,194.9	323.3	1,225.8	1,178.2	47.66	25.721	
2,249.9	2,245.5	2,230.5	2,230.5	4.9	43.9	-78.64	-1,194.9	323.3	1,223.8	1,175.0	48.78	25.088	
2,263.8	2,259.1	2,244.1	2,244.1	4.9	44.2	-78.77	-1,194.9	323.3	1,223.2	1,174.1	49.10	24.915	
2,300.0	2,294.5	2,279.5	2,279.5	5.0	44.9	-79.11	-1,194.9	323.3	1,221.7	1,171.8	49.92	24.474	
2,362.2	2,355.4	2,340.4	2,340.4	5.2	46.1	-79.69	-1,194.9	323.3	1,219.3	1,167.9	51.34	23.748	
2,400.0	2,392.3	2,377.3	2,377.3	5.4	46.9	-80.05	-1,194.9	323.3	1,217.9	1,165.7	52.21	23.327	
2,460.6	2,451.6	2,436.6	2,436.6	5.6	48.1	-80.62	-1,194.9	323.3	1,215.7	1,162.1	53.61	22.677	
2,500.0	2,490.2	2,475.2	2,475.2	5.7	48.9	-80.99	-1,194.9	323.3	1,214.4	1,159.9	54.52	22.274	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
2,559.0	2,547.9	2,532.9	2,532.9	5.9	50.0	-81.55	-1,194.9	323.3	1,212.5	1,156.6	55.90	21.692	
2,600.0	2,588.0	2,573.0	2,573.0	6.1	50.8	-81.94	-1,194.9	323.3	1,211.2	1,154.4	56.85	21.306	
2,657.5	2,644.2	2,629.2	2,629.2	6.3	52.0	-82.49	-1,194.9	323.3	1,209.6	1,151.4	58.20	20.784	
2,700.0	2,685.8	2,670.8	2,670.8	6.4	52.8	-82.90	-1,194.9	323.3	1,208.4	1,149.2	59.19	20.415	
2,755.9	2,740.5	2,725.5	2,725.5	6.6	53.9	-83.43	-1,194.9	323.3	1,207.0	1,146.5	60.51	19.948	
2,800.0	2,783.6	2,768.6	2,768.6	6.8	54.8	-83.86	-1,194.9	323.3	1,206.0	1,144.4	61.55	19.594	
2,854.3	2,836.7	2,821.7	2,821.7	7.0	55.8	-84.38	-1,194.9	323.3	1,204.8	1,142.0	62.83	19.175	
2,900.0	2,881.4	2,866.4	2,866.4	7.2	56.7	-84.82	-1,194.9	323.3	1,203.9	1,140.0	63.91	18.836	
2,952.7	2,933.0	2,918.0	2,918.0	7.4	57.8	-85.33	-1,194.9	323.3	1,202.9	1,137.8	65.16	18.460	
3,000.0	2,979.2	2,964.2	2,964.2	7.6	58.7	-85.78	-1,194.9	323.3	1,202.1	1,135.9	66.29	18.136	
3,051.2	3,029.3	3,014.3	3,014.3	7.8	59.7	-86.28	-1,194.9	323.3	1,201.4	1,133.9	67.50	17.797	
3,100.0	3,077.1	3,062.1	3,062.1	8.0	60.7	-86.75	-1,194.9	323.3	1,200.8	1,132.1	68.67	17.487	
3,149.6	3,125.6	3,110.6	3,110.6	8.2	61.6	-87.23	-1,194.9	323.3	1,200.2	1,130.4	69.85	17.183	
3,200.0	3,174.9	3,159.9	3,159.9	8.4	62.6	-87.72	-1,194.9	323.3	1,199.7	1,128.7	71.05	16.885	
3,248.0	3,221.8	3,206.8	3,206.8	8.6	63.6	-88.19	-1,194.9	323.3	1,199.4	1,127.2	72.20	16.612	
3,300.0	3,272.7	3,257.7	3,257.7	8.9	64.6	-88.69	-1,194.9	323.3	1,199.1	1,125.6	73.44	16.327	
3,346.4	3,318.1	3,303.1	3,303.1	9.0	65.5	-89.14	-1,194.9	323.3	1,198.9	1,124.3	74.55	16.081	
3,400.0	3,370.5	3,355.5	3,355.5	9.3	66.6	-89.66	-1,194.9	323.3	1,198.8	1,122.9	75.83	15.808	
3,434.5	3,404.3	3,389.3	3,389.3	9.4	67.2	-90.00	-1,194.9	323.3	1,198.7	1,122.1	76.66	15.637	
3,444.9	3,414.4	3,399.4	3,399.4	9.5	67.4	-90.10	-1,194.9	323.3	1,198.7	1,121.8	76.91	15.587	
3,500.0	3,468.3	3,453.3	3,453.3	9.7	68.5	-90.64	-1,194.9	323.3	1,198.8	1,120.6	78.23	15.325	
3,543.3	3,510.7	3,495.7	3,495.7	9.9	69.4	-91.06	-1,194.9	323.3	1,199.0	1,119.7	79.27	15.126	
3,600.0	3,566.1	3,551.1	3,551.1	10.1	70.5	-91.61	-1,194.9	323.3	1,199.2	1,118.6	80.63	14.874	
3,641.7	3,606.9	3,591.9	3,591.9	10.3	71.3	-92.01	-1,194.9	323.3	1,199.5	1,117.9	81.63	14.695	
3,700.0	3,664.0	3,649.0	3,649.0	10.6	72.5	-92.58	-1,194.9	323.3	1,200.0	1,117.0	83.02	14.454	
3,740.1	3,703.2	3,688.2	3,688.2	10.7	73.2	-92.97	-1,194.9	323.3	1,200.4	1,116.4	83.99	14.293	
3,800.0	3,761.8	3,746.8	3,746.8	11.0	74.4	-93.55	-1,194.9	323.3	1,201.1	1,115.7	85.42	14.062	
3,837.4	3,798.3	3,783.3	3,783.3	11.2	75.2	-93.91	-1,194.9	323.3	1,201.7	1,115.3	86.32	13.922	
3,838.6	3,799.5	3,784.5	3,784.5	11.2	75.2	-93.92	-1,194.9	323.3	1,201.7	1,115.3	86.34	13.917	
3,900.0	3,859.7	3,844.7	3,844.7	11.4	76.4	-94.50	-1,194.9	323.3	1,202.6	1,114.8	87.78	13.700	
3,937.0	3,896.1	3,881.1	3,881.1	11.5	77.1	-94.82	-1,194.9	323.3	1,203.1	1,114.5	88.62	13.576	
4,000.0	3,958.3	3,943.3	3,943.3	11.7	78.4	-95.32	-1,194.9	323.3	1,204.1	1,114.0	90.06	13.370	
4,035.4	3,993.3	3,978.3	3,978.3	11.8	79.1	-95.58	-1,194.9	323.3	1,204.6	1,113.7	90.86	13.257	
4,100.0	4,057.4	4,042.4	4,042.4	12.0	80.4	-95.98	-1,194.9	323.3	1,205.4	1,113.1	92.32	13.057	
4,133.8	4,091.0	4,076.0	4,076.0	12.1	81.0	-96.17	-1,194.9	323.3	1,205.8	1,112.7	93.08	12.955	
4,200.0	4,156.8	4,141.8	4,141.8	12.2	82.4	-96.47	-1,194.9	323.3	1,206.5	1,111.9	94.56	12.760	
4,232.3	4,189.0	4,174.0	4,174.0	12.3	83.0	-96.60	-1,194.9	323.3	1,206.8	1,111.5	95.27	12.667	
4,300.0	4,256.6	4,241.6	4,241.6	12.4	84.4	-96.80	-1,194.9	323.3	1,207.2	1,110.5	96.77	12.476	
4,330.7	4,287.3	4,272.3	4,272.3	12.5	85.0	-96.86	-1,194.9	323.3	1,207.4	1,110.0	97.43	12.392	
4,400.0	4,356.6	4,341.6	4,341.6	12.6	86.4	-96.95	-1,194.9	323.3	1,207.6	1,108.7	98.95	12.205	
4,429.1	4,385.7	4,370.7	4,370.7	12.6	87.0	-96.96	-1,194.9	323.3	1,207.6	1,108.1	99.58	12.128	
4,437.2	4,393.8	4,378.8	4,378.8	12.7	87.1	143.46	-1,194.9	323.3	1,207.6	1,110.8	96.87	12.467	
4,500.0	4,456.6	4,441.6	4,441.6	12.7	88.4	143.46	-1,194.9	323.3	1,207.6	1,109.4	98.25	12.291	
4,527.5	4,484.1	4,469.1	4,469.1	12.8	89.0	143.46	-1,194.9	323.3	1,207.6	1,108.8	98.86	12.215	
4,600.0	4,556.6	4,541.6	4,541.6	12.9	90.4	143.46	-1,194.9	323.3	1,207.6	1,107.2	100.47	12.020	
4,626.0	4,582.6	4,567.6	4,567.6	12.9	90.9	143.46	-1,194.9	323.3	1,207.6	1,106.6	101.04	11.952	
4,700.0	4,656.6	4,641.6	4,641.6	13.1	92.4	143.46	-1,194.9	323.3	1,207.6	1,105.0	102.68	11.761	
4,724.4	4,681.0	4,666.0	4,666.0	13.1	92.9	143.46	-1,194.9	323.3	1,207.6	1,104.4	103.22	11.700	
4,800.0	4,756.6	4,741.6	4,741.6	13.2	94.4	143.46	-1,194.9	323.3	1,207.6	1,102.7	104.89	11.513	
4,822.8	4,779.4	4,764.4	4,764.4	13.3	94.9	143.46	-1,194.9	323.3	1,207.6	1,102.2	105.40	11.458	
4,900.0	4,856.6	4,841.6	4,841.6	13.4	96.4	143.46	-1,194.9	323.3	1,207.6	1,100.5	107.11	11.275	
4,921.2	4,877.8	4,862.8	4,862.8	13.4	96.9	143.46	-1,194.9	323.3	1,207.6	1,100.1	107.58	11.226	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,941.6	4,941.6	13.6	98.5	143.46	-1,194.9	323.3	1,207.6	1,098.3	109.32	11.047	
5,019.7	4,976.3	4,961.3	4,961.3	13.6	98.9	143.46	-1,194.9	323.3	1,207.6	1,097.9	109.76	11.003	
5,100.0	5,056.6	5,041.6	5,041.6	13.7	100.5	143.46	-1,194.9	323.3	1,207.6	1,096.1	111.54	10.827	
5,118.1	5,074.7	5,059.7	5,059.7	13.8	100.8	143.46	-1,194.9	323.3	1,207.6	1,095.7	111.94	10.788	
5,200.0	5,156.6	5,141.6	5,141.6	13.9	102.5	143.46	-1,194.9	323.3	1,207.6	1,093.9	113.75	10.616	
5,216.5	5,173.1	5,158.1	5,158.1	13.9	102.8	143.46	-1,194.9	323.3	1,207.6	1,093.5	114.12	10.582	
5,300.0	5,256.6	5,241.6	5,241.6	14.1	104.5	143.46	-1,194.9	323.3	1,207.6	1,091.7	115.97	10.413	
5,314.9	5,271.5	5,256.5	5,256.5	14.1	104.8	143.46	-1,194.9	323.3	1,207.6	1,091.3	116.30	10.384	
5,400.0	5,356.6	5,341.6	5,341.6	14.2	106.5	143.46	-1,194.9	323.3	1,207.6	1,089.4	118.19	10.218	
5,413.4	5,370.0	5,355.0	5,355.0	14.3	106.8	143.46	-1,194.9	323.3	1,207.6	1,089.2	118.49	10.192	
5,500.0	5,456.6	5,441.6	5,441.6	14.4	108.5	143.46	-1,194.9	323.3	1,207.6	1,087.2	120.41	10.030	
5,511.8	5,468.4	5,453.4	5,453.4	14.4	108.7	143.46	-1,194.9	323.3	1,207.6	1,087.0	120.67	10.008	
5,600.0	5,556.6	5,541.6	5,541.6	14.6	110.5	143.46	-1,194.9	323.3	1,207.6	1,085.0	122.63	9.848	
5,610.2	5,566.8	5,551.8	5,551.8	14.6	110.7	143.46	-1,194.9	323.3	1,207.6	1,084.8	122.85	9.830	
5,700.0	5,656.6	5,641.6	5,641.6	14.8	112.5	143.46	-1,194.9	323.3	1,207.6	1,082.8	124.85	9.673	
5,708.6	5,665.2	5,650.2	5,650.2	14.8	112.7	143.46	-1,194.9	323.3	1,207.6	1,082.6	125.04	9.658	
5,800.0	5,756.6	5,741.6	5,741.6	14.9	114.5	143.46	-1,194.9	323.3	1,207.6	1,080.6	127.07	9.504	
5,807.1	5,763.7	5,748.7	5,748.7	14.9	114.7	143.46	-1,194.9	323.3	1,207.6	1,080.4	127.23	9.492	
5,900.0	5,856.6	5,841.6	5,841.6	15.1	116.6	143.46	-1,194.9	323.3	1,207.6	1,078.3	129.29	9.341	
5,905.5	5,862.1	5,847.1	5,847.1	15.1	116.7	143.46	-1,194.9	323.3	1,207.6	1,078.2	129.41	9.332	
6,000.0	5,956.6	5,941.6	5,941.6	15.3	118.6	143.46	-1,194.9	323.3	1,207.6	1,076.1	131.51	9.183	
6,003.9	5,960.5	5,945.5	5,945.5	15.3	118.6	143.46	-1,194.9	323.3	1,207.6	1,076.0	131.60	9.177	
6,100.0	6,056.6	6,041.6	6,041.6	15.5	120.6	143.46	-1,194.9	323.3	1,207.6	1,073.9	133.73	9.030	
6,102.3	6,058.9	6,043.9	6,043.9	15.5	120.6	143.46	-1,194.9	323.3	1,207.6	1,073.9	133.79	9.027	
6,200.0	6,156.6	6,141.6	6,141.6	15.7	122.6	143.46	-1,194.9	323.3	1,207.6	1,071.7	135.96	8.883	
6,200.8	6,157.4	6,142.4	6,142.4	15.7	122.6	143.46	-1,194.9	323.3	1,207.6	1,071.7	135.97	8.881	
6,272.2	6,228.8	6,213.8	6,213.8	15.8	124.0	143.46	-1,194.9	323.3	1,207.6	1,070.1	137.56	8.779	
6,299.2	6,255.8	6,240.8	6,240.8	15.8	124.6	53.50	-1,194.9	323.3	1,207.3	1,067.0	140.34	8.603	
6,300.0	6,256.6	6,241.6	6,241.6	15.8	124.6	53.50	-1,194.9	323.3	1,207.3	1,067.0	140.35	8.602	
6,350.0	6,306.4	6,291.4	6,291.4	15.9	125.6	53.78	-1,194.9	323.3	1,205.1	1,064.0	141.17	8.537	
6,397.6	6,353.6	6,338.6	6,338.6	15.9	126.5	54.30	-1,194.9	323.3	1,201.2	1,059.4	141.72	8.476	
6,400.0	6,355.9	6,340.9	6,340.9	15.9	126.6	54.33	-1,194.9	323.3	1,200.9	1,059.2	141.74	8.473	
6,450.0	6,404.8	6,389.8	6,389.8	15.9	127.6	55.14	-1,194.9	323.3	1,194.7	1,052.6	142.11	8.407	
6,496.0	6,449.0	6,434.0	6,434.0	16.0	128.5	56.13	-1,194.9	323.3	1,187.3	1,045.0	142.31	8.343	
6,500.0	6,452.8	6,437.8	6,437.8	16.0	128.5	56.23	-1,194.9	323.3	1,186.6	1,044.3	142.32	8.337	
6,550.0	6,499.7	6,484.7	6,484.7	15.9	129.5	57.57	-1,194.9	323.3	1,176.7	1,034.3	142.46	8.260	
6,594.5	6,540.3	6,525.3	6,525.3	15.9	130.3	58.99	-1,194.9	323.3	1,166.6	1,024.0	142.59	8.182	
6,600.0	6,545.3	6,530.3	6,530.3	15.9	130.4	59.18	-1,194.9	323.3	1,165.3	1,022.7	142.61	8.171	
6,650.0	6,589.3	6,574.3	6,574.3	15.9	131.3	61.03	-1,194.9	323.3	1,152.3	1,009.5	142.85	8.067	
6,692.9	6,625.7	6,610.7	6,610.7	15.9	132.0	62.80	-1,194.9	323.3	1,140.3	997.1	143.19	7.963	
6,700.0	6,631.6	6,616.6	6,616.6	15.9	132.1	63.11	-1,194.9	323.3	1,138.2	994.9	143.27	7.944	
6,750.0	6,671.9	6,656.9	6,656.9	15.9	133.0	65.40	-1,194.9	323.3	1,123.0	979.1	143.92	7.803	
6,791.3	6,703.6	6,688.6	6,688.6	15.9	133.6	67.42	-1,194.9	323.3	1,109.9	965.2	144.67	7.672	
6,800.0	6,710.1	6,695.1	6,695.1	15.9	133.7	67.85	-1,194.9	323.3	1,107.1	962.3	144.85	7.643	
6,850.0	6,745.9	6,730.9	6,730.9	16.0	134.4	70.44	-1,194.9	323.3	1,090.7	944.7	146.04	7.469	
6,889.7	6,772.6	6,757.6	6,757.6	16.1	135.0	72.54	-1,194.9	323.3	1,077.6	930.5	147.14	7.324	
6,900.0	6,779.2	6,764.2	6,764.2	16.1	135.1	73.09	-1,194.9	323.3	1,074.2	926.8	147.44	7.286	
6,950.0	6,809.8	6,794.8	6,794.8	16.3	135.7	75.75	-1,194.9	323.3	1,057.9	908.9	148.99	7.100	
6,988.2	6,831.3	6,816.3	6,816.3	16.4	136.2	77.74	-1,194.9	323.3	1,045.7	895.5	150.22	6.961	
7,000.0	6,837.6	6,822.6	6,822.6	16.5	136.3	78.34	-1,194.9	323.3	1,042.0	891.4	150.59	6.920	
7,050.0	6,862.5	6,847.5	6,847.5	16.9	136.8	80.81	-1,194.9	323.3	1,027.0	874.8	152.15	6.750	
7,086.6	6,878.7	6,863.7	6,863.7	17.2	137.1	82.50	-1,194.9	323.3	1,016.7	863.4	153.25	6.634	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
7,100.0	6,884.2	6,869.2	6,869.2	17.3	137.2	83.09	-1,194.9	323.3	1,013.1	859.5	153.63	6.595	
7,150.0	6,902.7	6,887.7	6,887.7	17.8	137.6	85.11	-1,194.9	323.3	1,000.7	845.8	154.97	6.457	
7,185.0	6,913.8	6,898.8	6,898.8	18.3	137.8	86.35	-1,194.9	323.3	993.1	837.3	155.84	6.373	
7,200.0	6,918.0	6,903.0	6,903.0	18.5	137.9	86.83	-1,194.9	323.3	990.1	834.0	156.18	6.340	
7,250.0	6,929.9	6,914.9	6,914.9	19.2	138.1	88.20	-1,194.9	323.3	981.6	824.3	157.28	6.241	
7,283.4	6,936.0	6,921.0	6,921.0	19.7	138.3	88.92	-1,194.9	323.3	977.2	819.2	157.98	6.185	
7,300.0	6,938.4	6,923.4	6,923.4	20.0	138.3	89.20	-1,194.9	323.3	975.3	817.0	158.30	6.161	
7,350.0	6,943.4	6,928.4	6,928.4	20.9	138.4	89.81	-1,194.9	323.3	971.5	812.3	159.27	6.100	
7,381.9	6,944.8	6,929.8	6,929.8	21.4	138.4	89.98	-1,194.9	323.3	970.4	810.5	159.87	6.070	
7,400.1	6,945.0	6,930.0	6,930.0	21.8	138.4	90.00	-1,194.9	323.3	970.2	810.0	160.20	6.056 CC	
7,403.7	6,945.0	6,930.0	6,930.0	21.8	138.4	90.00	-1,194.9	323.3	970.2	810.0	160.27	6.054 ES	
7,480.3	6,944.3	6,929.3	6,929.3	23.3	138.4	89.96	-1,194.9	323.3	973.5	811.8	161.74	6.019	
7,500.0	6,944.1	6,929.1	6,929.1	23.7	138.4	89.95	-1,194.9	323.3	975.4	813.2	162.12	6.016 SF	
7,578.7	6,943.4	6,928.4	6,928.4	25.4	138.4	89.90	-1,194.9	323.3	986.5	822.8	163.75	6.024	
7,600.0	6,943.2	6,928.2	6,928.2	25.8	138.4	89.89	-1,194.9	323.3	990.6	826.4	164.20	6.033	
7,677.1	6,942.5	6,927.5	6,927.5	27.5	138.4	89.85	-1,194.9	323.3	1,009.0	843.1	165.89	6.082	
7,700.0	6,942.3	6,927.3	6,927.3	28.0	138.4	89.84	-1,194.9	323.3	1,015.5	849.1	166.40	6.103	
7,775.6	6,941.6	6,926.6	6,926.6	29.8	138.4	89.80	-1,194.9	323.3	1,040.4	872.2	168.14	6.188	
7,800.0	6,941.4	6,926.4	6,926.4	30.3	138.4	89.79	-1,194.9	323.3	1,049.4	880.7	168.70	6.221	
7,874.0	6,940.7	6,925.7	6,925.7	32.1	138.4	89.75	-1,194.9	323.3	1,079.8	909.3	170.46	6.334	
7,900.0	6,940.5	6,925.5	6,925.5	32.7	138.4	89.73	-1,194.9	323.3	1,091.4	920.4	171.08	6.380	
7,972.4	6,939.8	6,924.8	6,924.8	34.5	138.3	89.69	-1,194.9	323.3	1,126.5	953.6	172.85	6.517	
8,000.0	6,939.6	6,924.6	6,924.6	35.2	138.3	89.68	-1,194.9	323.3	1,140.7	967.2	173.52	6.574	
8,070.8	6,938.9	6,923.9	6,923.9	37.0	138.3	89.64	-1,194.9	323.3	1,179.5	1,004.2	175.29	6.729	
8,100.0	6,938.7	6,923.7	6,923.7	37.7	138.3	89.63	-1,194.9	323.3	1,196.3	1,020.3	176.01	6.797	
8,169.3	6,938.0	6,923.0	6,923.0	39.5	138.3	89.59	-1,194.9	323.3	1,238.1	1,060.4	177.77	6.965	
8,200.0	6,937.7	6,922.7	6,922.7	40.3	138.3	89.57	-1,194.9	323.3	1,257.4	1,078.9	178.54	7.043	
8,267.7	6,937.1	6,922.1	6,922.1	42.0	138.3	89.54	-1,194.9	323.3	1,301.6	1,121.3	180.28	7.220	
8,300.0	6,936.8	6,921.8	6,921.8	42.8	138.3	89.52	-1,194.9	323.3	1,323.3	1,142.2	181.11	7.307	
8,366.1	6,936.2	6,921.2	6,921.2	44.6	138.3	89.48	-1,194.9	323.3	1,369.1	1,186.3	182.82	7.489	
8,400.0	6,935.9	6,920.9	6,920.9	45.5	138.3	89.46	-1,194.9	323.3	1,393.2	1,209.5	183.69	7.585	
8,464.5	6,935.3	6,920.3	6,920.3	47.2	138.2	89.43	-1,194.9	323.3	1,440.3	1,254.9	185.38	7.769	
8,500.0	6,935.0	6,920.0	6,920.0	48.1	138.2	89.41	-1,194.9	323.3	1,466.7	1,280.3	186.31	7.872	
8,563.0	6,934.5	6,919.5	6,919.5	49.8	138.2	89.38	-1,194.9	323.3	1,514.5	1,326.5	187.96	8.057	
8,600.0	6,934.1	6,919.1	6,919.1	50.7	138.2	89.36	-1,194.9	323.3	1,543.1	1,354.1	188.94	8.167	
8,661.4	6,933.6	6,918.6	6,918.6	52.4	138.2	89.32	-1,194.9	323.3	1,591.3	1,400.7	190.56	8.350	
8,700.0	6,933.2	6,918.2	6,918.2	53.4	138.2	89.30	-1,194.9	323.3	1,622.0	1,430.5	191.58	8.466	
8,759.8	6,932.7	6,917.7	6,917.7	55.0	138.2	89.27	-1,194.9	323.3	1,670.4	1,477.2	193.17	8.647	
8,800.0	6,932.3	6,917.3	6,917.3	56.1	138.2	89.25	-1,194.9	323.3	1,703.2	1,509.0	194.24	8.768	
8,858.2	6,931.8	6,916.8	6,916.8	57.7	138.2	89.22	-1,194.9	323.3	1,751.4	1,555.6	195.80	8.945	
8,900.0	6,931.4	6,916.4	6,916.4	58.8	138.2	89.20	-1,194.9	323.3	1,786.3	1,589.4	196.92	9.071	
8,956.7	6,930.9	6,915.9	6,915.9	60.3	138.2	89.17	-1,194.9	323.3	1,834.2	1,635.7	198.44	9.243	
9,000.0	6,930.5	6,915.5	6,915.5	61.5	138.2	89.14	-1,194.9	323.3	1,871.1	1,671.5	199.60	9.374	
9,055.1	6,930.0	6,915.0	6,915.0	63.0	138.1	89.11	-1,194.9	323.3	1,918.4	1,717.3	201.08	9.540	
9,100.0	6,929.6	6,914.6	6,914.6	64.2	138.1	89.09	-1,194.9	323.3	1,957.3	1,755.0	202.29	9.675	
9,153.5	6,929.1	6,914.1	6,914.1	65.6	138.1	89.06	-1,194.9	323.3	2,003.9	1,800.2	203.73	9.836	
9,200.0	6,928.7	6,913.7	6,913.7	66.9	138.1	89.04	-1,194.9	323.3	2,044.7	1,839.7	204.99	9.975	
9,251.9	6,928.2	6,913.2	6,913.2	68.3	138.1	89.01	-1,194.9	323.3	2,090.6	1,884.2	206.39	10.129	
9,300.0	6,927.8	6,912.8	6,912.8	69.6	138.1	88.98	-1,194.9	323.3	2,133.2	1,925.6	207.69	10.271	
9,350.4	6,927.3	6,912.3	6,912.3	71.0	138.1	88.96	-1,194.9	323.3	2,178.2	1,969.2	209.06	10.419	
9,400.0	6,926.9	6,911.9	6,911.9	72.4	138.1	88.93	-1,194.9	323.3	2,222.8	2,012.4	210.41	10.564	
9,448.8	6,926.4	6,911.4	6,911.4	73.7	138.1	88.90	-1,194.9	323.3	2,266.8	2,055.0	211.73	10.706	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,500.0	6,926.0	6,911.0	6,911.0	75.1	138.1	88.88	-1,194.9	323.3	2,313.1	2,100.0	213.12	10.854	
9,547.2	6,925.5	6,910.5	6,910.5	76.4	138.1	88.85	-1,194.9	323.3	2,356.1	2,141.7	214.41	10.989	
9,600.0	6,925.1	6,910.1	6,910.1	77.9	138.0	88.82	-1,194.9	323.3	2,404.3	2,188.4	215.85	11.139	
9,645.6	6,924.6	6,909.6	6,909.6	79.1	138.0	88.80	-1,194.9	323.3	2,446.1	2,229.0	217.09	11.268	
9,700.0	6,924.1	6,909.1	6,909.1	80.6	138.0	88.77	-1,194.9	323.3	2,496.1	2,277.5	218.57	11.420	
9,744.1	6,923.7	6,908.7	6,908.7	81.8	138.0	88.75	-1,194.9	323.3	2,536.8	2,317.0	219.78	11.543	
9,800.0	6,923.2	6,908.2	6,908.2	83.4	138.0	88.72	-1,194.9	323.3	2,588.5	2,367.2	221.30	11.697	
9,842.5	6,922.9	6,907.9	6,907.9	84.5	138.0	88.69	-1,194.9	323.3	2,628.0	2,405.5	222.46	11.813	
9,900.0	6,922.3	6,907.3	6,907.3	86.1	138.0	88.66	-1,194.9	323.3	2,681.5	2,457.5	224.04	11.969	
9,940.9	6,922.0	6,907.0	6,907.0	87.2	138.0	88.64	-1,194.9	323.3	2,719.7	2,494.5	225.16	12.079	
10,000.0	6,921.4	6,906.4	6,906.4	88.9	138.0	88.61	-1,194.9	323.3	2,775.0	2,548.2	226.77	12.237	
10,039.3	6,921.1	6,906.1	6,906.1	90.0	138.0	88.59	-1,194.9	323.3	2,811.9	2,584.0	227.85	12.341	
10,100.0	6,920.5	6,905.5	6,905.5	91.6	138.0	88.56	-1,194.9	323.3	2,868.9	2,639.3	229.51	12.500	
10,137.8	6,920.2	6,905.2	6,905.2	92.7	137.9	88.54	-1,194.9	323.3	2,904.4	2,673.9	230.55	12.598	
10,200.0	6,919.6	6,904.6	6,904.6	94.4	137.9	88.50	-1,194.9	323.3	2,963.1	2,730.9	232.25	12.758	
10,236.2	6,919.3	6,904.3	6,904.3	95.4	137.9	88.48	-1,194.9	323.3	2,997.4	2,764.1	233.25	12.851	
10,300.0	6,918.7	6,903.7	6,903.7	97.2	137.9	88.45	-1,194.9	323.3	3,057.8	2,822.8	235.00	13.012	
10,334.6	6,918.4	6,903.4	6,903.4	98.1	137.9	88.43	-1,194.9	323.3	3,090.7	2,854.7	235.95	13.099	
10,400.0	6,917.8	6,902.8	6,902.8	99.9	137.9	88.40	-1,194.9	323.3	3,152.8	2,915.1	237.74	13.261	
10,433.0	6,917.5	6,902.5	6,902.5	100.9	137.9	88.38	-1,194.9	323.3	3,184.3	2,945.6	238.65	13.343	
10,500.0	6,916.9	6,901.9	6,901.9	102.7	137.9	88.34	-1,194.9	323.3	3,248.1	3,007.6	240.49	13.506	
10,531.5	6,916.6	6,901.6	6,901.6	103.6	137.9	88.33	-1,194.9	323.3	3,278.1	3,036.8	241.36	13.582	
10,600.0	6,916.0	6,901.0	6,901.0	105.5	137.9	88.29	-1,194.9	323.3	3,343.6	3,100.4	243.24	13.746	
10,629.9	6,915.7	6,900.7	6,900.7	106.3	137.9	88.27	-1,194.9	323.3	3,372.3	3,128.2	244.06	13.817	
10,700.0	6,915.1	6,900.1	6,900.1	108.3	137.8	88.24	-1,194.9	323.3	3,439.5	3,193.5	245.99	13.982	
10,728.3	6,914.8	6,899.8	6,899.8	109.1	137.8	88.22	-1,194.9	323.3	3,466.6	3,219.9	246.77	14.048	
10,800.0	6,914.2	6,899.2	6,899.2	111.0	137.8	88.18	-1,194.9	323.3	3,535.5	3,286.8	248.74	14.214	
10,826.7	6,913.9	6,898.9	6,898.9	111.8	137.8	88.17	-1,194.9	323.3	3,561.2	3,311.8	249.48	14.275	
10,900.0	6,913.3	6,898.3	6,898.3	113.8	137.8	88.13	-1,194.9	323.3	3,631.8	3,380.3	251.50	14.441	
10,925.2	6,913.1	6,898.1	6,898.1	114.5	137.8	88.12	-1,194.9	323.3	3,656.0	3,403.8	252.19	14.497	
11,000.0	6,912.4	6,897.4	6,897.4	116.6	137.8	88.08	-1,194.9	323.3	3,728.2	3,474.0	254.25	14.664	
11,023.6	6,912.2	6,897.2	6,897.2	117.3	137.8	88.06	-1,194.9	323.3	3,751.0	3,496.1	254.90	14.716	
11,100.0	6,911.5	6,896.5	6,896.5	119.4	137.8	88.02	-1,194.9	323.3	3,824.9	3,567.9	257.00	14.882	
11,122.0	6,911.3	6,896.3	6,896.3	120.0	137.8	88.01	-1,194.9	323.3	3,846.2	3,588.6	257.61	14.930	
11,200.0	6,910.6	6,895.6	6,895.6	122.2	137.8	87.97	-1,194.9	323.3	3,921.7	3,661.9	259.76	15.097	
11,220.4	6,910.4	6,895.4	6,895.4	122.7	137.7	87.96	-1,194.9	323.3	3,941.5	3,681.2	260.32	15.141	
11,300.0	6,909.7	6,894.7	6,894.7	125.0	137.7	87.92	-1,194.9	323.3	4,018.6	3,756.1	262.52	15.308	
11,318.9	6,909.5	6,894.5	6,894.5	125.5	137.7	87.91	-1,194.9	323.3	4,037.0	3,773.9	263.04	15.347	
11,400.0	6,908.8	6,893.8	6,893.8	127.7	137.7	87.86	-1,194.9	323.3	4,115.7	3,850.5	265.28	15.515	
11,417.3	6,908.6	6,893.6	6,893.6	128.2	137.7	87.86	-1,194.9	323.3	4,132.6	3,866.8	265.75	15.550	
11,500.0	6,907.9	6,892.9	6,892.9	130.5	137.7	87.81	-1,194.9	323.3	4,213.0	3,945.0	268.03	15.718	
11,515.7	6,907.7	6,892.7	6,892.7	131.0	137.7	87.80	-1,194.9	323.3	4,228.3	3,959.8	268.47	15.750	
11,600.0	6,907.0	6,892.0	6,892.0	133.3	137.7	87.76	-1,194.9	323.3	4,310.4	4,039.6	270.79	15.918	
11,614.1	6,906.8	6,891.8	6,891.8	133.7	137.7	87.75	-1,194.9	323.3	4,324.1	4,053.0	271.18	15.946	
11,700.0	6,906.0	6,891.0	6,891.0	136.1	137.7	87.71	-1,194.9	323.3	4,407.8	4,134.3	273.55	16.113	
11,712.6	6,905.9	6,890.9	6,890.9	136.5	137.7	87.70	-1,194.9	323.3	4,420.1	4,146.2	273.90	16.138	
11,800.0	6,905.1	6,890.1	6,890.1	138.9	137.6	87.65	-1,194.9	323.3	4,505.4	4,229.1	276.31	16.306	
11,811.0	6,905.0	6,890.0	6,890.0	139.2	137.6	87.65	-1,194.9	323.3	4,516.2	4,239.6	276.61	16.327	
11,900.0	6,904.2	6,889.2	6,889.2	141.7	137.6	87.60	-1,194.9	323.3	4,603.1	4,324.1	279.07	16.495	
11,909.4	6,904.2	6,889.2	6,889.2	141.9	137.6	87.59	-1,194.9	323.3	4,612.4	4,333.0	279.33	16.512	
12,000.0	6,903.3	6,888.3	6,888.3	144.5	137.6	87.55	-1,194.9	323.3	4,700.9	4,419.1	281.83	16.680	
12,007.8	6,903.3	6,888.3	6,888.3	144.7	137.6	87.54	-1,194.9	323.3	4,708.6	4,426.6	282.05	16.694	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
12,100.0	6,902.4	6,887.4	6,887.4	147.3	137.6	87.49	-1,194.9	323.3	4,798.8	4,514.2	284.59	16.862	
12,106.3	6,902.4	6,887.4	6,887.4	147.4	137.6	87.49	-1,194.9	323.3	4,805.0	4,520.2	284.76	16.874	
12,200.0	6,901.5	6,886.5	6,886.5	150.1	137.6	87.44	-1,194.9	323.3	4,896.8	4,609.4	287.35	17.041	
12,204.7	6,901.5	6,886.5	6,886.5	150.2	137.6	87.44	-1,194.9	323.3	4,901.4	4,613.9	287.48	17.049	
12,300.0	6,900.6	6,885.6	6,885.6	152.9	137.6	87.39	-1,194.9	323.3	4,994.9	4,704.7	290.11	17.217	
12,303.1	6,900.6	6,885.6	6,885.6	152.9	137.5	87.39	-1,194.9	323.3	4,997.9	4,707.7	290.20	17.222	
12,400.0	6,899.7	6,884.7	6,884.7	155.6	137.5	87.33	-1,194.9	323.3	5,093.0	4,800.1	292.87	17.390	
12,401.5	6,899.7	6,884.7	6,884.7	155.7	137.5	87.33	-1,194.9	323.3	5,094.5	4,801.6	292.92	17.392	
12,500.0	6,898.8	6,883.8	6,883.8	158.4	137.5	87.28	-1,194.9	323.3	5,191.2	4,895.5	295.63	17.559	
12,598.4	6,897.9	6,882.9	6,882.9	161.2	137.5	87.23	-1,194.9	323.3	5,287.9	4,989.5	298.35	17.724	
12,600.0	6,897.9	6,882.9	6,882.9	161.2	137.5	87.23	-1,194.9	323.3	5,289.4	4,991.1	298.40	17.726	
12,696.8	6,897.0	6,882.0	6,882.0	163.9	137.5	87.18	-1,194.9	323.3	5,384.7	5,083.6	301.07	17.885	
12,700.0	6,897.0	6,882.0	6,882.0	164.0	137.5	87.17	-1,194.9	323.3	5,387.8	5,086.6	301.16	17.890	
12,795.2	6,896.1	6,881.1	6,881.1	166.7	137.5	87.12	-1,194.9	323.3	5,481.5	5,177.7	303.79	18.044	
12,800.0	6,896.1	6,881.1	6,881.1	166.8	137.5	87.12	-1,194.9	323.3	5,486.2	5,182.3	303.92	18.051	
12,893.7	6,895.3	6,880.3	6,880.3	169.4	137.4	87.07	-1,194.9	323.3	5,578.4	5,271.9	306.50	18.200	
12,900.0	6,895.2	6,880.2	6,880.2	169.6	137.4	87.07	-1,194.9	323.3	5,584.6	5,277.9	306.68	18.210	
12,992.1	6,894.4	6,879.4	6,879.4	172.2	137.4	87.02	-1,194.9	323.3	5,675.3	5,366.1	309.22	18.354	
13,000.0	6,894.3	6,879.3	6,879.3	172.4	137.4	87.02	-1,194.9	323.3	5,683.1	5,373.7	309.44	18.366	
13,090.5	6,893.5	6,878.5	6,878.5	175.0	137.4	86.97	-1,194.9	323.3	5,772.3	5,460.4	311.94	18.505	
13,100.0	6,893.4	6,878.4	6,878.4	175.2	137.4	86.96	-1,194.9	323.3	5,781.7	5,469.5	312.20	18.519	
13,188.9	6,892.6	6,877.6	6,877.6	177.7	137.4	86.92	-1,194.9	323.3	5,869.4	5,554.7	314.66	18.653	
13,200.0	6,892.5	6,877.5	6,877.5	178.0	137.4	86.91	-1,194.9	323.3	5,880.3	5,565.3	314.96	18.670	
13,287.4	6,891.7	6,876.7	6,876.7	180.5	137.4	86.86	-1,194.9	323.3	5,966.5	5,649.1	317.37	18.799	
13,300.0	6,891.6	6,876.6	6,876.6	180.8	137.4	86.86	-1,194.9	323.3	5,978.9	5,661.2	317.72	18.818	
13,385.8	6,890.8	6,875.8	6,875.8	183.2	137.4	86.81	-1,194.9	323.3	6,063.6	5,743.5	320.09	18.943	
13,400.0	6,890.7	6,875.7	6,875.7	183.6	137.4	86.80	-1,194.9	323.3	6,077.6	5,757.1	320.48	18.964	
13,484.2	6,889.9	6,874.9	6,874.9	186.0	137.3	86.76	-1,194.9	323.3	6,160.8	5,838.0	322.81	19.085	
13,500.0	6,889.8	6,874.8	6,874.8	186.4	137.3	86.75	-1,194.9	323.3	6,176.3	5,853.1	323.24	19.107	
13,582.6	6,889.0	6,874.0	6,874.0	188.7	137.3	86.71	-1,194.9	323.3	6,258.0	5,932.5	325.52	19.224	
13,600.0	6,888.9	6,873.9	6,873.9	189.2	137.3	86.70	-1,194.9	323.3	6,275.1	5,949.1	326.00	19.249	
13,681.1	6,888.1	6,873.1	6,873.1	191.5	137.3	86.66	-1,194.9	323.3	6,355.2	6,027.0	328.24	19.361	
13,700.0	6,888.0	6,873.0	6,873.0	192.0	137.3	86.65	-1,194.9	323.3	6,373.9	6,045.2	328.76	19.388	
13,779.5	6,887.3	6,872.3	6,872.3	194.2	137.3	86.60	-1,194.9	323.3	6,452.5	6,121.6	330.96	19.497	
13,800.0	6,887.1	6,872.1	6,872.1	194.8	137.3	86.59	-1,194.9	323.3	6,472.8	6,141.3	331.52	19.524	
13,877.9	6,886.4	6,871.4	6,871.4	197.0	137.3	86.55	-1,194.9	323.3	6,549.8	6,216.2	333.67	19.629	
13,900.0	6,886.2	6,871.2	6,871.2	197.6	137.3	86.54	-1,194.9	323.3	6,571.7	6,237.4	334.28	19.659	
13,976.3	6,885.5	6,870.5	6,870.5	199.7	137.2	86.50	-1,194.9	323.3	6,647.2	6,310.8	336.39	19.760	
14,000.0	6,885.3	6,870.3	6,870.3	200.4	137.2	86.49	-1,194.9	323.3	6,670.6	6,333.5	337.04	19.792	
14,074.8	6,884.6	6,869.6	6,869.6	202.5	137.2	86.45	-1,194.9	323.3	6,744.6	6,405.5	339.10	19.889	
14,100.0	6,884.4	6,869.4	6,869.4	203.2	137.2	86.43	-1,194.9	323.3	6,769.5	6,429.7	339.80	19.922	
14,173.2	6,883.7	6,868.7	6,868.7	205.3	137.2	86.40	-1,194.9	323.3	6,842.0	6,500.2	341.82	20.016	
14,200.0	6,883.5	6,868.5	6,868.5	206.0	137.2	86.38	-1,194.9	323.3	6,868.5	6,526.0	342.56	20.051	
14,271.6	6,882.8	6,867.8	6,867.8	208.0	137.2	86.34	-1,194.9	323.3	6,939.4	6,594.9	344.53	20.141	
14,300.0	6,882.6	6,867.6	6,867.6	208.8	137.2	86.33	-1,194.9	323.3	6,967.5	6,622.2	345.32	20.177	
14,370.0	6,881.9	6,866.9	6,866.9	210.8	137.2	86.29	-1,194.9	323.3	7,036.9	6,689.6	347.25	20.265	
14,400.0	6,881.7	6,866.7	6,866.7	211.6	137.2	86.28	-1,194.9	323.3	7,066.6	6,718.5	348.07	20.302	
14,468.5	6,881.0	6,866.0	6,866.0	213.5	137.2	86.24	-1,194.9	323.3	7,134.4	6,784.4	349.96	20.386	
14,500.0	6,880.8	6,865.8	6,865.8	214.4	137.2	86.22	-1,194.9	323.3	7,165.6	6,814.8	350.83	20.425	
14,566.9	6,880.2	6,865.2	6,865.2	216.3	137.1	86.19	-1,194.9	323.3	7,231.9	6,879.2	352.68	20.506	
14,584.2	6,880.0	6,865.0	6,865.0	216.8	137.1	86.18	-1,194.9	323.3	7,249.0	6,895.8	353.15	20.527	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
0.0	0.0	0.0	0.0	0.0	0.0	0.00	76.5	0.0	76.5				
98.4	98.4	97.4	97.4	0.1	0.1	0.00	76.5	0.0	76.5	76.3	0.17	452.548	
100.0	100.0	99.0	99.0	0.1	0.1	0.00	76.5	0.0	76.5	76.3	0.17	444.315	
196.8	196.8	195.8	195.8	0.3	0.3	0.00	76.5	0.0	76.5	75.9	0.61	126.219	
200.0	200.0	199.0	199.0	0.3	0.3	0.00	76.5	0.0	76.5	75.9	0.62	123.338	
295.3	295.3	294.3	294.3	0.5	0.5	0.00	76.5	0.0	76.5	75.5	1.05	72.964	
300.0	300.0	299.0	299.0	0.5	0.5	0.00	76.5	0.0	76.5	75.4	1.07	71.515	
393.7	393.7	392.7	392.7	0.7	0.7	0.00	76.5	0.0	76.5	75.0	1.49	51.313	
400.0	400.0	399.0	399.0	0.8	0.8	0.00	76.5	0.0	76.5	75.0	1.52	50.357	
492.1	492.1	491.1	491.1	1.0	1.0	0.00	76.5	0.0	76.5	74.6	1.93	39.571	
500.0	500.0	499.0	499.0	1.0	1.0	0.00	76.5	0.0	76.5	74.5	1.97	38.860	
590.5	590.5	589.5	589.5	1.2	1.2	0.00	76.5	0.0	76.5	74.1	2.38	32.202	
600.0	600.0	599.0	599.0	1.2	1.2	0.00	76.5	0.0	76.5	74.1	2.42	31.637	
689.0	689.0	688.0	688.0	1.4	1.4	0.00	76.5	0.0	76.5	73.7	2.82	27.147	
700.0	700.0	699.0	699.0	1.4	1.4	0.00	76.5	0.0	76.5	73.6	2.87	26.678	
787.4	787.4	786.4	786.4	1.6	1.6	0.00	76.5	0.0	76.5	73.3	3.26	23.464	
800.0	800.0	799.0	799.0	1.7	1.7	0.00	76.5	0.0	76.5	73.2	3.32	23.063	
885.8	885.8	884.8	884.8	1.9	1.9	0.00	76.5	0.0	76.5	72.8	3.70	20.660	
900.0	900.0	899.0	899.0	1.9	1.9	0.00	76.5	0.0	76.5	72.7	3.77	20.311	
984.2	984.2	983.2	983.2	2.1	2.1	0.00	76.5	0.0	76.5	72.4	4.15	18.456	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.00	76.5	0.0	76.5	72.3	4.22	18.146	
1,038.0	1,038.0	1,037.0	1,037.0	2.2	2.2	0.00	76.5	0.0	76.5	72.1	4.39	17.439 CC	
1,082.7	1,082.7	1,080.9	1,080.9	2.3	2.3	-0.06	76.7	-0.1	76.7	72.1	4.59	16.717 ES	
1,100.0	1,100.0	1,097.8	1,097.8	2.3	2.3	-0.13	76.9	-0.2	76.9	72.2	4.66	16.488	
1,181.1	1,181.1	1,177.0	1,176.9	2.5	2.5	-0.90	79.0	-1.2	79.1	74.1	5.02	15.756	
1,200.0	1,200.0	1,195.4	1,195.3	2.6	2.5	-1.17	79.8	-1.6	79.9	74.8	5.10	15.658	
1,279.5	1,279.5	1,272.7	1,272.5	2.7	2.7	-2.60	84.3	-3.8	84.6	79.1	5.46	15.499	
1,300.0	1,300.0	1,292.6	1,292.3	2.8	2.8	-3.03	85.7	-4.5	86.1	80.6	5.55	15.521	
1,377.9	1,377.9	1,368.0	1,367.3	3.0	2.9	-4.83	92.3	-7.8	93.2	87.3	5.90	15.801	
1,400.0	1,400.0	1,389.2	1,388.4	3.0	3.0	-5.36	94.5	-8.9	95.5	89.5	5.99	15.935	
1,476.4	1,476.4	1,462.5	1,461.1	3.2	3.2	-7.25	103.1	-13.1	104.9	98.6	6.34	16.547	
1,500.0	1,500.0	1,485.1	1,483.4	3.2	3.2	-7.83	106.1	-14.6	108.2	101.8	6.45	16.784	
1,574.8	1,574.8	1,556.2	1,553.6	3.4	3.4	-9.61	116.5	-19.7	119.9	113.1	6.80	17.640	
1,600.0	1,600.0	1,580.0	1,577.0	3.5	3.5	-10.19	120.4	-21.6	124.3	117.3	6.91	17.969	
1,650.0	1,650.0	1,627.1	1,623.2	3.6	3.7	-11.28	128.5	-25.6	133.5	126.4	7.15	18.662	
1,673.2	1,673.2	1,648.8	1,644.4	3.6	3.7	107.77	132.4	-27.6	138.1	130.9	7.23	19.095	
1,700.0	1,700.0	1,674.9	1,670.0	3.7	3.8	107.24	137.3	-30.0	143.6	136.3	7.35	19.537	
1,771.6	1,771.6	1,744.9	1,738.5	3.8	4.0	106.39	150.4	-36.4	158.7	151.1	7.65	20.739	
1,800.0	1,799.9	1,772.6	1,765.6	3.9	4.1	106.24	155.5	-39.0	164.8	157.1	7.77	21.209	
1,870.1	1,869.9	1,841.0	1,832.4	4.0	4.4	106.27	168.3	-45.3	180.3	172.2	8.07	22.328	
1,900.0	1,899.7	1,870.1	1,860.9	4.1	4.5	106.41	173.7	-47.9	187.0	178.8	8.20	22.797	
1,968.5	1,967.8	1,936.7	1,926.0	4.2	4.7	107.00	186.1	-54.1	202.8	194.3	8.51	23.826	
2,000.0	1,999.1	1,967.2	1,955.9	4.3	4.9	107.37	191.8	-56.9	210.3	201.6	8.66	24.293	
2,066.9	2,065.5	2,032.0	2,019.3	4.4	5.1	108.31	203.9	-62.8	226.4	217.5	8.97	25.242	
2,100.0	2,098.2	2,063.9	2,050.5	4.5	5.2	108.85	209.9	-65.8	234.7	225.5	9.13	25.707	
2,165.3	2,162.6	2,126.8	2,112.0	4.7	5.5	110.01	221.6	-71.6	251.4	241.9	9.46	26.582	
2,200.0	2,196.6	2,160.0	2,144.5	4.7	5.6	110.67	227.8	-74.6	260.5	250.9	9.63	27.047	
2,249.9	2,245.5	2,207.7	2,191.1	4.9	5.8	111.66	236.7	-79.0	274.0	264.1	9.89	27.691	
2,263.8	2,259.1	2,221.0	2,204.1	4.9	5.9	112.01	239.2	-80.2	277.8	267.8	9.97	27.858	
2,300.0	2,294.5	2,255.6	2,237.9	5.0	6.0	112.88	245.6	-83.4	287.8	277.6	10.17	28.287	
2,362.2	2,355.4	2,314.9	2,296.0	5.2	6.2	114.25	256.7	-88.9	305.1	294.6	10.53	28.971	
2,400.0	2,392.3	2,351.0	2,331.3	5.4	6.4	115.00	263.4	-92.2	315.7	304.9	10.75	29.368	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
2,460.6	2,451.6	2,408.8	2,387.9	5.6	6.6	116.12	274.2	-97.5	332.8	321.6	11.11	29.953	
2,500.0	2,490.2	2,446.4	2,424.6	5.7	6.8	116.78	281.2	-101.0	343.9	332.6	11.34	30.316	
2,559.0	2,547.9	2,502.8	2,479.7	5.9	7.0	117.70	291.7	-106.1	360.7	349.0	11.70	30.819	
2,600.0	2,588.0	2,541.8	2,518.0	6.1	7.2	118.29	299.0	-109.7	372.4	360.4	11.95	31.151	
2,657.5	2,644.2	2,596.7	2,571.6	6.3	7.4	119.06	309.3	-114.8	388.9	376.5	12.31	31.583	
2,700.0	2,685.8	2,637.3	2,611.3	6.4	7.6	119.59	316.8	-118.5	401.1	388.5	12.58	31.888	
2,755.9	2,740.5	2,690.6	2,663.5	6.6	7.8	120.23	326.8	-123.4	417.2	404.3	12.93	32.260	
2,800.0	2,783.6	2,732.7	2,704.6	6.8	8.0	120.71	334.6	-127.3	429.9	416.7	13.21	32.541	
2,854.3	2,836.7	2,784.5	2,755.3	7.0	8.2	121.26	344.3	-132.1	445.7	432.1	13.56	32.864	
2,900.0	2,881.4	2,828.1	2,798.0	7.2	8.4	121.69	352.4	-136.1	458.9	445.1	13.86	33.124	
2,952.7	2,933.0	2,878.4	2,847.2	7.4	8.6	122.16	361.8	-140.7	474.3	460.1	14.20	33.404	
3,000.0	2,979.2	2,923.5	2,891.3	7.6	8.8	122.56	370.2	-144.8	488.0	473.5	14.51	33.645	
3,051.2	3,029.3	2,972.4	2,939.1	7.8	9.0	122.96	379.3	-149.3	503.0	488.1	14.84	33.889	
3,100.0	3,077.1	3,019.0	2,984.6	8.0	9.2	123.33	388.0	-153.6	517.2	502.1	15.16	34.113	
3,149.6	3,125.6	3,066.3	3,030.9	8.2	9.4	123.68	396.9	-158.0	531.7	516.3	15.49	34.326	
3,200.0	3,174.9	3,114.4	3,078.0	8.4	9.6	124.02	405.8	-162.4	546.5	530.7	15.82	34.535	
3,248.0	3,221.8	3,160.2	3,122.8	8.6	9.8	124.32	414.4	-166.6	560.6	544.4	16.14	34.722	
3,300.0	3,272.7	3,209.8	3,171.3	8.9	10.1	124.63	423.6	-171.2	575.8	559.3	16.49	34.917	
3,346.4	3,318.1	3,254.1	3,214.7	9.0	10.3	124.90	431.9	-175.3	589.5	572.7	16.80	35.082	
3,400.0	3,370.5	3,305.2	3,264.7	9.3	10.5	125.19	441.4	-180.0	605.2	588.1	17.16	35.265	
3,444.9	3,414.4	3,348.1	3,306.5	9.5	10.7	125.42	449.4	-183.9	618.4	601.0	17.47	35.409	
3,500.0	3,468.3	3,400.7	3,358.0	9.7	10.9	125.70	459.2	-188.7	634.7	616.8	17.84	35.582	
3,543.3	3,510.7	3,442.0	3,398.4	9.9	11.1	125.90	466.9	-192.5	647.4	629.3	18.13	35.709	
3,600.0	3,566.1	3,496.1	3,451.3	10.1	11.3	126.16	477.0	-197.5	664.1	645.6	18.51	35.872	
3,641.7	3,606.9	3,535.9	3,490.3	10.3	11.5	126.34	484.5	-201.2	676.5	657.7	18.80	35.985	
3,700.0	3,664.0	3,591.5	3,544.7	10.6	11.7	126.58	494.8	-206.3	693.7	674.5	19.19	36.138	
3,740.1	3,703.2	3,629.8	3,582.1	10.7	11.9	126.74	502.0	-209.8	705.5	686.1	19.47	36.238	
3,800.0	3,761.8	3,686.9	3,638.0	11.0	12.1	126.97	512.6	-215.1	723.2	703.3	19.88	36.383	
3,837.4	3,798.3	3,722.6	3,672.9	11.2	12.3	127.11	519.3	-218.4	734.3	714.1	20.13	36.469	
3,838.6	3,799.5	3,723.7	3,674.0	11.2	12.3	127.12	519.5	-218.5	734.6	714.5	20.14	36.472	
3,900.0	3,859.7	3,782.5	3,731.5	11.4	12.6	127.58	530.5	-223.9	752.4	731.8	20.58	36.567	
3,937.0	3,896.1	3,818.0	3,766.2	11.5	12.7	127.82	537.1	-227.1	762.7	741.9	20.82	36.640	
4,000.0	3,958.3	3,878.7	3,825.6	11.7	13.0	128.13	548.4	-232.7	779.7	758.4	21.23	36.732	
4,035.4	3,993.3	3,912.9	3,859.0	11.8	13.1	128.26	554.8	-235.9	788.8	767.4	21.45	36.781	
4,100.0	4,057.4	3,975.4	3,920.2	12.0	13.4	128.42	566.5	-241.6	804.9	783.0	21.85	36.839	
4,133.8	4,091.0	4,008.3	3,952.4	12.1	13.6	128.47	572.6	-244.6	812.9	790.9	22.05	36.869	
4,200.0	4,156.8	4,072.6	4,015.3	12.2	13.9	128.49	584.6	-250.6	828.0	805.6	22.44	36.901	
4,232.3	4,189.0	4,104.1	4,046.0	12.3	14.0	128.47	590.5	-253.5	835.0	812.4	22.62	36.917	
4,300.0	4,256.6	4,170.2	4,110.7	12.4	14.3	128.36	602.8	-259.5	849.0	826.0	22.99	36.926	
4,330.7	4,287.3	4,200.2	4,140.0	12.5	14.4	128.27	608.4	-262.3	855.1	831.9	23.15	36.933	
4,400.0	4,356.6	4,267.9	4,206.3	12.6	14.7	128.03	621.0	-268.5	868.0	844.5	23.51	36.925	
4,429.1	4,385.7	4,296.4	4,234.1	12.6	14.8	127.89	626.3	-271.1	873.2	849.5	23.65	36.922	
4,437.2	4,393.8	4,304.3	4,241.9	12.7	14.9	8.27	627.8	-271.9	874.6	850.2	24.38	35.876	
4,500.0	4,456.6	4,365.7	4,301.9	12.7	15.2	7.80	639.3	-277.5	885.5	860.7	24.74	35.794	
4,527.5	4,484.1	4,392.6	4,328.3	12.8	15.3	7.59	644.3	-280.0	890.2	865.3	24.90	35.757	
4,600.0	4,556.6	4,463.5	4,397.6	12.9	15.6	7.06	657.5	-286.5	902.9	877.6	25.32	35.662	
4,626.0	4,582.6	4,488.9	4,422.5	12.9	15.7	6.88	662.2	-288.9	907.4	882.0	25.47	35.628	
4,700.0	4,656.6	4,561.3	4,493.3	13.1	16.0	6.36	675.8	-295.5	920.4	894.5	25.90	35.533	
4,724.4	4,681.0	4,585.2	4,516.6	13.1	16.1	6.19	680.2	-297.7	924.7	898.7	26.05	35.502	
4,800.0	4,756.6	4,659.1	4,589.0	13.2	16.5	5.67	694.0	-304.5	938.1	911.6	26.50	35.407	
4,822.8	4,779.4	4,681.5	4,610.8	13.3	16.6	5.52	698.2	-306.6	942.2	915.6	26.63	35.379	
4,900.0	4,856.6	4,757.0	4,684.6	13.4	16.9	5.02	712.2	-313.5	956.0	928.9	27.09	35.286	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,777.7	4,705.0	13.4	17.0	4.88	716.1	-315.4	959.8	932.5	27.22	35.260	
5,000.0	4,956.6	4,854.8	4,780.3	13.6	17.3	4.39	730.5	-322.5	973.9	946.2	27.69	35.168	
5,019.7	4,976.3	4,874.0	4,799.1	13.6	17.4	4.27	734.1	-324.3	977.4	949.6	27.81	35.145	
5,100.0	5,056.6	4,952.6	4,876.0	13.7	17.8	3.78	748.7	-331.5	992.0	963.7	28.30	35.053	
5,118.1	5,074.7	4,970.3	4,893.3	13.8	17.8	3.67	752.0	-333.1	995.2	966.8	28.41	35.033	
5,200.0	5,156.6	5,050.4	4,971.6	13.9	18.2	3.19	767.0	-340.5	1,010.1	981.2	28.91	34.943	
5,216.5	5,173.1	5,066.6	4,987.5	13.9	18.3	3.10	770.0	-342.0	1,013.1	984.1	29.01	34.925	
5,300.0	5,256.6	5,148.2	5,067.3	14.1	18.6	2.62	785.2	-349.5	1,028.4	998.9	29.52	34.836	
5,314.9	5,271.5	5,162.8	5,081.6	14.1	18.7	2.54	788.0	-350.8	1,031.1	1,001.5	29.61	34.820	
5,400.0	5,356.6	5,246.0	5,163.0	14.2	19.1	2.08	803.5	-358.5	1,046.7	1,016.6	30.14	34.732	
5,413.4	5,370.0	5,259.1	5,175.8	14.3	19.1	2.01	805.9	-359.7	1,049.2	1,019.0	30.22	34.719	
5,500.0	5,456.6	5,343.8	5,258.7	14.4	19.5	1.55	821.7	-367.5	1,065.2	1,034.4	30.76	34.632	
5,511.8	5,468.4	5,357.9	5,272.4	14.4	19.6	1.47	824.3	-368.8	1,067.3	1,036.5	30.84	34.612	
5,600.0	5,556.6	5,488.1	5,400.5	14.6	20.0	0.88	845.7	-379.3	1,081.7	1,050.3	31.45	34.395	
5,610.2	5,566.8	5,503.4	5,415.5	14.6	20.0	0.82	847.9	-380.4	1,083.2	1,051.7	31.52	34.367	
5,700.0	5,656.6	5,638.1	5,549.1	14.8	20.4	0.40	863.9	-388.3	1,093.8	1,061.7	32.05	34.123	
5,708.6	5,665.2	5,651.2	5,562.1	14.8	20.4	0.36	865.1	-388.9	1,094.6	1,062.5	32.10	34.097	
5,800.0	5,756.6	5,789.9	5,700.3	14.9	20.7	0.10	875.1	-393.8	1,101.2	1,068.6	32.58	33.801	
5,807.1	5,763.7	5,800.6	5,711.0	14.9	20.7	0.09	875.6	-394.1	1,101.5	1,068.9	32.61	33.775	
5,900.0	5,856.6	5,942.5	5,852.8	15.1	20.9	0.00	879.1	-395.8	1,103.8	1,070.8	33.01	33.438	
5,905.5	5,862.1	5,950.8	5,861.1	15.1	20.9	0.00	879.1	-395.8	1,103.8	1,070.8	33.03	33.416	
6,000.0	5,956.6	6,045.3	5,955.6	15.3	21.1	0.00	879.1	-395.8	1,103.8	1,070.5	33.35	33.099	
6,003.9	5,960.5	6,049.2	5,959.5	15.3	21.1	0.00	879.1	-395.8	1,103.8	1,070.5	33.36	33.086	
6,100.0	6,056.6	6,145.3	6,055.6	15.5	21.2	0.00	879.1	-395.8	1,103.8	1,070.1	33.69	32.764	
6,102.3	6,058.9	6,147.6	6,057.9	15.5	21.2	0.00	879.1	-395.8	1,103.8	1,070.1	33.70	32.756	
6,165.4	6,121.9	6,210.6	6,120.9	15.6	21.3	0.00	879.1	-395.8	1,103.8	1,069.9	33.91	32.547	
6,200.0	6,156.6	6,245.3	6,155.6	15.7	21.3	0.01	879.1	-395.7	1,103.8	1,069.8	34.03	32.434	
6,200.8	6,157.4	6,246.0	6,156.3	15.7	21.3	0.01	879.1	-395.7	1,103.8	1,069.8	34.04	32.431	
6,208.3	6,164.8	6,253.5	6,163.8	15.7	21.3	0.01	879.1	-395.5	1,103.8	1,069.8	34.06	32.408	
6,272.2	6,228.8	6,317.1	6,227.2	15.8	21.4	0.25	879.1	-390.9	1,103.8	1,069.6	34.26	32.222	
6,299.2	6,255.8	6,343.7	6,253.5	15.8	21.4	-89.59	879.1	-387.3	1,103.8	1,072.1	31.79	34.722	
6,300.0	6,256.6	6,344.4	6,254.3	15.8	21.4	-89.58	879.1	-387.2	1,103.8	1,072.0	31.79	34.719	
6,350.0	6,306.4	6,393.4	6,302.3	15.9	21.4	-89.28	879.1	-378.0	1,103.9	1,072.0	31.90	34.609	
6,397.6	6,353.6	6,439.6	6,347.1	15.9	21.4	-89.00	879.1	-366.3	1,104.0	1,072.0	31.96	34.544	
6,400.0	6,355.9	6,441.9	6,349.3	15.9	21.4	-88.99	879.1	-365.7	1,104.0	1,072.0	31.96	34.541	
6,450.0	6,404.8	6,490.1	6,394.9	15.9	21.4	-88.70	879.1	-350.3	1,104.1	1,072.1	32.00	34.507	
6,496.0	6,449.0	6,534.2	6,435.7	16.0	21.4	-88.45	879.1	-333.6	1,104.2	1,072.2	32.01	34.500	
6,500.0	6,452.8	6,537.9	6,439.2	16.0	21.4	-88.42	879.1	-332.1	1,104.2	1,072.2	32.01	34.500	
6,550.0	6,499.7	6,585.5	6,481.8	15.9	21.4	-88.15	879.1	-311.0	1,104.4	1,072.4	32.00	34.508	
6,594.5	6,540.3	6,627.5	6,518.2	15.9	21.3	-87.92	879.1	-290.1	1,104.5	1,072.5	32.00	34.517	
6,600.0	6,545.3	6,632.7	6,522.6	15.9	21.3	-87.89	879.1	-287.4	1,104.6	1,072.6	32.00	34.518	
6,650.0	6,589.3	6,679.6	6,561.6	15.9	21.3	-87.64	879.1	-261.3	1,104.8	1,072.8	32.01	34.515	
6,692.9	6,625.7	6,719.6	6,593.5	15.9	21.2	-87.43	879.1	-237.0	1,104.9	1,072.9	32.04	34.487	
6,700.0	6,631.6	6,726.2	6,598.6	15.9	21.2	-87.40	879.1	-232.9	1,105.0	1,072.9	32.05	34.481	
6,750.0	6,671.9	6,772.6	6,633.5	15.9	21.2	-87.17	879.1	-202.3	1,105.2	1,073.0	32.13	34.396	
6,791.3	6,703.6	6,810.8	6,660.6	15.9	21.1	-86.99	879.1	-175.4	1,105.3	1,073.1	32.25	34.271	
6,800.0	6,710.1	6,818.8	6,666.1	15.9	21.1	-86.95	879.1	-169.6	1,105.4	1,073.1	32.28	34.240	
6,850.0	6,745.9	6,864.7	6,696.4	16.0	21.1	-86.75	879.1	-135.2	1,105.6	1,073.1	32.52	33.994	
6,889.7	6,772.6	6,900.0	6,718.2	16.1	21.0	-86.61	879.1	-107.4	1,105.8	1,073.0	32.78	33.730	
6,900.0	6,779.2	6,910.5	6,724.4	16.1	21.0	-86.57	879.1	-99.0	1,105.8	1,072.9	32.87	33.643	
6,950.0	6,809.8	6,956.0	6,749.9	16.3	21.0	-86.39	879.1	-61.2	1,106.0	1,072.7	33.34	33.175	
6,988.2	6,831.3	6,990.7	6,767.6	16.4	20.9	-86.28	879.1	-31.4	1,106.2	1,072.4	33.80	32.725	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,000.0	6,837.6	7,000.0	6,772.1	16.5	20.9	-86.24	879.1	-23.3	1,106.2	1,072.3	33.94	32.597	
7,050.0	6,862.5	7,046.7	6,793.2	16.9	20.9	-86.10	879.1	18.4	1,106.4	1,071.7	34.71	31.876	
7,086.6	6,878.7	7,079.7	6,806.4	17.2	20.9	-86.01	879.1	48.6	1,106.5	1,071.1	35.38	31.275	
7,100.0	6,884.2	7,091.8	6,810.9	17.3	20.8	-85.98	879.1	59.9	1,106.5	1,070.9	35.63	31.058	
7,150.0	6,902.7	7,136.8	6,826.0	17.8	20.8	-85.88	879.1	102.3	1,106.7	1,070.0	36.70	30.155	
7,185.0	6,913.8	7,168.3	6,834.9	18.3	20.8	-85.82	879.1	132.5	1,106.8	1,069.2	37.55	29.477	
7,200.0	6,918.0	7,181.8	6,838.3	18.5	20.8	-85.80	879.1	145.5	1,106.8	1,068.9	37.92	29.187	
7,250.0	6,929.9	7,226.6	6,847.9	19.2	20.8	-85.73	879.1	189.3	1,106.9	1,067.6	39.28	28.180	
7,283.4	6,936.0	7,256.6	6,852.8	19.7	21.0	-85.70	879.1	218.9	1,106.9	1,066.7	40.26	27.494	
7,300.0	6,938.4	7,271.4	6,854.7	20.0	21.2	-85.68	879.1	233.6	1,107.0	1,066.2	40.76	27.157	
7,350.0	6,943.4	7,316.2	6,858.8	20.9	21.8	-85.66	879.1	278.2	1,107.0	1,064.6	42.35	26.140	
7,381.9	6,944.8	7,344.7	6,859.9	21.4	22.3	-85.65	879.1	306.7	1,107.0	1,063.6	43.41	25.499	
7,403.7	6,945.0	7,364.5	6,860.0	21.8	22.6	-85.65	879.1	326.4	1,107.0	1,062.8	44.16	25.070	
7,480.3	6,944.3	7,441.1	6,859.5	23.3	24.1	-85.66	879.1	403.0	1,107.0	1,059.9	47.08	23.515	
7,500.0	6,944.1	7,460.8	6,859.4	23.7	24.5	-85.67	879.1	422.7	1,107.0	1,059.1	47.84	23.140	
7,578.7	6,943.4	7,539.5	6,859.0	25.4	26.1	-85.68	879.1	501.4	1,107.0	1,055.9	51.07	21.677	
7,600.0	6,943.2	7,560.8	6,858.9	25.8	26.5	-85.68	879.1	522.7	1,107.0	1,055.0	51.95	21.306	
7,677.1	6,942.5	7,637.9	6,858.4	27.5	28.2	-85.70	879.1	599.8	1,106.9	1,051.6	55.32	20.010	
7,700.0	6,942.3	7,660.8	6,858.3	28.0	28.7	-85.70	879.1	622.7	1,106.9	1,050.6	56.33	19.651	
7,775.6	6,941.6	7,736.4	6,857.9	29.8	30.4	-85.72	879.1	698.3	1,106.9	1,047.1	59.78	18.515	
7,800.0	6,941.4	7,760.8	6,857.8	30.3	31.0	-85.72	879.1	722.7	1,106.9	1,046.0	60.91	18.173	
7,874.0	6,940.7	7,834.8	6,857.3	32.1	32.7	-85.73	879.1	796.7	1,106.9	1,042.5	64.41	17.185	
7,900.0	6,940.5	7,860.8	6,857.2	32.7	33.4	-85.74	879.1	822.7	1,106.9	1,041.2	65.65	16.860	
7,972.4	6,939.8	7,933.2	6,856.8	34.5	35.1	-85.75	879.1	895.1	1,106.9	1,037.7	69.17	16.002	
8,000.0	6,939.6	7,960.8	6,856.6	35.2	35.8	-85.76	879.1	922.7	1,106.8	1,036.3	70.52	15.696	
8,070.8	6,938.9	8,031.6	6,856.2	37.0	37.5	-85.77	879.1	993.5	1,106.8	1,032.8	74.03	14.950	
8,100.0	6,938.7	8,060.8	6,856.1	37.7	38.2	-85.77	879.1	1,022.7	1,106.8	1,031.3	75.49	14.662	
8,169.3	6,938.0	8,130.1	6,855.7	39.5	40.0	-85.79	879.1	1,092.0	1,106.8	1,027.8	78.99	14.013	
8,200.0	6,937.7	8,160.8	6,855.5	40.3	40.8	-85.79	879.1	1,122.7	1,106.8	1,026.3	80.54	13.742	
8,267.7	6,937.1	8,228.5	6,855.2	42.0	42.5	-85.80	879.1	1,190.4	1,106.8	1,022.8	84.01	13.175	
8,300.0	6,936.8	8,260.8	6,855.0	42.8	43.3	-85.81	879.1	1,222.7	1,106.8	1,021.1	85.67	12.919	
8,366.1	6,936.2	8,326.9	6,854.6	44.6	45.0	-85.82	879.1	1,288.8	1,106.8	1,017.7	89.09	12.423	
8,400.0	6,935.9	8,360.8	6,854.4	45.5	45.9	-85.83	879.1	1,322.7	1,106.7	1,015.9	90.85	12.182	
8,464.5	6,935.3	8,425.3	6,854.1	47.2	47.5	-85.84	879.1	1,387.2	1,106.7	1,012.5	94.22	11.746	
8,500.0	6,935.0	8,460.8	6,853.9	48.1	48.5	-85.85	879.1	1,422.7	1,106.7	1,010.6	96.08	11.519	
8,563.0	6,934.5	8,523.8	6,853.5	49.8	50.1	-85.86	879.1	1,485.7	1,106.7	1,007.3	99.39	11.135	
8,600.0	6,934.1	8,560.8	6,853.3	50.7	51.1	-85.86	879.1	1,522.7	1,106.7	1,005.3	101.35	10.920	
8,661.4	6,933.6	8,622.2	6,853.0	52.4	52.7	-85.88	879.1	1,584.1	1,106.7	1,002.1	104.60	10.580	
8,700.0	6,933.2	8,660.8	6,852.7	53.4	53.7	-85.88	879.1	1,622.7	1,106.7	1,000.0	106.65	10.376	
8,759.8	6,932.7	8,720.6	6,852.4	55.0	55.3	-85.89	879.1	1,682.5	1,106.7	996.8	109.84	10.075	
8,800.0	6,932.3	8,760.8	6,852.2	56.1	56.4	-85.90	879.1	1,722.7	1,106.6	994.7	111.99	9.882	
8,858.2	6,931.8	8,819.0	6,851.9	57.7	57.9	-85.91	879.1	1,780.9	1,106.6	991.5	115.11	9.614	
8,900.0	6,931.4	8,860.8	6,851.6	58.8	59.1	-85.92	879.1	1,822.7	1,106.6	989.3	117.35	9.430	
8,956.7	6,930.9	8,917.5	6,851.3	60.3	60.6	-85.93	879.1	1,879.3	1,106.6	986.2	120.40	9.191	
9,000.0	6,930.5	8,960.8	6,851.1	61.5	61.7	-85.94	879.1	1,922.7	1,106.6	983.9	122.73	9.016	
9,055.1	6,930.0	9,015.9	6,850.8	63.0	63.2	-85.95	879.1	1,977.8	1,106.6	980.9	125.71	8.803	
9,100.0	6,929.6	9,060.8	6,850.5	64.2	64.4	-85.95	879.1	2,022.7	1,106.6	978.4	128.13	8.636	
9,153.5	6,929.1	9,114.3	6,850.2	65.6	65.9	-85.96	879.1	2,076.2	1,106.6	975.5	131.03	8.445	
9,200.0	6,928.7	9,160.8	6,850.0	66.9	67.1	-85.97	879.1	2,122.7	1,106.5	973.0	133.55	8.285	
9,251.9	6,928.2	9,212.7	6,849.7	68.3	68.5	-85.98	879.1	2,174.6	1,106.5	970.2	136.38	8.114	
9,300.0	6,927.8	9,260.8	6,849.4	69.6	69.8	-85.99	879.1	2,222.7	1,106.5	967.5	138.99	7.961	
9,350.4	6,927.3	9,311.2	6,849.1	71.0	71.2	-86.00	879.1	2,273.0	1,106.5	964.8	141.73	7.807	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,400.0	6,926.9	9,360.8	6,848.8	72.4	72.6	-86.01	879.1	2,322.7	1,106.5	962.1	144.44	7.661	
9,448.8	6,926.4	9,409.6	6,848.6	73.7	73.9	-86.02	879.1	2,371.5	1,106.5	959.4	147.10	7.522	
9,500.0	6,926.0	9,460.8	6,848.3	75.1	75.3	-86.03	879.1	2,422.7	1,106.5	956.6	149.90	7.382	
9,547.2	6,925.5	9,508.0	6,848.0	76.4	76.6	-86.03	879.1	2,469.9	1,106.5	954.0	152.48	7.256	
9,600.0	6,925.1	9,560.8	6,847.7	77.9	78.0	-86.04	879.1	2,522.7	1,106.5	951.1	155.37	7.121	
9,645.6	6,924.6	9,606.4	6,847.5	79.1	79.3	-86.05	879.1	2,568.3	1,106.4	948.6	157.87	7.009	
9,700.0	6,924.1	9,660.8	6,847.2	80.6	80.8	-86.06	879.1	2,622.7	1,106.4	945.6	160.85	6.879	
9,744.1	6,923.7	9,704.9	6,846.9	81.8	82.0	-86.07	879.1	2,666.7	1,106.4	943.1	163.27	6.777	
9,800.0	6,923.2	9,760.8	6,846.6	83.4	83.5	-86.08	879.1	2,722.7	1,106.4	940.1	166.34	6.651	
9,842.5	6,922.9	9,803.3	6,846.4	84.5	84.7	-86.09	879.1	2,765.2	1,106.4	937.7	168.68	6.559	
9,900.0	6,922.3	9,860.8	6,846.0	86.1	86.2	-86.10	879.1	2,822.6	1,106.4	934.5	171.84	6.438	
9,940.9	6,922.0	9,901.7	6,845.8	87.2	87.4	-86.11	879.1	2,863.6	1,106.4	932.3	174.09	6.355	
10,000.0	6,921.4	9,960.8	6,845.5	88.9	89.0	-86.12	879.1	2,922.6	1,106.4	929.0	177.35	6.238	
10,039.3	6,921.1	10,000.1	6,845.3	90.0	90.1	-86.12	879.1	2,962.0	1,106.4	926.8	179.51	6.163	
10,100.0	6,920.5	10,060.8	6,844.9	91.6	91.7	-86.13	879.1	3,022.6	1,106.3	923.5	182.86	6.050	
10,137.8	6,920.2	10,098.5	6,844.7	92.7	92.8	-86.14	879.1	3,060.4	1,106.3	921.4	184.94	5.982	
10,200.0	6,919.6	10,160.8	6,844.4	94.4	94.5	-86.15	879.1	3,122.6	1,106.3	917.9	188.38	5.873	
10,236.2	6,919.3	10,197.0	6,844.2	95.4	95.5	-86.16	879.1	3,158.8	1,106.3	915.9	190.38	5.811	
10,300.0	6,918.7	10,260.8	6,843.8	97.2	97.3	-86.17	879.1	3,222.6	1,106.3	912.4	193.90	5.705	
10,334.6	6,918.4	10,295.4	6,843.6	98.1	98.2	-86.18	879.1	3,257.3	1,106.3	910.5	195.81	5.650	
10,400.0	6,917.8	10,360.8	6,843.3	99.9	100.0	-86.19	879.1	3,322.6	1,106.3	906.8	199.43	5.547	
10,433.0	6,917.5	10,393.8	6,843.1	100.9	100.9	-86.19	879.1	3,355.7	1,106.3	905.0	201.26	5.497	
10,500.0	6,916.9	10,460.8	6,842.7	102.7	102.8	-86.21	879.1	3,422.6	1,106.2	901.3	204.96	5.397	
10,531.5	6,916.6	10,492.2	6,842.5	103.6	103.6	-86.21	879.1	3,454.1	1,106.2	899.5	206.71	5.352	
10,600.0	6,916.0	10,560.8	6,842.1	105.5	105.5	-86.22	879.1	3,522.6	1,106.2	895.7	210.50	5.255	
10,629.9	6,915.7	10,590.7	6,842.0	106.3	106.4	-86.23	879.1	3,552.5	1,106.2	894.1	212.16	5.214	
10,700.0	6,915.1	10,660.8	6,841.6	108.3	108.3	-86.24	879.1	3,622.6	1,106.2	890.2	216.04	5.120	
10,728.3	6,914.8	10,689.1	6,841.4	109.1	109.1	-86.25	879.1	3,651.0	1,106.2	888.6	217.61	5.083	
10,800.0	6,914.2	10,760.8	6,841.0	111.0	111.1	-86.26	879.1	3,722.6	1,106.2	884.6	221.59	4.992	
10,826.7	6,913.9	10,787.5	6,840.9	111.8	111.8	-86.26	879.1	3,749.4	1,106.2	883.1	223.07	4.959	
10,900.0	6,913.3	10,860.8	6,840.5	113.8	113.9	-86.28	879.1	3,822.6	1,106.2	879.0	227.14	4.870	
10,925.2	6,913.1	10,885.9	6,840.3	114.5	114.6	-86.28	879.1	3,847.8	1,106.2	877.6	228.54	4.840	
11,000.0	6,912.4	10,960.8	6,839.9	116.6	116.6	-86.30	879.1	3,922.6	1,106.1	873.4	232.69	4.754	
11,023.6	6,912.2	10,984.4	6,839.8	117.3	117.3	-86.30	879.1	3,946.2	1,106.1	872.1	234.00	4.727	
11,100.0	6,911.5	11,060.8	6,839.4	119.4	119.4	-86.31	879.1	4,022.6	1,106.1	867.9	238.25	4.643	
11,122.0	6,911.3	11,082.8	6,839.2	120.0	120.0	-86.32	879.1	4,044.6	1,106.1	866.6	239.47	4.619	
11,200.0	6,910.6	11,160.8	6,838.8	122.2	122.2	-86.33	879.1	4,122.6	1,106.1	862.3	243.80	4.537	
11,220.4	6,910.4	11,181.2	6,838.7	122.7	122.7	-86.34	879.1	4,143.1	1,106.1	861.1	244.94	4.516	
11,300.0	6,909.7	11,260.8	6,838.3	125.0	125.0	-86.35	879.1	4,222.6	1,106.1	856.7	249.37	4.436	
11,318.9	6,909.5	11,279.6	6,838.1	125.5	125.5	-86.35	879.1	4,241.5	1,106.1	855.6	250.42	4.417	
11,400.0	6,908.8	11,360.8	6,837.7	127.7	127.7	-86.37	879.1	4,322.6	1,106.0	851.1	254.93	4.339	
11,417.3	6,908.6	11,378.1	6,837.6	128.2	128.2	-86.37	879.1	4,339.9	1,106.0	850.2	255.89	4.322	
11,500.0	6,907.9	11,460.8	6,837.1	130.5	130.5	-86.39	879.1	4,422.6	1,106.0	845.5	260.50	4.246	
11,515.7	6,907.7	11,476.5	6,837.1	131.0	131.0	-86.39	879.1	4,438.3	1,106.0	844.7	261.37	4.232	
11,600.0	6,907.0	11,560.8	6,836.6	133.3	133.3	-86.40	879.1	4,522.6	1,106.0	839.9	266.06	4.157	
11,614.1	6,906.8	11,574.9	6,836.5	133.7	133.7	-86.41	879.1	4,536.8	1,106.0	839.2	266.85	4.145	
11,700.0	6,906.0	11,660.8	6,836.0	136.1	136.1	-86.42	879.1	4,622.6	1,106.0	834.4	271.63	4.072	
11,712.6	6,905.9	11,673.3	6,836.0	136.5	136.4	-86.42	879.1	4,635.2	1,106.0	833.6	272.33	4.061	
11,800.0	6,905.1	11,760.8	6,835.5	138.9	138.9	-86.44	879.1	4,722.6	1,106.0	828.8	277.21	3.990	
11,811.0	6,905.0	11,771.8	6,835.4	139.2	139.2	-86.44	879.1	4,733.6	1,106.0	828.1	277.82	3.981	
11,900.0	6,904.2	11,860.8	6,834.9	141.7	141.7	-86.46	879.1	4,822.6	1,105.9	823.2	282.78	3.911	
11,909.4	6,904.2	11,870.2	6,834.9	141.9	141.9	-86.46	879.1	4,832.0	1,105.9	822.6	283.31	3.904	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	11,960.8	6,834.4	144.5	144.4	-86.48	879.1	4,922.6	1,105.9	817.6	288.36	3.835	
12,007.8	6,903.3	11,968.6	6,834.3	144.7	144.7	-86.48	879.1	4,930.5	1,105.9	817.1	288.79	3.829	
12,100.0	6,902.4	12,060.8	6,833.8	147.3	147.2	-86.49	879.1	5,022.6	1,105.9	812.0	293.93	3.762	
12,106.3	6,902.4	12,067.0	6,833.8	147.4	147.4	-86.50	879.1	5,028.9	1,105.9	811.6	294.28	3.758	
12,200.0	6,901.5	12,160.8	6,833.2	150.1	150.0	-86.51	879.1	5,122.6	1,105.9	806.4	299.51	3.692	
12,204.7	6,901.5	12,165.5	6,833.2	150.2	150.1	-86.51	879.1	5,127.3	1,105.9	806.1	299.77	3.689	
12,300.0	6,900.6	12,260.8	6,832.7	152.9	152.8	-86.53	879.1	5,222.6	1,105.9	800.8	305.09	3.625	
12,303.1	6,900.6	12,263.9	6,832.7	152.9	152.9	-86.53	879.1	5,225.7	1,105.9	800.6	305.27	3.623	
12,400.0	6,899.7	12,360.8	6,832.1	155.6	155.6	-86.55	879.1	5,322.6	1,105.8	795.2	310.68	3.559	
12,401.5	6,899.7	12,362.3	6,832.1	155.7	155.6	-86.55	879.1	5,324.1	1,105.8	795.1	310.76	3.558	
12,500.0	6,898.8	12,460.8	6,831.6	158.4	158.4	-86.57	879.1	5,422.6	1,105.8	789.6	316.26	3.497	
12,598.4	6,897.9	12,559.2	6,831.0	161.2	161.1	-86.58	879.1	5,521.0	1,105.8	784.0	321.75	3.437	
12,600.0	6,897.9	12,560.8	6,831.0	161.2	161.2	-86.58	879.1	5,522.6	1,105.8	784.0	321.84	3.436	
12,696.8	6,897.0	12,657.6	6,830.5	163.9	163.9	-86.60	879.1	5,619.4	1,105.8	778.5	327.25	3.379	
12,700.0	6,897.0	12,660.8	6,830.5	164.0	164.0	-86.60	879.1	5,622.6	1,105.8	778.4	327.43	3.377	
12,795.2	6,896.1	12,756.0	6,829.9	166.7	166.6	-86.62	879.1	5,717.8	1,105.8	773.0	332.75	3.323	
12,800.0	6,896.1	12,760.8	6,829.9	166.8	166.8	-86.62	879.1	5,722.6	1,105.8	772.7	333.02	3.320	
12,893.7	6,895.3	12,854.4	6,829.4	169.4	169.4	-86.64	879.1	5,816.3	1,105.7	767.5	338.25	3.269	
12,900.0	6,895.2	12,860.8	6,829.4	169.6	169.6	-86.64	879.1	5,822.6	1,105.7	767.1	338.60	3.266	
12,992.1	6,894.4	12,952.9	6,828.8	172.2	172.1	-86.65	879.1	5,914.7	1,105.7	762.0	343.75	3.217	
13,000.0	6,894.3	12,960.8	6,828.8	172.4	172.3	-86.66	879.1	5,922.6	1,105.7	761.5	344.19	3.213	
13,090.5	6,893.5	13,051.3	6,828.3	175.0	174.9	-86.67	879.1	6,013.1	1,105.7	756.5	349.25	3.166	
13,100.0	6,893.4	13,060.8	6,828.2	175.2	175.1	-86.67	879.1	6,022.6	1,105.7	755.9	349.78	3.161	
13,188.9	6,892.6	13,149.7	6,827.7	177.7	177.6	-86.69	879.1	6,111.5	1,105.7	750.9	354.76	3.117	
13,200.0	6,892.5	13,160.8	6,827.7	178.0	177.9	-86.69	879.1	6,122.6	1,105.7	750.3	355.38	3.111	
13,287.4	6,891.7	13,248.1	6,827.2	180.5	180.4	-86.71	879.1	6,209.9	1,105.7	745.4	360.26	3.069	
13,300.0	6,891.6	13,260.8	6,827.1	180.8	180.7	-86.71	879.1	6,222.6	1,105.7	744.7	360.97	3.063	
13,385.8	6,890.8	13,346.6	6,826.7	183.2	183.1	-86.73	879.1	6,308.4	1,105.6	739.9	365.77	3.023	
13,400.0	6,890.7	13,360.8	6,826.6	183.6	183.5	-86.73	879.1	6,322.6	1,105.6	739.1	366.56	3.016	
13,484.2	6,889.9	13,445.0	6,826.1	186.0	185.9	-86.74	879.1	6,406.8	1,105.6	734.4	371.27	2.978	
13,500.0	6,889.8	13,460.8	6,826.0	186.4	186.3	-86.75	879.1	6,422.6	1,105.6	733.5	372.15	2.971	
13,582.6	6,889.0	13,543.4	6,825.6	188.7	188.6	-86.76	879.1	6,505.2	1,105.6	728.8	376.78	2.934	
13,600.0	6,888.9	13,560.8	6,825.5	189.2	189.1	-86.76	879.1	6,522.6	1,105.6	727.9	377.75	2.927	
13,681.1	6,888.1	13,641.8	6,825.0	191.5	191.4	-86.78	879.1	6,603.6	1,105.6	723.3	382.29	2.892	
13,700.0	6,888.0	13,660.7	6,824.9	192.0	191.9	-86.78	879.1	6,622.6	1,105.6	722.2	383.35	2.884	
13,779.5	6,887.3	13,740.2	6,824.5	194.2	194.1	-86.80	879.1	6,702.1	1,105.6	717.8	387.79	2.851	
13,800.0	6,887.1	13,760.7	6,824.4	194.8	194.7	-86.80	879.1	6,722.6	1,105.6	716.6	388.94	2.843	
13,877.9	6,886.4	13,838.7	6,823.9	197.0	196.9	-86.81	879.1	6,800.5	1,105.6	712.3	393.30	2.811	
13,900.0	6,886.2	13,860.7	6,823.8	197.6	197.5	-86.82	879.1	6,822.6	1,105.6	711.0	394.54	2.802	
13,976.3	6,885.5	13,937.1	6,823.4	199.7	199.6	-86.83	879.1	6,898.9	1,105.5	706.7	398.81	2.772	
14,000.0	6,885.3	13,960.7	6,823.2	200.4	200.3	-86.84	879.1	6,922.6	1,105.5	705.4	400.14	2.763	
14,074.8	6,884.6	14,035.5	6,822.8	202.5	202.4	-86.85	879.1	6,997.3	1,105.5	701.2	404.32	2.734	
14,100.0	6,884.4	14,060.7	6,822.7	203.2	203.1	-86.85	879.1	7,022.6	1,105.5	699.8	405.74	2.725	
14,173.2	6,883.7	14,133.9	6,822.3	205.3	205.2	-86.87	879.1	7,095.8	1,105.5	695.7	409.83	2.697	
14,200.0	6,883.5	14,160.7	6,822.1	206.0	205.9	-86.87	879.1	7,122.6	1,105.5	694.2	411.33	2.688	
14,271.6	6,882.8	14,232.4	6,821.7	208.0	207.9	-86.88	879.1	7,194.2	1,105.5	690.1	415.35	2.662	
14,300.0	6,882.6	14,260.7	6,821.6	208.8	208.7	-86.89	879.1	7,222.6	1,105.5	688.5	416.93	2.651	
14,370.0	6,881.9	14,330.8	6,821.2	210.8	210.7	-86.90	879.1	7,292.6	1,105.5	684.6	420.86	2.627	
14,400.0	6,881.7	14,360.7	6,821.0	211.6	211.5	-86.91	879.1	7,322.6	1,105.5	682.9	422.54	2.616	
14,468.5	6,881.0	14,429.2	6,820.6	213.5	213.4	-86.92	879.1	7,391.0	1,105.5	679.1	426.37	2.593	
14,500.0	6,880.8	14,460.7	6,820.5	214.4	214.3	-86.93	879.1	7,422.5	1,105.4	677.3	428.14	2.582	
14,566.9	6,880.2	14,527.6	6,820.1	216.3	216.2	-86.94	879.1	7,489.4	1,105.4	673.6	431.88	2.560	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,584.2	6,880.0	14,544.9	6,820.0	216.8	216.7	-86.94	879.1	7,506.7	1,105.4	672.6	432.85	2.554 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	47.4	0.0	47.4				
98.4	98.4	97.4	97.4	0.1	0.1	0.00	47.4	0.0	47.4	47.2	0.17	280.119	
100.0	100.0	99.0	99.0	0.1	0.1	0.00	47.4	0.0	47.4	47.2	0.17	275.023	
196.8	196.8	195.8	195.8	0.3	0.3	0.00	47.4	0.0	47.4	46.8	0.61	78.127	
200.0	200.0	199.0	199.0	0.3	0.3	0.00	47.4	0.0	47.4	46.7	0.62	76.344	
295.3	295.3	294.3	294.3	0.5	0.5	0.00	47.4	0.0	47.4	46.3	1.05	45.163	
300.0	300.0	299.0	299.0	0.5	0.5	0.00	47.4	0.0	47.4	46.3	1.07	44.267	
393.7	393.7	392.7	392.7	0.7	0.7	0.00	47.4	0.0	47.4	45.9	1.49	31.762	
400.0	400.0	399.0	399.0	0.8	0.8	0.00	47.4	0.0	47.4	45.8	1.52	31.170	
492.1	492.1	491.1	491.1	1.0	1.0	0.00	47.4	0.0	47.4	45.4	1.93	24.494	
500.0	500.0	499.0	499.0	1.0	1.0	0.00	47.4	0.0	47.4	45.4	1.97	24.054	
590.5	590.5	589.5	589.5	1.2	1.2	0.00	47.4	0.0	47.4	45.0	2.38	19.933	
600.0	600.0	599.0	599.0	1.2	1.2	0.00	47.4	0.0	47.4	44.9	2.42	19.583	
689.0	689.0	688.0	688.0	1.4	1.4	0.00	47.4	0.0	47.4	44.5	2.82	16.804	
700.0	700.0	699.0	699.0	1.4	1.4	0.00	47.4	0.0	47.4	44.5	2.87	16.513	
787.4	787.4	786.4	786.4	1.6	1.6	0.00	47.4	0.0	47.4	44.1	3.26	14.524	
800.0	800.0	799.0	799.0	1.7	1.7	0.00	47.4	0.0	47.4	44.0	3.32	14.276	
885.8	885.8	884.8	884.8	1.9	1.9	0.00	47.4	0.0	47.4	43.7	3.70	12.788	
900.0	900.0	899.0	899.0	1.9	1.9	0.00	47.4	0.0	47.4	43.6	3.77	12.572	
984.2	984.2	983.2	983.2	2.1	2.1	0.00	47.4	0.0	47.4	43.2	4.15	11.424	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.00	47.4	0.0	47.4	43.1	4.22	11.232	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	0.00	47.4	0.0	47.4	42.8	4.59	10.322	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.3	0.00	47.4	0.0	47.4	42.7	4.67	10.150	
1,181.1	1,181.1	1,180.1	1,180.1	2.5	2.5	0.00	47.4	0.0	47.4	42.3	5.03	9.414	
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.00	47.4	0.0	47.4	42.2	5.12	9.258	
1,238.2	1,238.2	1,237.2	1,237.2	2.6	2.6	0.00	47.4	0.0	47.4	42.1	5.29	8.957 CC	
1,279.5	1,279.5	1,278.2	1,278.2	2.7	2.7	-0.11	47.5	-0.1	47.5	42.0	5.47	8.675 ES	
1,300.0	1,300.0	1,298.4	1,298.4	2.8	2.8	-0.33	47.7	-0.3	47.7	42.1	5.56	8.570	
1,377.9	1,377.9	1,375.3	1,375.3	3.0	2.9	-2.14	49.4	-1.8	49.4	43.5	5.91	8.374	
1,400.0	1,400.0	1,397.1	1,397.0	3.0	3.0	-2.90	50.2	-2.5	50.3	44.3	6.00	8.373	
1,476.4	1,476.4	1,472.2	1,472.0	3.2	3.2	-6.16	53.7	-5.8	54.1	47.8	6.34	8.541	
1,500.0	1,500.0	1,495.4	1,495.1	3.2	3.2	-7.31	55.1	-7.1	55.7	49.3	6.44	8.646	
1,574.8	1,574.8	1,568.6	1,567.9	3.4	3.4	-11.15	60.4	-11.9	61.9	55.1	6.78	9.133	
1,600.0	1,600.0	1,593.1	1,592.3	3.5	3.4	-12.46	62.5	-13.8	64.4	57.5	6.89	9.349	
1,650.0	1,650.0	1,641.7	1,640.5	3.6	3.6	-15.01	67.1	-18.0	70.0	62.9	7.11	9.844	
1,673.2	1,673.2	1,664.2	1,662.8	3.6	3.6	103.44	69.5	-20.1	73.0	65.7	7.23	10.096	
1,700.0	1,700.0	1,690.1	1,688.4	3.7	3.7	102.33	72.3	-22.7	76.6	69.3	7.34	10.438	
1,771.6	1,771.6	1,759.0	1,756.3	3.8	3.9	100.25	80.7	-30.4	87.8	80.2	7.64	11.497	
1,800.0	1,799.9	1,786.1	1,783.0	3.9	4.0	99.73	84.3	-33.7	92.8	85.1	7.76	11.964	
1,870.1	1,869.9	1,852.8	1,848.4	4.0	4.2	99.00	94.1	-42.5	106.4	98.3	8.06	13.195	
1,900.0	1,899.7	1,882.1	1,877.0	4.1	4.3	98.91	98.6	-46.6	112.5	104.3	8.19	13.735	
1,968.5	1,967.8	1,949.1	1,942.5	4.2	4.5	99.23	108.9	-56.0	126.8	118.3	8.50	14.912	
2,000.0	1,999.1	1,979.9	1,972.6	4.3	4.6	99.58	113.6	-60.3	133.4	124.8	8.65	15.435	
2,066.9	2,065.5	2,045.1	2,036.5	4.4	4.8	100.60	123.7	-69.5	147.8	138.9	8.97	16.482	
2,100.0	2,098.2	2,077.3	2,068.0	4.5	4.9	101.23	128.6	-74.0	155.1	145.9	9.13	16.984	
2,165.3	2,162.6	2,140.9	2,130.1	4.7	5.2	102.64	138.4	-82.9	169.7	160.2	9.47	17.917	
2,200.0	2,196.6	2,174.5	2,163.0	4.7	5.3	103.47	143.5	-87.6	177.6	168.0	9.65	18.400	
2,249.9	2,245.5	2,222.7	2,210.2	4.9	5.5	104.73	151.0	-94.3	189.3	179.4	9.93	19.065	
2,263.8	2,259.1	2,236.2	2,223.3	4.9	5.5	105.14	153.0	-96.2	192.6	182.6	10.01	19.241	
2,300.0	2,294.5	2,271.2	2,257.6	5.0	5.7	106.17	158.4	-101.1	201.3	191.1	10.22	19.691	
2,362.2	2,355.4	2,331.3	2,316.4	5.2	5.9	107.74	167.6	-109.5	216.3	205.7	10.60	20.411	
2,400.0	2,392.3	2,367.8	2,352.1	5.4	6.0	108.60	173.3	-114.6	225.5	214.7	10.83	20.828	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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	2,451.6	2,426.4	2,409.4	5.6	6.3	109.83	182.3	-122.8	240.3	229.1	11.21	21.445	
2,500.0	2,490.2	2,464.4	2,446.6	5.7	6.4	110.55	188.1	-128.2	250.0	238.5	11.45	21.827	
2,559.0	2,547.9	2,521.5	2,502.4	5.9	6.7	111.54	196.9	-136.1	264.6	252.7	11.83	22.357	
2,600.0	2,588.0	2,561.1	2,541.1	6.1	6.8	112.16	203.0	-141.7	274.7	262.6	12.10	22.705	
2,657.5	2,644.2	2,616.6	2,595.5	6.3	7.1	112.96	211.5	-149.5	289.0	276.5	12.48	23.160	
2,700.0	2,685.8	2,657.7	2,635.7	6.4	7.2	113.50	217.8	-155.2	299.6	286.9	12.76	23.479	
2,755.9	2,740.5	2,711.7	2,688.5	6.6	7.4	114.16	226.1	-162.8	313.6	300.5	13.14	23.870	
2,800.0	2,783.6	2,754.3	2,730.2	6.8	7.6	114.63	232.7	-168.7	324.6	311.2	13.44	24.163	
2,854.3	2,836.7	2,806.8	2,781.5	7.0	7.8	115.18	240.8	-176.1	338.3	324.5	13.81	24.501	
2,900.0	2,881.4	2,850.9	2,824.7	7.2	8.0	115.61	247.5	-182.3	349.8	335.7	14.12	24.770	
2,952.7	2,933.0	2,901.9	2,874.6	7.4	8.3	116.07	255.4	-189.4	363.1	348.6	14.49	25.062	
3,000.0	2,979.2	2,947.6	2,919.2	7.6	8.4	116.45	262.4	-195.8	375.0	360.2	14.82	25.311	
3,051.2	3,029.3	2,997.0	2,967.6	7.8	8.7	116.84	270.0	-202.7	387.9	372.8	15.17	25.564	
3,100.0	3,077.1	3,044.2	3,013.7	8.0	8.9	117.19	277.3	-209.3	400.3	384.8	15.52	25.794	
3,149.6	3,125.6	3,092.1	3,060.6	8.2	9.1	117.52	284.6	-216.0	412.8	397.0	15.87	26.014	
3,200.0	3,174.9	3,140.8	3,108.2	8.4	9.3	117.84	292.1	-222.9	425.6	409.4	16.23	26.228	
3,248.0	3,221.8	3,187.2	3,153.6	8.6	9.5	118.12	299.3	-229.3	437.8	421.2	16.57	26.420	
3,300.0	3,272.7	3,237.5	3,202.8	8.9	9.7	118.41	307.0	-236.4	451.0	434.1	16.94	26.619	
3,346.4	3,318.1	3,282.4	3,246.7	9.0	9.9	118.66	313.9	-242.7	462.8	445.5	17.28	26.787	
3,400.0	3,370.5	3,334.1	3,297.3	9.3	10.1	118.93	321.8	-249.9	476.4	458.8	17.66	26.973	
3,444.9	3,414.4	3,377.5	3,339.7	9.5	10.3	119.14	328.5	-256.0	487.8	469.9	17.99	27.121	
3,500.0	3,468.3	3,430.7	3,391.8	9.7	10.5	119.39	336.7	-263.4	501.9	483.5	18.39	27.295	
3,543.3	3,510.7	3,472.6	3,432.7	9.9	10.7	119.58	343.1	-269.3	512.9	494.2	18.70	27.424	
3,600.0	3,566.1	3,527.4	3,486.3	10.1	11.0	119.81	351.5	-277.0	527.4	508.2	19.12	27.587	
3,641.7	3,606.9	3,567.7	3,525.8	10.3	11.1	119.97	357.7	-282.6	538.0	518.6	19.42	27.701	
3,700.0	3,664.0	3,624.0	3,580.8	10.6	11.4	120.19	366.4	-290.5	552.9	533.0	19.85	27.855	
3,740.1	3,703.2	3,662.8	3,618.8	10.7	11.5	120.33	372.4	-295.9	563.1	543.0	20.14	27.956	
3,800.0	3,761.8	3,720.6	3,675.4	11.0	11.8	120.54	381.3	-304.0	578.4	557.8	20.58	28.100	
3,837.4	3,798.3	3,756.7	3,710.7	11.2	12.0	120.66	386.8	-309.1	587.9	567.1	20.86	28.187	
3,838.6	3,799.5	3,757.9	3,711.8	11.2	12.0	120.67	387.0	-309.2	588.2	567.4	20.87	28.190	
3,900.0	3,859.7	3,817.4	3,770.0	11.4	12.2	121.08	396.1	-317.6	603.6	582.3	21.32	28.310	
3,937.0	3,896.1	3,853.3	3,805.1	11.5	12.4	121.26	401.6	-322.6	612.5	591.0	21.57	28.396	
4,000.0	3,958.3	3,914.5	3,865.0	11.7	12.7	121.47	411.1	-331.2	627.2	605.2	22.00	28.513	
4,035.4	3,993.3	3,949.0	3,898.8	11.8	12.8	121.53	416.4	-336.0	635.1	612.9	22.23	28.576	
4,100.0	4,057.4	4,012.1	3,960.4	12.0	13.1	121.56	426.1	-344.8	649.0	626.4	22.64	28.665	
4,133.8	4,091.0	4,045.1	3,992.8	12.1	13.2	121.53	431.2	-349.4	656.0	633.1	22.85	28.710	
4,200.0	4,156.8	4,116.8	4,063.0	12.2	13.5	121.35	442.0	-359.3	668.9	645.6	23.24	28.776	
4,232.3	4,189.0	4,155.0	4,100.4	12.3	13.6	121.23	447.2	-364.1	674.5	651.1	23.41	28.809	
4,300.0	4,256.6	4,235.6	4,179.9	12.4	13.9	120.96	457.2	-373.1	684.7	661.0	23.76	28.822	
4,330.7	4,287.3	4,272.3	4,216.3	12.5	14.0	120.83	461.1	-376.8	688.7	664.8	23.90	28.815	
4,400.0	4,356.6	4,355.8	4,299.1	12.6	14.2	120.50	468.9	-383.8	695.9	671.7	24.20	28.750	
4,429.1	4,385.7	4,391.0	4,334.1	12.6	14.3	120.35	471.6	-386.3	698.2	673.9	24.32	28.706	
4,437.2	4,393.8	4,400.8	4,343.9	12.7	14.3	0.73	472.4	-387.0	698.8	675.8	22.98	30.404	
4,500.0	4,456.6	4,477.1	4,419.9	12.7	14.5	0.38	477.0	-391.2	702.6	679.4	23.26	30.209	
4,527.5	4,484.1	4,510.6	4,453.4	12.8	14.5	0.26	478.6	-392.6	703.9	680.5	23.38	30.111	
4,600.0	4,556.6	4,599.1	4,541.7	12.9	14.7	0.06	481.3	-395.1	706.1	682.5	23.67	29.833	
4,626.0	4,582.6	4,630.9	4,573.5	12.9	14.7	0.02	481.8	-395.6	706.6	682.8	23.77	29.727	
4,700.0	4,656.6	4,713.0	4,655.6	13.1	14.8	0.00	482.1	-395.8	706.8	682.7	24.03	29.408	
4,724.4	4,681.0	4,737.4	4,680.0	13.1	14.9	0.00	482.1	-395.8	706.8	682.6	24.12	29.303	
4,800.0	4,756.6	4,813.0	4,755.6	13.2	15.0	0.00	482.1	-395.8	706.8	682.4	24.39	28.982	
4,822.8	4,779.4	4,835.8	4,778.4	13.3	15.0	0.00	482.1	-395.8	706.8	682.3	24.47	28.885	
4,900.0	4,856.6	4,913.0	4,855.6	13.4	15.1	0.00	482.1	-395.8	706.8	682.0	24.74	28.564	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,934.2	4,876.8	13.4	15.2	0.00	482.1	-395.8	706.8	681.9	24.82	28.476	
5,000.0	4,956.6	5,013.0	4,955.6	13.6	15.3	0.00	482.1	-395.8	706.8	681.7	25.10	28.154	
5,019.7	4,976.3	5,032.6	4,975.3	13.6	15.3	0.00	482.1	-395.8	706.8	681.6	25.17	28.075	
5,100.0	5,056.6	5,113.0	5,055.6	13.7	15.5	0.00	482.1	-395.8	706.8	681.3	25.47	27.753	
5,118.1	5,074.7	5,131.1	5,073.7	13.8	15.5	0.00	482.1	-395.8	706.8	681.2	25.53	27.682	
5,200.0	5,156.6	5,213.0	5,155.6	13.9	15.6	0.00	482.1	-395.8	706.8	680.9	25.83	27.361	
5,216.5	5,173.1	5,229.5	5,172.1	13.9	15.6	0.00	482.1	-395.8	706.8	680.9	25.89	27.297	
5,300.0	5,256.6	5,313.0	5,255.6	14.1	15.8	0.00	482.1	-395.8	706.8	680.6	26.20	26.977	
5,314.9	5,271.5	5,327.9	5,270.5	14.1	15.8	0.00	482.1	-395.8	706.8	680.5	26.25	26.920	
5,400.0	5,356.6	5,413.0	5,355.6	14.2	15.9	0.00	482.1	-395.8	706.8	680.2	26.57	26.601	
5,413.4	5,370.0	5,426.3	5,369.0	14.3	16.0	0.00	482.1	-395.8	706.8	680.1	26.62	26.551	
5,500.0	5,456.6	5,513.0	5,455.6	14.4	16.1	0.00	482.1	-395.8	706.8	679.8	26.94	26.233	
5,511.8	5,468.4	5,524.8	5,467.4	14.4	16.1	0.00	482.1	-395.8	706.8	679.8	26.99	26.190	
5,600.0	5,556.6	5,613.0	5,555.6	14.6	16.3	0.00	482.1	-395.8	706.8	679.4	27.32	25.873	
5,610.2	5,566.8	5,623.2	5,565.8	14.6	16.3	0.00	482.1	-395.8	706.8	679.4	27.36	25.836	
5,700.0	5,656.6	5,713.0	5,655.6	14.8	16.4	0.00	482.1	-395.8	706.8	679.1	27.69	25.520	
5,708.6	5,665.2	5,721.6	5,664.2	14.8	16.4	0.00	482.1	-395.8	706.8	679.0	27.73	25.490	
5,800.0	5,756.6	5,813.0	5,755.6	14.9	16.6	0.00	482.1	-395.8	706.8	678.7	28.07	25.176	
5,807.1	5,763.7	5,820.0	5,762.7	14.9	16.6	0.00	482.1	-395.8	706.8	678.7	28.10	25.151	
5,900.0	5,856.6	5,913.0	5,855.6	15.1	16.8	0.00	482.1	-395.8	706.8	678.3	28.45	24.838	
5,905.5	5,862.1	5,918.5	5,861.1	15.1	16.8	0.00	482.1	-395.8	706.8	678.3	28.48	24.820	
6,000.0	5,956.6	6,013.0	5,955.6	15.3	16.9	0.00	482.1	-395.8	706.8	677.9	28.84	24.508	
6,003.9	5,960.5	6,016.9	5,959.5	15.3	16.9	0.00	482.1	-395.8	706.8	677.9	28.85	24.495	
6,100.0	6,056.6	6,113.0	6,055.6	15.5	17.1	0.00	482.1	-395.8	706.8	677.5	29.22	24.185	
6,102.3	6,058.9	6,115.3	6,057.9	15.5	17.1	0.00	482.1	-395.8	706.8	677.5	29.23	24.178	
6,200.0	6,156.6	6,213.0	6,155.6	15.7	17.3	0.00	482.1	-395.8	706.8	677.2	29.61	23.869	
6,200.8	6,157.4	6,213.7	6,156.4	15.7	17.3	0.00	482.1	-395.8	706.8	677.1	29.61	23.867	
6,236.0	6,192.5	6,248.9	6,191.5	15.7	17.3	0.00	482.1	-395.8	706.8	677.0	29.75	23.757	
6,272.2	6,228.8	6,285.2	6,227.8	15.8	17.4	0.07	482.1	-395.0	706.8	676.9	29.88	23.650	
6,299.2	6,255.8	6,312.1	6,254.6	15.8	17.4	-89.83	482.1	-393.2	706.8	675.7	31.10	22.725	
6,300.0	6,256.6	6,312.9	6,255.4	15.8	17.4	-89.83	482.1	-393.1	706.8	675.7	31.10	22.724	
6,350.0	6,306.4	6,362.6	6,304.7	15.9	17.5	-89.64	482.1	-387.2	706.8	675.6	31.21	22.643	
6,397.6	6,353.6	6,409.8	6,351.1	15.9	17.5	-89.46	482.1	-378.3	706.8	675.5	31.28	22.595	
6,400.0	6,355.9	6,412.1	6,353.4	15.9	17.5	-89.45	482.1	-377.8	706.8	675.5	31.28	22.593	
6,450.0	6,404.8	6,461.5	6,401.1	15.9	17.5	-89.26	482.1	-365.1	706.8	675.5	31.32	22.567	
6,496.0	6,449.0	6,506.9	6,444.1	16.0	17.5	-89.10	482.1	-350.6	706.8	675.5	31.33	22.560	
6,500.0	6,452.8	6,510.8	6,447.7	16.0	17.5	-89.08	482.1	-349.3	706.9	675.5	31.33	22.560	
6,550.0	6,499.7	6,559.9	6,493.0	15.9	17.5	-88.90	482.1	-330.3	706.9	675.6	31.33	22.565	
6,594.5	6,540.3	6,603.4	6,532.0	15.9	17.4	-88.75	482.1	-310.9	706.9	675.6	31.32	22.573	
6,600.0	6,545.3	6,608.8	6,536.8	15.9	17.4	-88.73	482.1	-308.3	706.9	675.6	31.32	22.573	
6,650.0	6,589.3	6,657.6	6,578.8	15.9	17.4	-88.57	482.1	-283.5	707.0	675.7	31.32	22.573	
6,692.9	6,625.7	6,700.0	6,613.8	15.9	17.4	-88.43	482.1	-259.7	707.0	675.7	31.34	22.558	
6,700.0	6,631.6	6,706.3	6,618.9	15.9	17.4	-88.41	482.1	-256.0	707.0	675.7	31.35	22.554	
6,750.0	6,671.9	6,754.9	6,657.0	15.9	17.3	-88.26	482.1	-225.8	707.1	675.7	31.43	22.500	
6,791.3	6,703.6	6,795.0	6,686.8	15.9	17.3	-88.14	482.1	-199.1	707.1	675.6	31.54	22.418	
6,800.0	6,710.1	6,803.4	6,692.9	15.9	17.3	-88.11	482.1	-193.3	707.1	675.6	31.57	22.398	
6,850.0	6,745.9	6,851.7	6,726.4	16.0	17.3	-87.98	482.1	-158.5	707.2	675.4	31.81	22.234	
6,889.7	6,772.6	6,890.1	6,751.3	16.1	17.3	-87.88	482.1	-129.2	707.2	675.2	32.08	22.044	
6,900.0	6,779.2	6,900.0	6,757.4	16.1	17.3	-87.86	482.1	-121.5	707.3	675.1	32.15	21.996	
6,950.0	6,809.8	6,948.1	6,785.8	16.3	17.3	-87.74	482.1	-82.7	707.3	674.7	32.63	21.674	
6,988.2	6,831.3	6,984.8	6,805.7	16.4	17.4	-87.66	482.1	-51.8	707.3	674.2	33.11	21.361	
7,000.0	6,837.6	6,996.2	6,811.5	16.5	17.4	-87.64	482.1	-42.0	707.4	674.1	33.26	21.266	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,050.0	6,862.5	7,044.2	6,834.4	16.9	17.6	-87.55	482.1	0.1	707.4	673.4	34.05	20.776	
7,086.6	6,878.7	7,079.3	6,849.3	17.2	17.8	-87.49	482.1	31.9	707.4	672.7	34.74	20.363	
7,100.0	6,884.2	7,092.1	6,854.4	17.3	17.9	-87.47	482.1	43.7	707.5	672.5	35.00	20.213	
7,150.0	6,902.7	7,140.0	6,871.4	17.8	18.3	-87.40	482.1	88.4	707.5	671.4	36.11	19.591	
7,185.0	6,913.8	7,173.5	6,881.5	18.3	18.7	-87.36	482.1	120.4	707.5	670.5	37.00	19.122	
7,200.0	6,918.0	7,187.8	6,885.4	18.5	18.9	-87.35	482.1	134.2	707.5	670.1	37.39	18.925	
7,250.0	6,929.9	7,235.6	6,896.2	19.2	19.6	-87.30	482.1	180.7	707.5	668.7	38.80	18.234	
7,283.4	6,936.0	7,267.6	6,901.8	19.7	20.1	-87.28	482.1	212.2	707.6	667.7	39.83	17.763	
7,300.0	6,938.4	7,283.4	6,904.0	20.0	20.4	-87.27	482.1	227.8	707.6	667.2	40.35	17.535	
7,350.0	6,943.4	7,331.1	6,908.6	20.9	21.2	-87.25	482.1	275.3	707.6	665.6	42.01	16.842	
7,381.9	6,944.8	7,361.5	6,909.8	21.4	21.7	-87.25	482.1	305.7	707.6	664.5	43.12	16.409	
7,403.7	6,945.0	7,382.4	6,910.0	21.8	22.1	-87.25	482.1	326.6	707.6	663.7	43.89	16.121	
7,404.0	6,945.0	7,382.7	6,910.0	21.8	22.1	-87.25	482.1	326.9	707.6	663.7	43.90	16.117	
7,480.3	6,944.3	7,458.9	6,909.1	23.3	23.6	-87.23	482.1	403.1	707.6	660.7	46.85	15.102	
7,500.0	6,944.1	7,478.6	6,908.9	23.7	24.0	-87.23	482.1	422.8	707.6	660.0	47.62	14.859	
7,578.7	6,943.4	7,557.3	6,908.0	25.4	25.6	-87.22	482.1	501.5	707.6	656.7	50.89	13.904	
7,600.0	6,943.2	7,578.6	6,907.8	25.8	26.1	-87.21	482.1	522.8	707.6	655.8	51.78	13.664	
7,677.1	6,942.5	7,655.7	6,906.9	27.5	27.8	-87.20	482.1	599.9	707.6	652.4	55.18	12.823	
7,700.0	6,942.3	7,678.6	6,906.7	28.0	28.3	-87.20	482.1	622.8	707.6	651.4	56.20	12.591	
7,775.6	6,941.6	7,754.2	6,905.8	29.8	30.0	-87.18	482.1	698.3	707.6	647.9	59.68	11.856	
7,800.0	6,941.4	7,778.6	6,905.5	30.3	30.6	-87.18	482.1	722.8	707.6	646.8	60.82	11.635	
7,874.0	6,940.7	7,852.6	6,904.7	32.1	32.3	-87.17	482.1	796.8	707.6	643.3	64.35	10.997	
7,900.0	6,940.5	7,878.6	6,904.4	32.7	33.0	-87.16	482.1	822.8	707.6	642.0	65.59	10.789	
7,972.4	6,939.8	7,951.0	6,903.6	34.5	34.7	-87.15	482.1	895.2	707.6	638.5	69.13	10.236	
8,000.0	6,939.6	7,978.6	6,903.3	35.2	35.4	-87.15	482.1	922.8	707.6	637.2	70.49	10.039	
8,070.8	6,938.9	8,049.4	6,902.5	37.0	37.2	-87.13	482.1	993.6	707.6	633.6	74.03	9.559	
8,100.0	6,938.7	8,078.6	6,902.2	37.7	37.9	-87.13	482.1	1,022.8	707.6	632.2	75.49	9.375	
8,169.3	6,938.0	8,147.9	6,901.4	39.5	39.7	-87.12	482.1	1,092.0	707.7	628.7	79.00	8.958	
8,200.0	6,937.7	8,178.6	6,901.1	40.3	40.4	-87.11	482.1	1,122.7	707.7	627.1	80.56	8.784	
8,267.7	6,937.1	8,246.3	6,900.3	42.0	42.2	-87.10	482.1	1,190.4	707.7	623.6	84.04	8.420	
8,300.0	6,936.8	8,278.6	6,900.0	42.8	43.0	-87.09	482.1	1,222.7	707.7	622.0	85.71	8.257	
8,366.1	6,936.2	8,344.7	6,899.2	44.6	44.7	-87.08	482.1	1,288.9	707.7	618.5	89.15	7.938	
8,400.0	6,935.9	8,378.6	6,898.8	45.5	45.6	-87.08	482.1	1,322.7	707.7	616.8	90.91	7.785	
8,464.5	6,935.3	8,443.1	6,898.1	47.2	47.3	-87.07	482.1	1,387.3	707.7	613.4	94.29	7.505	
8,500.0	6,935.0	8,478.6	6,897.7	48.1	48.2	-87.06	482.1	1,422.7	707.7	611.5	96.16	7.360	
8,563.0	6,934.5	8,541.6	6,897.0	49.8	49.9	-87.05	482.1	1,485.7	707.7	608.2	99.48	7.114	
8,600.0	6,934.1	8,578.6	6,896.6	50.7	50.9	-87.04	482.1	1,522.7	707.7	606.3	101.44	6.977	
8,661.4	6,933.6	8,640.0	6,895.9	52.4	52.5	-87.03	482.1	1,584.1	707.7	603.0	104.71	6.759	
8,700.0	6,933.2	8,678.6	6,895.5	53.4	53.5	-87.03	482.1	1,622.7	707.7	601.0	106.76	6.629	
8,759.8	6,932.7	8,738.4	6,894.8	55.0	55.1	-87.02	482.1	1,682.5	707.7	597.8	109.96	6.436	
8,800.0	6,932.3	8,778.6	6,894.4	56.1	56.2	-87.01	482.1	1,722.7	707.7	595.6	112.11	6.313	
8,858.2	6,931.8	8,836.8	6,893.7	57.7	57.8	-87.00	482.1	1,781.0	707.7	592.5	115.23	6.142	
8,900.0	6,931.4	8,878.6	6,893.3	58.8	58.9	-86.99	482.1	1,822.7	707.7	590.3	117.48	6.024	
8,956.7	6,930.9	8,935.3	6,892.6	60.3	60.4	-86.98	482.1	1,879.4	707.7	587.2	120.53	5.872	
9,000.0	6,930.5	8,978.6	6,892.2	61.5	61.6	-86.98	482.1	1,922.7	707.7	584.9	122.87	5.760	
9,055.1	6,930.0	9,033.7	6,891.5	63.0	63.1	-86.97	482.1	1,977.8	707.8	581.9	125.85	5.624	
9,100.0	6,929.6	9,078.6	6,891.0	64.2	64.3	-86.96	482.1	2,022.7	707.8	579.5	128.28	5.517	
9,153.5	6,929.1	9,132.1	6,890.4	65.6	65.8	-86.95	482.1	2,076.2	707.8	576.6	131.19	5.395	
9,200.0	6,928.7	9,178.6	6,889.9	66.9	67.0	-86.94	482.1	2,122.7	707.8	574.1	133.71	5.293	
9,251.9	6,928.2	9,230.5	6,889.3	68.3	68.4	-86.93	482.1	2,174.6	707.8	571.2	136.54	5.184	
9,300.0	6,927.8	9,278.6	6,888.8	69.6	69.7	-86.93	482.1	2,222.7	707.8	568.6	139.15	5.086	
9,350.4	6,927.3	9,329.0	6,888.2	71.0	71.1	-86.92	482.1	2,273.0	707.8	565.9	141.90	4.988	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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	6,926.9	9,378.6	6,887.7	72.4	72.5	-86.91	482.1	2,322.7	707.8	563.2	144.61	4.895	
9,448.8	6,926.4	9,427.4	6,887.1	73.7	73.8	-86.90	482.1	2,371.5	707.8	560.5	147.28	4.806	
9,500.0	6,926.0	9,478.6	6,886.6	75.1	75.2	-86.89	482.1	2,422.7	707.8	557.7	150.07	4.716	
9,547.2	6,925.5	9,525.8	6,886.1	76.4	76.5	-86.88	482.1	2,469.9	707.8	555.1	152.66	4.636	
9,600.0	6,925.1	9,578.6	6,885.5	77.9	77.9	-86.87	482.1	2,522.7	707.8	552.3	155.55	4.550	
9,645.6	6,924.6	9,624.2	6,885.0	79.1	79.2	-86.87	482.1	2,568.3	707.8	549.8	158.05	4.478	
9,700.0	6,924.1	9,678.6	6,884.3	80.6	80.7	-86.86	482.1	2,622.6	707.8	546.8	161.04	4.395	
9,744.1	6,923.7	9,722.7	6,883.9	81.8	81.9	-86.85	482.1	2,666.7	707.8	544.4	163.46	4.330	
9,800.0	6,923.2	9,778.6	6,883.2	83.4	83.4	-86.84	482.1	2,722.6	707.8	541.3	166.53	4.250	
9,842.5	6,922.9	9,821.1	6,882.8	84.5	84.6	-86.83	482.1	2,765.1	707.8	539.0	168.87	4.192	
9,900.0	6,922.3	9,878.6	6,882.1	86.1	86.2	-86.82	482.1	2,822.6	707.8	535.8	172.03	4.115	
9,940.9	6,922.0	9,919.5	6,881.7	87.2	87.3	-86.82	482.1	2,863.6	707.9	533.6	174.29	4.061	
10,000.0	6,921.4	9,978.6	6,881.0	88.9	88.9	-86.81	482.1	2,922.6	707.9	530.3	177.54	3.987	
10,039.3	6,921.1	10,017.9	6,880.6	90.0	90.0	-86.80	482.1	2,962.0	707.9	528.2	179.71	3.939	
10,100.0	6,920.5	10,078.6	6,879.9	91.6	91.7	-86.79	482.1	3,022.6	707.9	524.8	183.05	3.867	
10,137.8	6,920.2	10,116.4	6,879.5	92.7	92.7	-86.78	482.1	3,060.4	707.9	522.7	185.14	3.824	
10,200.0	6,919.6	10,178.6	6,878.8	94.4	94.5	-86.77	482.1	3,122.6	707.9	519.3	188.57	3.754	
10,236.2	6,919.3	10,214.8	6,878.4	95.4	95.5	-86.77	482.1	3,158.8	707.9	517.3	190.57	3.715	
10,300.0	6,918.7	10,278.6	6,877.7	97.2	97.2	-86.76	482.1	3,222.6	707.9	513.8	194.10	3.647	
10,334.6	6,918.4	10,313.2	6,877.3	98.1	98.2	-86.75	482.1	3,257.2	707.9	511.9	196.01	3.612	
10,400.0	6,917.8	10,378.6	6,876.5	99.9	100.0	-86.74	482.1	3,322.6	707.9	508.3	199.62	3.546	
10,433.0	6,917.5	10,411.6	6,876.2	100.9	100.9	-86.73	482.1	3,355.7	707.9	506.5	201.45	3.514	
10,500.0	6,916.9	10,478.6	6,875.4	102.7	102.8	-86.72	482.1	3,422.6	707.9	502.8	205.16	3.451	
10,531.5	6,916.6	10,510.1	6,875.1	103.6	103.6	-86.72	482.1	3,454.1	707.9	501.0	206.90	3.422	
10,600.0	6,916.0	10,578.6	6,874.3	105.5	105.5	-86.71	482.1	3,522.6	707.9	497.2	210.69	3.360	
10,629.9	6,915.7	10,608.5	6,874.0	106.3	106.4	-86.70	482.1	3,552.5	707.9	495.6	212.35	3.334	
10,700.0	6,915.1	10,678.6	6,873.2	108.3	108.3	-86.69	482.1	3,622.6	707.9	491.7	216.23	3.274	
10,728.3	6,914.8	10,706.9	6,872.9	109.1	109.1	-86.68	482.1	3,650.9	707.9	490.1	217.80	3.250	
10,800.0	6,914.2	10,778.6	6,872.1	111.0	111.1	-86.67	482.1	3,722.6	708.0	486.2	221.78	3.192	
10,826.7	6,913.9	10,805.3	6,871.8	111.8	111.8	-86.67	482.1	3,749.3	708.0	484.7	223.26	3.171	
10,900.0	6,913.3	10,878.6	6,871.0	113.8	113.9	-86.65	482.1	3,822.6	708.0	480.6	227.32	3.114	
10,925.2	6,913.1	10,903.8	6,870.7	114.5	114.6	-86.65	482.1	3,847.7	708.0	479.2	228.72	3.095	
11,000.0	6,912.4	10,978.6	6,869.9	116.6	116.6	-86.64	482.1	3,922.6	708.0	475.1	232.87	3.040	
11,023.6	6,912.2	11,002.2	6,869.6	117.3	117.3	-86.63	482.1	3,946.2	708.0	473.8	234.18	3.023	
11,100.0	6,911.5	11,078.6	6,868.7	119.4	119.4	-86.62	482.1	4,022.6	708.0	469.6	238.43	2.969	
11,122.0	6,911.3	11,100.6	6,868.5	120.0	120.0	-86.62	482.1	4,044.6	708.0	468.3	239.65	2.954	
11,200.0	6,910.6	11,178.6	6,867.6	122.2	122.2	-86.60	482.1	4,122.6	708.0	464.0	243.98	2.902	
11,220.4	6,910.4	11,199.0	6,867.4	122.7	122.8	-86.60	482.1	4,143.0	708.0	462.9	245.12	2.888	
11,300.0	6,909.7	11,278.6	6,866.5	125.0	125.0	-86.59	482.1	4,222.5	708.0	458.5	249.54	2.837	
11,318.9	6,909.5	11,297.5	6,866.3	125.5	125.5	-86.58	482.1	4,241.4	708.0	457.4	250.59	2.825	
11,400.0	6,908.8	11,378.6	6,865.4	127.7	127.8	-86.57	482.1	4,322.5	708.0	452.9	255.10	2.776	
11,417.3	6,908.6	11,395.9	6,865.2	128.2	128.3	-86.57	482.1	4,339.8	708.0	452.0	256.06	2.765	
11,500.0	6,907.9	11,478.6	6,864.3	130.5	130.6	-86.55	482.1	4,422.5	708.0	447.4	260.66	2.716	
11,515.7	6,907.7	11,494.3	6,864.1	131.0	131.0	-86.55	482.1	4,438.3	708.0	446.5	261.53	2.707	
11,600.0	6,907.0	11,578.6	6,863.2	133.3	133.3	-86.54	482.1	4,522.5	708.1	441.8	266.22	2.660	
11,614.1	6,906.8	11,592.7	6,863.0	133.7	133.7	-86.53	482.1	4,536.7	708.1	441.1	267.00	2.652	
11,700.0	6,906.0	11,678.6	6,862.1	136.1	136.1	-86.52	482.1	4,622.5	708.1	436.3	271.78	2.605	
11,712.6	6,905.9	11,691.2	6,861.9	136.5	136.5	-86.52	482.1	4,635.1	708.1	435.6	272.48	2.599	
11,800.0	6,905.1	11,778.6	6,861.0	138.9	138.9	-86.50	482.1	4,722.5	708.1	430.7	277.35	2.553	
11,811.0	6,905.0	11,789.6	6,860.8	139.2	139.2	-86.50	482.1	4,733.5	708.1	430.1	277.96	2.547	
11,900.0	6,904.2	11,878.6	6,859.8	141.7	141.7	-86.49	482.1	4,822.5	708.1	425.2	282.91	2.503	
11,909.4	6,904.2	11,888.0	6,859.7	141.9	142.0	-86.48	482.1	4,831.9	708.1	424.7	283.44	2.498	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	11,978.6	6,858.7	144.5	144.5	-86.47	482.1	4,922.5	708.1	419.6	288.48	2.455	
12,007.8	6,903.3	11,986.4	6,858.6	144.7	144.7	-86.47	482.1	4,930.4	708.1	419.2	288.92	2.451	
12,100.0	6,902.4	12,078.6	6,857.6	147.3	147.3	-86.45	482.1	5,022.5	708.1	414.1	294.05	2.408	
12,106.3	6,902.4	12,084.9	6,857.5	147.4	147.5	-86.45	482.1	5,028.8	708.1	413.7	294.40	2.405	
12,200.0	6,901.5	12,178.6	6,856.5	150.1	150.1	-86.44	482.0	5,122.5	708.1	408.5	299.62	2.363	
12,204.7	6,901.5	12,183.3	6,856.5	150.2	150.2	-86.43	482.0	5,127.2	708.1	408.2	299.88	2.361	
12,300.0	6,900.6	12,278.6	6,855.4	152.9	152.9	-86.42	482.0	5,222.5	708.1	403.0	305.19	2.320	
12,303.1	6,900.6	12,281.7	6,855.4	152.9	153.0	-86.42	482.0	5,225.6	708.1	402.8	305.37	2.319	
12,400.0	6,899.7	12,378.6	6,854.3	155.6	155.7	-86.40	482.0	5,322.5	708.2	397.4	310.76	2.279	
12,401.5	6,899.7	12,380.1	6,854.3	155.7	155.7	-86.40	482.0	5,324.0	708.2	397.3	310.85	2.278	
12,500.0	6,898.8	12,478.6	6,853.2	158.4	158.5	-86.38	482.0	5,422.5	708.2	391.8	316.34	2.239	
12,598.4	6,897.9	12,577.0	6,852.1	161.2	161.2	-86.37	482.0	5,520.9	708.2	386.4	321.82	2.201	
12,600.0	6,897.9	12,578.6	6,852.1	161.2	161.2	-86.37	482.0	5,522.5	708.2	386.3	321.91	2.200	
12,696.8	6,897.0	12,675.4	6,851.0	163.9	164.0	-86.35	482.0	5,619.3	708.2	380.9	327.31	2.164	
12,700.0	6,897.0	12,678.6	6,850.9	164.0	164.0	-86.35	482.0	5,622.5	708.2	380.7	327.49	2.163	
12,795.2	6,896.1	12,773.8	6,849.9	166.7	166.7	-86.34	482.0	5,717.7	708.2	375.4	332.80	2.128	
12,800.0	6,896.1	12,778.6	6,849.8	166.8	166.8	-86.33	482.0	5,722.5	708.2	375.1	333.06	2.126	
12,893.7	6,895.3	12,872.3	6,848.8	169.4	169.5	-86.32	482.0	5,816.1	708.2	369.9	338.29	2.094	
12,900.0	6,895.2	12,878.6	6,848.7	169.6	169.6	-86.32	482.0	5,822.4	708.2	369.6	338.64	2.091	
12,992.1	6,894.4	12,970.7	6,847.7	172.2	172.2	-86.30	482.0	5,914.5	708.2	364.5	343.78	2.060	
13,000.0	6,894.3	12,978.6	6,847.6	172.4	172.4	-86.30	482.0	5,922.4	708.2	364.0	344.22	2.058	
13,090.5	6,893.5	13,069.1	6,846.6	175.0	175.0	-86.29	482.0	6,013.0	708.2	359.0	349.27	2.028	
13,100.0	6,893.4	13,078.6	6,846.5	175.2	175.2	-86.28	482.0	6,022.4	708.2	358.5	349.80	2.025	
13,188.9	6,892.6	13,167.5	6,845.5	177.7	177.7	-86.27	482.0	6,111.4	708.3	353.5	354.76	1.996	
13,200.0	6,892.5	13,178.6	6,845.4	178.0	178.0	-86.27	482.0	6,122.4	708.3	352.9	355.37	1.993	
13,287.4	6,891.7	13,266.0	6,844.4	180.5	180.5	-86.25	482.0	6,209.8	708.3	348.0	360.25	1.966	
13,300.0	6,891.6	13,278.6	6,844.3	180.8	180.8	-86.25	482.0	6,222.4	708.3	347.3	360.95	1.962	
13,385.8	6,890.8	13,364.4	6,843.3	183.2	183.2	-86.24	482.0	6,308.2	708.3	342.5	365.74	1.937	
13,400.0	6,890.7	13,378.6	6,843.2	183.6	183.6	-86.23	482.0	6,322.4	708.3	341.8	366.53	1.932	
13,484.2	6,889.9	13,462.8	6,842.2	186.0	186.0	-86.22	482.0	6,406.6	708.3	337.1	371.23	1.908	
13,500.0	6,889.8	13,478.6	6,842.0	186.4	186.4	-86.22	482.0	6,422.4	708.3	336.2	372.11	1.903	
13,582.6	6,889.0	13,561.2	6,841.1	188.7	188.7	-86.20	482.0	6,505.1	708.3	331.6	376.73	1.880	
13,600.0	6,888.9	13,578.6	6,840.9	189.2	189.2	-86.20	482.0	6,522.4	708.3	330.6	377.69	1.875	
13,681.1	6,888.1	13,659.7	6,840.0	191.5	191.5	-86.19	482.0	6,603.5	708.3	326.1	382.22	1.853	
13,700.0	6,888.0	13,678.6	6,839.8	192.0	192.0	-86.18	482.0	6,622.4	708.3	325.1	383.27	1.848	
13,779.5	6,887.3	13,758.1	6,838.9	194.2	194.2	-86.17	482.0	6,701.9	708.3	320.6	387.71	1.827	
13,800.0	6,887.1	13,778.6	6,838.7	194.8	194.8	-86.17	482.0	6,722.4	708.3	319.5	388.86	1.822	
13,877.9	6,886.4	13,856.5	6,837.8	197.0	197.0	-86.15	482.0	6,800.3	708.4	315.2	393.21	1.801	
13,900.0	6,886.2	13,878.6	6,837.6	197.6	197.6	-86.15	482.0	6,822.4	708.4	313.9	394.44	1.796	
13,976.3	6,885.5	13,954.9	6,836.8	199.7	199.7	-86.14	482.0	6,898.7	708.4	309.7	398.70	1.777	
14,000.0	6,885.3	13,978.6	6,836.5	200.4	200.4	-86.13	482.0	6,922.4	708.4	308.4	400.02	1.771	
14,074.8	6,884.6	14,053.4	6,835.7	202.5	202.5	-86.12	482.0	6,997.1	708.4	304.2	404.19	1.753	
14,100.0	6,884.4	14,078.6	6,835.4	203.2	203.2	-86.12	482.0	7,022.4	708.4	302.8	405.60	1.747	
14,173.2	6,883.7	14,151.8	6,834.6	205.3	205.3	-86.10	482.0	7,095.6	708.4	298.7	409.69	1.729	
14,200.0	6,883.5	14,178.6	6,834.3	206.0	206.0	-86.10	482.0	7,122.4	708.4	297.2	411.18	1.723	
14,271.6	6,882.8	14,250.2	6,833.5	208.0	208.0	-86.09	482.0	7,194.0	708.4	293.2	415.18	1.706	
14,300.0	6,882.6	14,278.6	6,833.2	208.8	208.8	-86.08	482.0	7,222.4	708.4	291.6	416.77	1.700	
14,370.0	6,881.9	14,348.6	6,832.4	210.8	210.8	-86.07	482.0	7,292.4	708.4	287.7	420.68	1.684	
14,400.0	6,881.7	14,378.6	6,832.0	211.6	211.6	-86.07	482.0	7,322.4	708.4	286.1	422.35	1.677	
14,468.5	6,881.0	14,447.1	6,831.3	213.5	213.5	-86.05	482.0	7,390.8	708.4	282.3	426.17	1.662	
14,500.0	6,880.8	14,478.6	6,830.9	214.4	214.4	-86.05	482.0	7,422.3	708.4	280.5	427.93	1.656	
14,566.9	6,880.2	14,545.5	6,830.2	216.3	215.8	-86.04	482.0	7,489.2	708.5	277.2	431.21	1.643	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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									
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
14,584.2	6,880.0	14,562.7	6,830.0	216.8	216.1	-86.03	482.0	7,506.5	708.5	276.5	432.01	1.640 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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	0.0	0.0	0.0	0.0	0.00	61.9	0.0	61.9				
98.4	98.4	97.4	97.4	0.1	0.1	0.00	61.9	0.0	61.9	61.8	0.17	366.309	
100.0	100.0	99.0	99.0	0.1	0.1	0.00	61.9	0.0	61.9	61.8	0.17	359.645	
196.8	196.8	195.8	195.8	0.3	0.3	0.00	61.9	0.0	61.9	61.3	0.61	102.166	
200.0	200.0	199.0	199.0	0.3	0.3	0.00	61.9	0.0	61.9	61.3	0.62	99.834	
295.3	295.3	294.3	294.3	0.5	0.5	0.00	61.9	0.0	61.9	60.9	1.05	59.060	
300.0	300.0	299.0	299.0	0.5	0.5	0.00	61.9	0.0	61.9	60.9	1.07	57.887	
393.7	393.7	392.7	392.7	0.7	0.7	0.00	61.9	0.0	61.9	60.4	1.49	41.535	
400.0	400.0	399.0	399.0	0.8	0.8	0.00	61.9	0.0	61.9	60.4	1.52	40.761	
492.1	492.1	491.1	491.1	1.0	1.0	0.00	61.9	0.0	61.9	60.0	1.93	32.031	
500.0	500.0	499.0	499.0	1.0	1.0	0.00	61.9	0.0	61.9	60.0	1.97	31.455	
590.5	590.5	589.5	589.5	1.2	1.2	0.00	61.9	0.0	61.9	59.6	2.38	26.066	
600.0	600.0	599.0	599.0	1.2	1.2	0.00	61.9	0.0	61.9	59.5	2.42	25.608	
689.0	689.0	688.0	688.0	1.4	1.4	0.00	61.9	0.0	61.9	59.1	2.82	21.974	
700.0	700.0	699.0	699.0	1.4	1.4	0.00	61.9	0.0	61.9	59.1	2.87	21.594	
787.4	787.4	786.4	786.4	1.6	1.6	0.00	61.9	0.0	61.9	58.7	3.26	18.992	
800.0	800.0	799.0	799.0	1.7	1.7	0.00	61.9	0.0	61.9	58.6	3.32	18.668	
885.8	885.8	884.8	884.8	1.9	1.9	0.00	61.9	0.0	61.9	58.2	3.70	16.723	
900.0	900.0	899.0	899.0	1.9	1.9	0.00	61.9	0.0	61.9	58.2	3.77	16.440	
984.2	984.2	983.2	983.2	2.1	2.1	0.00	61.9	0.0	61.9	57.8	4.15	14.939	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.00	61.9	0.0	61.9	57.7	4.22	14.688	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	0.00	61.9	0.0	61.9	57.3	4.59	13.498	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.3	0.00	61.9	0.0	61.9	57.3	4.67	13.273	
1,138.1	1,138.1	1,137.1	1,137.1	2.4	2.4	0.00	61.9	0.0	61.9	57.1	4.84	12.803 CC	
1,181.1	1,181.1	1,179.6	1,179.6	2.5	2.5	-0.08	62.1	-0.1	62.1	57.0	5.03	12.342 ES	
1,200.0	1,200.0	1,198.1	1,198.1	2.6	2.6	-0.20	62.3	-0.2	62.3	57.2	5.11	12.182	
1,279.5	1,279.5	1,276.1	1,276.1	2.7	2.7	-1.34	64.3	-1.5	64.3	58.9	5.46	11.775	
1,300.0	1,300.0	1,296.2	1,296.1	2.8	2.8	-1.77	65.1	-2.0	65.2	59.6	5.55	11.733	
1,377.9	1,377.9	1,372.4	1,372.2	3.0	2.9	-3.85	69.2	-4.7	69.5	63.6	5.90	11.784	
1,400.0	1,400.0	1,394.0	1,393.7	3.0	3.0	-4.54	70.7	-5.6	71.1	65.1	6.00	11.855	
1,476.4	1,476.4	1,468.2	1,467.6	3.2	3.2	-7.08	76.8	-9.5	77.8	71.4	6.34	12.273	
1,500.0	1,500.0	1,491.1	1,490.3	3.2	3.2	-7.90	79.0	-11.0	80.2	73.8	6.44	12.454	
1,574.8	1,574.8	1,563.3	1,561.9	3.4	3.4	-10.47	87.0	-16.1	89.3	82.5	6.78	13.163	
1,600.0	1,600.0	1,587.5	1,585.8	3.5	3.5	-11.32	90.0	-18.0	92.7	85.8	6.89	13.449	
1,650.0	1,650.0	1,635.4	1,633.1	3.6	3.6	-12.94	96.5	-22.2	100.2	93.1	7.13	14.067	
1,673.2	1,673.2	1,657.5	1,654.9	3.6	3.7	105.90	99.7	-24.2	104.1	96.8	7.23	14.390	
1,700.0	1,700.0	1,683.0	1,679.9	3.7	3.7	105.18	103.5	-26.7	108.7	101.4	7.35	14.801	
1,771.6	1,771.6	1,750.6	1,746.2	3.8	3.9	103.84	114.7	-33.9	122.7	115.0	7.65	16.045	
1,800.0	1,799.9	1,778.3	1,773.3	3.9	4.0	103.53	119.6	-37.0	128.6	120.9	7.77	16.563	
1,870.1	1,869.9	1,846.8	1,840.3	4.0	4.3	103.30	131.6	-44.7	143.6	135.6	8.07	17.798	
1,900.0	1,899.7	1,876.0	1,868.9	4.1	4.4	103.39	136.7	-48.0	150.2	142.0	8.20	18.313	
1,968.5	1,967.8	1,942.7	1,934.2	4.2	4.6	103.94	148.3	-55.4	165.4	156.9	8.51	19.438	
2,000.0	1,999.1	1,973.4	1,964.1	4.3	4.7	104.32	153.7	-58.9	172.5	163.9	8.65	19.941	
2,066.9	2,065.5	2,038.4	2,027.7	4.4	5.0	105.33	165.1	-66.2	188.0	179.0	8.97	20.960	
2,100.0	2,098.2	2,070.4	2,059.0	4.5	5.1	105.92	170.7	-69.8	195.9	186.7	9.13	21.455	
2,165.3	2,162.6	2,133.5	2,120.8	4.7	5.3	107.21	181.7	-76.9	211.8	202.3	9.46	22.382	
2,200.0	2,196.6	2,166.9	2,153.4	4.7	5.4	107.94	187.6	-80.6	220.4	210.8	9.64	22.869	
2,249.9	2,245.5	2,214.8	2,200.3	4.9	5.6	109.05	195.9	-86.0	233.2	223.3	9.91	23.542	
2,263.8	2,259.1	2,228.2	2,213.3	4.9	5.7	109.43	198.3	-87.5	236.9	226.9	9.99	23.719	
2,300.0	2,294.5	2,262.9	2,247.3	5.0	5.8	110.37	204.4	-91.4	246.4	236.2	10.19	24.172	
2,362.2	2,355.4	2,322.6	2,305.7	5.2	6.1	111.83	214.8	-98.1	262.8	252.3	10.56	24.897	
2,400.0	2,392.3	2,358.8	2,341.2	5.4	6.2	112.63	221.1	-102.2	272.9	262.1	10.78	25.316	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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						
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	2,451.6	2,417.0	2,398.0	5.6	6.4	113.80	231.3	-108.7	289.1	278.0	11.15	25.937	
2,500.0	2,490.2	2,454.7	2,435.0	5.7	6.6	114.49	237.9	-112.9	299.7	288.3	11.39	26.323	
2,559.0	2,547.9	2,511.4	2,490.4	5.9	6.8	115.44	247.8	-119.3	315.7	303.9	11.75	26.857	
2,600.0	2,588.0	2,550.7	2,528.8	6.1	7.0	116.04	254.7	-123.7	326.8	314.8	12.01	27.209	
2,657.5	2,644.2	2,605.8	2,582.7	6.3	7.2	116.83	264.3	-129.9	342.4	330.1	12.38	27.669	
2,700.0	2,685.8	2,646.6	2,622.6	6.4	7.4	117.36	271.5	-134.5	354.1	341.4	12.65	27.992	
2,755.9	2,740.5	2,700.2	2,675.1	6.6	7.6	118.01	280.8	-140.5	369.4	356.4	13.01	28.388	
2,800.0	2,783.6	2,742.5	2,716.4	6.8	7.8	118.49	288.2	-145.2	381.5	368.2	13.30	28.686	
2,854.3	2,836.7	2,794.6	2,767.4	7.0	8.0	119.04	297.4	-151.1	396.4	382.8	13.66	29.029	
2,900.0	2,881.4	2,838.4	2,810.2	7.2	8.2	119.47	305.0	-156.0	409.0	395.1	13.96	29.304	
2,952.7	2,933.0	2,889.0	2,859.7	7.4	8.4	119.94	313.9	-161.7	423.6	409.3	14.31	29.601	
3,000.0	2,979.2	2,934.3	2,904.1	7.6	8.6	120.33	321.8	-166.8	436.7	422.0	14.63	29.855	
3,051.2	3,029.3	2,983.4	2,952.1	7.8	8.8	120.72	330.4	-172.3	450.8	435.9	14.97	30.114	
3,100.0	3,077.1	3,030.2	2,997.9	8.0	9.0	121.08	338.6	-177.5	464.4	449.1	15.30	30.351	
3,149.6	3,125.6	3,077.8	3,044.4	8.2	9.2	121.42	346.9	-182.9	478.1	462.5	15.64	30.576	
3,200.0	3,174.9	3,126.1	3,091.7	8.4	9.4	121.75	355.4	-188.3	492.2	476.2	15.98	30.796	
3,248.0	3,221.8	3,172.2	3,136.8	8.6	9.6	122.04	363.4	-193.5	505.5	489.2	16.31	30.994	
3,300.0	3,272.7	3,222.0	3,185.5	8.9	9.9	122.35	372.1	-199.1	520.0	503.3	16.67	31.200	
3,346.4	3,318.1	3,266.6	3,229.1	9.0	10.1	122.60	379.9	-204.1	532.9	515.9	16.99	31.373	
3,400.0	3,370.5	3,318.0	3,279.3	9.3	10.3	122.88	388.9	-209.8	547.9	530.5	17.36	31.565	
3,444.9	3,414.4	3,361.0	3,321.4	9.5	10.5	123.11	396.5	-214.7	560.4	542.7	17.67	31.718	
3,500.0	3,468.3	3,413.9	3,373.2	9.7	10.7	123.37	405.7	-220.6	575.8	557.7	18.05	31.898	
3,543.3	3,510.7	3,455.4	3,413.8	9.9	10.9	123.56	413.0	-225.3	587.9	569.5	18.35	32.033	
3,600.0	3,566.1	3,509.8	3,467.0	10.1	11.1	123.81	422.5	-231.4	603.8	585.0	18.75	32.203	
3,641.7	3,606.9	3,549.8	3,506.1	10.3	11.3	123.98	429.5	-235.9	615.4	596.4	19.04	32.321	
3,700.0	3,664.0	3,605.7	3,560.8	10.6	11.5	124.21	439.3	-242.1	631.7	612.3	19.45	32.482	
3,740.1	3,703.2	3,644.2	3,598.5	10.7	11.7	124.36	446.0	-246.5	643.0	623.3	19.73	32.587	
3,800.0	3,761.8	3,701.6	3,654.6	11.0	12.0	124.58	456.0	-252.9	659.8	639.6	20.15	32.738	
3,837.4	3,798.3	3,737.4	3,689.7	11.2	12.1	124.71	462.3	-256.9	670.2	649.8	20.42	32.828	
3,838.6	3,799.5	3,738.6	3,690.8	11.2	12.1	124.72	462.5	-257.1	670.6	650.1	20.42	32.831	
3,900.0	3,859.7	3,797.7	3,748.6	11.4	12.4	125.16	472.8	-263.7	687.4	666.6	20.87	32.944	
3,937.0	3,896.1	3,833.3	3,783.4	11.5	12.5	125.37	479.1	-267.7	697.2	676.1	21.11	33.026	
4,000.0	3,958.3	3,894.2	3,843.0	11.7	12.8	125.64	489.7	-274.5	713.3	691.8	21.53	33.135	
4,035.4	3,993.3	3,928.6	3,876.6	11.8	13.0	125.75	495.7	-278.4	722.0	700.2	21.75	33.193	
4,100.0	4,057.4	3,991.3	3,938.0	12.0	13.2	125.86	506.7	-285.4	737.2	715.0	22.16	33.269	
4,133.8	4,091.0	4,024.3	3,970.2	12.1	13.4	125.87	512.5	-289.1	744.8	722.5	22.36	33.308	
4,200.0	4,156.8	4,088.7	4,033.3	12.2	13.7	125.83	523.8	-296.4	759.1	736.4	22.76	33.359	
4,232.3	4,189.0	4,120.3	4,064.1	12.3	13.8	125.77	529.3	-299.9	765.8	742.8	22.94	33.384	
4,300.0	4,256.6	4,186.4	4,128.8	12.4	14.1	125.58	540.9	-307.3	779.1	755.8	23.32	33.415	
4,330.7	4,287.3	4,216.4	4,158.2	12.5	14.2	125.46	546.1	-310.7	784.9	761.4	23.48	33.430	
4,400.0	4,356.6	4,284.2	4,224.5	12.6	14.5	125.12	558.0	-318.3	797.2	773.4	23.84	33.446	
4,429.1	4,385.7	4,312.7	4,252.4	12.6	14.7	124.95	562.9	-321.5	802.1	778.1	23.98	33.452	
4,437.2	4,393.8	4,320.6	4,260.1	12.7	14.7	5.32	564.3	-322.4	803.5	779.6	23.82	33.728	
4,500.0	4,456.6	4,382.0	4,320.2	12.7	15.0	4.75	575.1	-329.3	813.9	789.7	24.18	33.660	
4,527.5	4,484.1	4,409.0	4,346.5	12.8	15.1	4.51	579.8	-332.3	818.5	794.1	24.34	33.629	
4,600.0	4,556.6	4,479.9	4,415.9	12.9	15.4	3.89	592.2	-340.3	830.6	805.8	24.76	33.548	
4,626.0	4,582.6	4,505.3	4,440.7	12.9	15.5	3.67	596.6	-343.1	835.0	810.1	24.91	33.520	
4,700.0	4,656.6	4,577.7	4,511.5	13.1	15.8	3.06	609.3	-351.2	847.5	822.2	25.34	33.440	
4,724.4	4,681.0	4,601.5	4,534.9	13.1	15.9	2.86	613.5	-353.9	851.7	826.2	25.49	33.414	
4,800.0	4,756.6	4,676.1	4,607.8	13.2	16.3	2.25	626.5	-362.3	864.6	838.7	25.94	33.333	
4,822.8	4,779.4	4,705.9	4,637.0	13.3	16.4	2.02	631.6	-365.5	868.4	842.3	26.09	33.286	
4,900.0	4,856.6	4,807.6	4,737.0	13.4	16.7	1.34	646.9	-375.4	879.9	853.3	26.55	33.135	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,835.8	4,764.9	13.4	16.8	1.18	650.7	-377.8	882.7	856.0	26.68	33.089	
5,000.0	4,956.6	4,941.1	4,869.2	13.6	17.1	0.67	662.5	-385.4	891.5	864.4	27.11	32.886	
5,019.7	4,976.3	4,967.5	4,895.5	13.6	17.1	0.57	665.0	-387.0	893.3	866.1	27.21	32.829	
5,100.0	5,056.6	5,076.0	5,003.6	13.7	17.4	0.23	673.0	-392.1	899.2	871.6	27.61	32.574	
5,118.1	5,074.7	5,100.6	5,028.1	13.8	17.4	0.18	674.3	-393.0	900.2	872.5	27.69	32.508	
5,200.0	5,156.6	5,211.9	5,139.3	13.9	17.6	0.02	678.2	-395.4	903.0	875.0	28.04	32.206	
5,216.5	5,173.1	5,234.3	5,161.7	13.9	17.6	0.01	678.5	-395.7	903.3	875.2	28.10	32.142	
5,300.0	5,256.6	5,328.2	5,255.6	14.1	17.7	0.00	678.7	-395.8	903.4	875.0	28.40	31.812	
5,314.9	5,271.5	5,343.1	5,270.5	14.1	17.8	0.00	678.7	-395.8	903.4	875.0	28.45	31.755	
5,400.0	5,356.6	5,428.2	5,355.6	14.2	17.9	0.00	678.7	-395.8	903.4	874.7	28.74	31.430	
5,413.4	5,370.0	5,441.6	5,369.0	14.3	17.9	0.00	678.7	-395.8	903.4	874.6	28.79	31.379	
5,500.0	5,456.6	5,528.2	5,455.6	14.4	18.0	0.00	678.7	-395.8	903.4	874.3	29.09	31.053	
5,511.8	5,468.4	5,540.0	5,467.4	14.4	18.0	0.00	678.7	-395.8	903.4	874.3	29.13	31.009	
5,600.0	5,556.6	5,628.2	5,555.6	14.6	18.2	0.00	678.7	-395.8	903.4	874.0	29.44	30.683	
5,610.2	5,566.8	5,638.4	5,565.8	14.6	18.2	0.00	678.7	-395.8	903.4	874.0	29.48	30.645	
5,700.0	5,656.6	5,728.2	5,655.6	14.8	18.3	0.00	678.7	-395.8	903.4	873.6	29.80	30.319	
5,708.6	5,665.2	5,736.8	5,664.2	14.8	18.3	0.00	678.7	-395.8	903.4	873.6	29.83	30.287	
5,800.0	5,756.6	5,828.2	5,755.6	14.9	18.5	0.00	678.7	-395.8	903.4	873.3	30.15	29.961	
5,807.1	5,763.7	5,835.3	5,762.7	14.9	18.5	0.00	678.7	-395.8	903.4	873.3	30.18	29.936	
5,900.0	5,856.6	5,928.2	5,855.6	15.1	18.6	0.00	678.7	-395.8	903.4	872.9	30.51	29.609	
5,905.5	5,862.1	5,933.7	5,861.1	15.1	18.6	0.00	678.7	-395.8	903.4	872.9	30.53	29.590	
6,000.0	5,956.6	6,028.2	5,955.6	15.3	18.8	0.00	678.7	-395.8	903.4	872.6	30.87	29.263	
6,003.9	5,960.5	6,032.1	5,959.5	15.3	18.8	0.00	678.7	-395.8	903.4	872.5	30.89	29.250	
6,100.0	6,056.6	6,128.2	6,055.6	15.5	18.9	0.00	678.7	-395.8	903.4	872.2	31.24	28.923	
6,102.3	6,058.9	6,130.5	6,057.9	15.5	18.9	0.00	678.7	-395.8	903.4	872.2	31.24	28.915	
6,200.0	6,156.6	6,228.2	6,155.6	15.7	19.1	0.00	678.7	-395.8	903.4	871.8	31.60	28.589	
6,200.8	6,157.4	6,229.0	6,156.4	15.7	19.1	0.00	678.7	-395.8	903.4	871.8	31.60	28.587	
6,272.2	6,228.8	6,300.4	6,227.8	15.8	19.2	0.00	678.7	-395.8	903.4	871.6	31.87	28.352	
6,299.2	6,255.8	6,327.4	6,254.8	15.8	19.2	-90.00	678.7	-395.3	903.4	872.0	31.42	28.754	
6,300.0	6,256.6	6,328.2	6,255.6	15.8	19.2	-90.00	678.7	-395.3	903.4	872.0	31.42	28.752	
6,350.0	6,306.4	6,378.2	6,305.4	15.9	19.3	-90.01	678.7	-391.7	903.4	871.9	31.54	28.641	
6,397.6	6,353.6	6,425.8	6,352.6	15.9	19.3	-90.01	678.7	-385.0	903.4	871.8	31.62	28.574	
6,400.0	6,355.9	6,428.2	6,354.9	15.9	19.3	-90.01	678.7	-384.6	903.4	871.8	31.62	28.571	
6,450.0	6,404.8	6,478.2	6,403.8	15.9	19.3	-90.02	678.7	-374.1	903.4	871.8	31.66	28.534	
6,496.0	6,449.0	6,524.3	6,448.1	16.0	19.3	-90.02	678.7	-361.4	903.4	871.8	31.67	28.524	
6,500.0	6,452.8	6,528.2	6,451.9	16.0	19.3	-90.02	678.7	-360.2	903.4	871.8	31.67	28.524	
6,550.0	6,499.7	6,578.3	6,498.8	15.9	19.3	-90.02	678.7	-343.0	903.4	871.8	31.67	28.530	
6,594.5	6,540.3	6,622.8	6,539.5	15.9	19.3	-90.03	678.7	-324.9	903.4	871.8	31.65	28.543	
6,600.0	6,545.3	6,628.3	6,544.4	15.9	19.3	-90.03	678.7	-322.5	903.4	871.8	31.65	28.545	
6,650.0	6,589.3	6,678.3	6,588.6	15.9	19.2	-90.03	678.7	-298.9	903.4	871.8	31.64	28.553	
6,692.9	6,625.7	6,721.3	6,625.0	15.9	19.2	-90.04	678.7	-276.2	903.4	871.8	31.65	28.543	
6,700.0	6,631.6	6,728.4	6,630.9	15.9	19.2	-90.04	678.7	-272.3	903.4	871.8	31.65	28.541	
6,750.0	6,671.9	6,778.4	6,671.3	15.9	19.2	-90.04	678.7	-242.7	903.4	871.7	31.71	28.490	
6,791.3	6,703.6	6,819.8	6,703.1	15.9	19.1	-90.04	678.7	-216.3	903.4	871.6	31.81	28.402	
6,800.0	6,710.1	6,828.4	6,709.5	15.9	19.1	-90.04	678.7	-210.5	903.4	871.6	31.83	28.381	
6,850.0	6,745.9	6,878.5	6,745.4	16.0	19.1	-90.05	678.7	-175.6	903.4	871.4	32.04	28.197	
6,889.7	6,772.6	6,918.3	6,772.2	16.1	19.0	-90.05	678.7	-146.2	903.4	871.1	32.29	27.980	
6,900.0	6,779.2	6,928.5	6,778.8	16.1	19.0	-90.05	678.7	-138.3	903.4	871.1	32.36	27.919	
6,950.0	6,809.8	6,978.6	6,809.5	16.3	19.0	-90.05	678.7	-98.8	903.4	870.6	32.81	27.537	
6,988.2	6,831.3	7,016.8	6,831.0	16.4	18.9	-90.05	678.7	-67.2	903.4	870.2	33.26	27.165	
7,000.0	6,837.6	7,028.7	6,837.4	16.5	18.9	-90.05	678.7	-57.2	903.4	870.0	33.41	27.044	
7,050.0	6,862.5	7,078.7	6,862.2	16.9	18.9	-90.06	678.7	-13.8	903.4	869.3	34.17	26.441	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,878.7	7,115.4	6,878.5	17.2	18.8	-90.06	678.7	19.0	903.4	868.6	34.84	25.931	
7,100.0	6,884.2	7,128.8	6,884.0	17.3	18.8	-90.06	678.7	31.3	903.4	868.3	35.10	25.740	
7,150.0	6,902.7	7,178.8	6,902.6	17.8	18.8	-90.06	678.7	77.7	903.4	867.2	36.20	24.956	
7,185.0	6,913.8	7,213.9	6,913.7	18.3	18.9	-90.06	678.7	111.0	903.4	866.4	37.08	24.366	
7,200.0	6,918.0	7,228.9	6,917.9	18.5	19.0	-90.06	678.7	125.4	903.4	866.0	37.47	24.112	
7,250.0	6,929.9	7,279.0	6,929.9	19.2	19.7	-90.06	678.7	174.0	903.4	864.5	38.89	23.230	
7,283.4	6,936.0	7,312.5	6,936.0	19.7	20.2	-90.06	678.7	206.9	903.4	863.5	39.93	22.628	
7,300.0	6,938.4	7,329.0	6,938.4	20.0	20.5	-90.06	678.7	223.3	903.4	863.0	40.45	22.334	
7,350.0	6,943.4	7,379.1	6,943.4	20.9	21.3	-90.06	678.7	273.1	903.4	861.3	42.13	21.443	
7,381.9	6,944.8	7,411.0	6,944.8	21.4	21.9	-90.06	678.7	305.0	903.4	860.2	43.26	20.886	
7,390.7	6,945.0	7,419.9	6,945.0	21.6	22.1	-90.06	678.7	313.9	903.4	859.9	43.57	20.734	
7,403.7	6,945.0	7,432.9	6,945.0	21.8	22.3	-90.06	678.7	326.9	903.4	859.4	44.04	20.514	
7,480.3	6,944.3	7,509.5	6,944.3	23.3	23.8	-90.07	678.7	403.5	903.4	856.5	46.97	19.235	
7,500.0	6,944.1	7,529.2	6,944.2	23.7	24.2	-90.07	678.7	423.2	903.4	855.7	47.75	18.921	
7,578.7	6,943.4	7,607.9	6,943.5	25.4	25.8	-90.07	678.7	501.9	903.4	852.4	50.99	17.717	
7,600.0	6,943.2	7,629.2	6,943.3	25.8	26.3	-90.07	678.7	523.2	903.4	851.5	51.89	17.409	
7,677.1	6,942.5	7,706.3	6,942.7	27.5	28.0	-90.08	678.7	600.3	903.4	848.2	55.27	16.345	
7,700.0	6,942.3	7,729.2	6,942.5	28.0	28.5	-90.08	678.7	623.2	903.4	847.1	56.30	16.048	
7,775.6	6,941.6	7,804.8	6,941.9	29.8	30.2	-90.08	678.7	698.7	903.4	843.7	59.76	15.117	
7,800.0	6,941.4	7,829.2	6,941.6	30.3	30.8	-90.08	678.7	723.2	903.4	842.5	60.90	14.834	
7,874.0	6,940.7	7,903.2	6,941.0	32.1	32.5	-90.08	678.7	797.2	903.4	839.0	64.42	14.025	
7,900.0	6,940.5	7,929.2	6,940.8	32.7	33.1	-90.09	678.7	823.2	903.4	837.8	65.67	13.758	
7,972.4	6,939.8	8,001.6	6,940.2	34.5	34.9	-90.09	678.7	895.6	903.4	834.2	69.20	13.056	
8,000.0	6,939.6	8,029.2	6,940.0	35.2	35.6	-90.09	678.7	923.2	903.4	832.9	70.56	12.804	
8,070.8	6,938.9	8,100.0	6,939.4	37.0	37.3	-90.09	678.7	994.0	903.4	829.3	74.08	12.195	
8,100.0	6,938.7	8,129.2	6,939.1	37.7	38.1	-90.09	678.7	1,023.2	903.4	827.9	75.55	11.958	
8,169.3	6,938.0	8,198.5	6,938.6	39.5	39.8	-90.10	678.7	1,092.4	903.4	824.4	79.06	11.428	
8,200.0	6,937.7	8,229.2	6,938.3	40.3	40.6	-90.10	678.7	1,123.2	903.4	822.8	80.62	11.206	
8,267.7	6,937.1	8,296.9	6,937.7	42.0	42.3	-90.10	678.7	1,190.9	903.4	819.3	84.10	10.742	
8,300.0	6,936.8	8,329.2	6,937.5	42.8	43.1	-90.10	678.7	1,223.1	903.4	817.7	85.77	10.534	
8,366.1	6,936.2	8,395.3	6,936.9	44.6	44.8	-90.11	678.7	1,289.3	903.4	814.2	89.20	10.128	
8,400.0	6,935.9	8,429.2	6,936.6	45.5	45.7	-90.11	678.7	1,323.1	903.4	812.5	90.97	9.932	
8,464.5	6,935.3	8,493.7	6,936.1	47.2	47.4	-90.11	678.7	1,387.7	903.4	809.1	94.35	9.575	
8,500.0	6,935.0	8,529.2	6,935.8	48.1	48.3	-90.11	678.7	1,423.1	903.4	807.2	96.21	9.390	
8,563.0	6,934.5	8,592.2	6,935.3	49.8	50.0	-90.11	678.7	1,486.1	903.4	803.9	99.54	9.076	
8,600.0	6,934.1	8,629.2	6,935.0	50.7	51.0	-90.12	678.7	1,523.1	903.4	801.9	101.50	8.901	
8,661.4	6,933.6	8,690.6	6,934.4	52.4	52.6	-90.12	678.7	1,584.5	903.4	798.7	104.76	8.624	
8,700.0	6,933.2	8,729.2	6,934.1	53.4	53.6	-90.12	678.7	1,623.1	903.4	796.6	106.82	8.458	
8,759.8	6,932.7	8,789.0	6,933.6	55.0	55.2	-90.12	678.7	1,683.0	903.4	793.4	110.02	8.212	
8,800.0	6,932.3	8,829.2	6,933.3	56.1	56.3	-90.13	678.7	1,723.1	903.4	791.3	112.17	8.054	
8,858.2	6,931.8	8,887.4	6,932.8	57.7	57.8	-90.13	678.7	1,781.4	903.4	788.1	115.30	7.836	
8,900.0	6,931.4	8,929.2	6,932.4	58.8	59.0	-90.13	678.7	1,823.1	903.4	785.9	117.55	7.686	
8,956.7	6,930.9	8,985.9	6,932.0	60.3	60.5	-90.13	678.7	1,879.8	903.4	782.8	120.60	7.491	
9,000.0	6,930.5	9,029.2	6,931.6	61.5	61.7	-90.13	678.7	1,923.1	903.4	780.5	122.94	7.348	
9,055.1	6,930.0	9,084.3	6,931.1	63.0	63.1	-90.14	678.7	1,978.2	903.4	777.5	125.92	7.174	
9,100.0	6,929.6	9,129.2	6,930.8	64.2	64.4	-90.14	678.7	2,023.1	903.4	775.1	128.36	7.038	
9,153.5	6,929.1	9,182.7	6,930.3	65.6	65.8	-90.14	678.7	2,076.6	903.4	772.2	131.26	6.883	
9,200.0	6,928.7	9,229.2	6,929.9	66.9	67.1	-90.14	678.7	2,123.1	903.4	769.6	133.79	6.753	
9,251.9	6,928.2	9,281.1	6,929.5	68.3	68.5	-90.15	678.7	2,175.1	903.4	766.8	136.62	6.613	
9,300.0	6,927.8	9,329.2	6,929.1	69.6	69.8	-90.15	678.7	2,223.1	903.4	764.2	139.24	6.488	
9,350.4	6,927.3	9,379.6	6,928.7	71.0	71.1	-90.15	678.7	2,273.5	903.4	761.5	141.99	6.363	
9,400.0	6,926.9	9,429.2	6,928.3	72.4	72.5	-90.15	678.7	2,323.1	903.4	758.7	144.70	6.244	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,926.4	9,478.0	6,927.9	73.7	73.8	-90.15	678.7	2,371.9	903.4	756.1	147.37	6.130	
9,500.0	6,926.0	9,529.2	6,927.4	75.1	75.2	-90.16	678.7	2,423.1	903.4	753.3	150.17	6.016	
9,547.2	6,925.5	9,576.4	6,927.0	76.4	76.5	-90.16	678.7	2,470.3	903.4	750.7	152.76	5.914	
9,600.0	6,925.1	9,629.2	6,926.6	77.9	78.0	-90.16	678.7	2,523.1	903.4	747.8	155.66	5.804	
9,645.6	6,924.6	9,674.8	6,926.2	79.1	79.2	-90.16	678.7	2,568.8	903.4	745.3	158.16	5.712	
9,700.0	6,924.1	9,729.2	6,925.7	80.6	80.7	-90.16	678.7	2,623.1	903.4	742.3	161.15	5.606	
9,744.1	6,923.7	9,773.3	6,925.4	81.8	81.9	-90.17	678.7	2,667.2	903.4	739.9	163.57	5.523	
9,800.0	6,923.2	9,829.2	6,924.9	83.4	83.4	-90.17	678.7	2,723.1	903.4	736.8	166.65	5.421	
9,842.5	6,922.9	9,871.7	6,924.6	84.5	84.6	-90.17	678.7	2,765.6	903.4	734.5	168.99	5.346	
9,900.0	6,922.3	9,929.2	6,924.1	86.1	86.2	-90.17	678.7	2,823.1	903.4	731.3	172.16	5.248	
9,940.9	6,922.0	9,970.1	6,923.7	87.2	87.3	-90.18	678.7	2,864.0	903.4	729.0	174.41	5.180	
10,000.0	6,921.4	10,029.2	6,923.2	88.9	88.9	-90.18	678.7	2,923.1	903.4	725.8	177.67	5.085	
10,039.3	6,921.1	10,068.5	6,922.9	90.0	90.0	-90.18	678.7	2,962.4	903.4	723.6	179.85	5.023	
10,100.0	6,920.5	10,129.2	6,922.4	91.6	91.7	-90.18	678.7	3,023.1	903.4	720.3	183.19	4.932	
10,137.8	6,920.2	10,167.0	6,922.1	92.7	92.7	-90.18	678.7	3,060.9	903.4	718.2	185.28	4.876	
10,200.0	6,919.6	10,229.2	6,921.6	94.4	94.5	-90.19	678.7	3,123.1	903.4	714.7	188.72	4.787	
10,236.2	6,919.3	10,265.4	6,921.3	95.4	95.5	-90.19	678.7	3,159.3	903.4	712.7	190.72	4.737	
10,300.0	6,918.7	10,329.2	6,920.7	97.2	97.2	-90.19	678.7	3,223.1	903.4	709.2	194.26	4.651	
10,334.6	6,918.4	10,363.8	6,920.4	98.1	98.2	-90.19	678.7	3,257.7	903.4	707.3	196.17	4.605	
10,400.0	6,917.8	10,429.2	6,919.9	99.9	100.0	-90.20	678.7	3,323.1	903.4	703.7	199.79	4.522	
10,433.0	6,917.5	10,462.2	6,919.6	100.9	100.9	-90.20	678.7	3,356.1	903.4	701.8	201.62	4.481	
10,500.0	6,916.9	10,529.2	6,919.1	102.7	102.8	-90.20	678.7	3,423.1	903.4	698.1	205.33	4.400	
10,531.5	6,916.6	10,560.7	6,918.8	103.6	103.6	-90.20	678.7	3,454.5	903.4	696.4	207.08	4.363	
10,600.0	6,916.0	10,629.2	6,918.2	105.5	105.5	-90.20	678.7	3,523.1	903.4	692.6	210.88	4.284	
10,629.9	6,915.7	10,659.1	6,918.0	106.3	106.4	-90.21	678.7	3,553.0	903.4	690.9	212.54	4.251	
10,700.0	6,915.1	10,729.2	6,917.4	108.3	108.3	-90.21	678.7	3,623.1	903.5	687.0	216.43	4.174	
10,728.3	6,914.8	10,757.5	6,917.2	109.1	109.1	-90.21	678.7	3,651.4	903.5	685.4	218.00	4.144	
10,800.0	6,914.2	10,829.2	6,916.6	111.0	111.1	-90.21	678.7	3,723.1	903.5	681.5	221.98	4.070	
10,826.7	6,913.9	10,855.9	6,916.3	111.8	111.8	-90.21	678.7	3,749.8	903.5	680.0	223.47	4.043	
10,900.0	6,913.3	10,929.2	6,915.7	113.8	113.8	-90.22	678.7	3,823.1	903.5	675.9	227.54	3.970	
10,925.2	6,913.1	10,954.4	6,915.5	114.5	114.5	-90.22	678.7	3,848.2	903.5	674.5	228.94	3.946	
11,000.0	6,912.4	11,029.2	6,914.9	116.6	116.6	-90.22	678.7	3,923.1	903.5	670.4	233.10	3.876	
11,023.6	6,912.2	11,052.8	6,914.7	117.3	117.3	-90.22	678.7	3,946.7	903.5	669.0	234.41	3.854	
11,100.0	6,911.5	11,129.2	6,914.1	119.4	119.4	-90.23	678.7	4,023.0	903.5	664.8	238.66	3.785	
11,122.0	6,911.3	11,151.2	6,913.9	120.0	120.0	-90.23	678.7	4,045.1	903.5	663.6	239.89	3.766	
11,200.0	6,910.6	11,229.2	6,913.2	122.2	122.2	-90.23	678.7	4,123.0	903.5	659.2	244.23	3.699	
11,220.4	6,910.4	11,249.6	6,913.0	122.7	122.7	-90.23	678.7	4,143.5	903.5	658.1	245.37	3.682	
11,300.0	6,909.7	11,329.2	6,912.4	125.0	125.0	-90.24	678.7	4,223.0	903.5	653.7	249.80	3.617	
11,318.9	6,909.5	11,348.1	6,912.2	125.5	125.5	-90.24	678.7	4,241.9	903.5	652.6	250.85	3.602	
11,400.0	6,908.8	11,429.2	6,911.5	127.7	127.7	-90.24	678.7	4,323.0	903.5	648.1	255.37	3.538	
11,417.3	6,908.6	11,446.5	6,911.4	128.2	128.2	-90.24	678.7	4,340.3	903.5	647.1	256.33	3.525	
11,500.0	6,907.9	11,529.2	6,910.7	130.5	130.5	-90.24	678.7	4,423.0	903.5	642.5	260.94	3.462	
11,515.7	6,907.7	11,544.9	6,910.6	131.0	131.0	-90.25	678.7	4,438.8	903.5	641.6	261.82	3.451	
11,600.0	6,907.0	11,629.2	6,909.9	133.3	133.3	-90.25	678.7	4,523.0	903.5	636.9	266.51	3.390	
11,614.1	6,906.8	11,643.3	6,909.8	133.7	133.7	-90.25	678.7	4,537.2	903.5	636.2	267.30	3.380	
11,700.0	6,906.0	11,729.2	6,909.0	136.1	136.1	-90.25	678.7	4,623.0	903.5	631.4	272.09	3.320	
11,712.6	6,905.9	11,741.8	6,908.9	136.5	136.4	-90.25	678.7	4,635.6	903.5	630.7	272.79	3.312	
11,800.0	6,905.1	11,829.2	6,908.2	138.9	138.9	-90.26	678.7	4,723.0	903.5	625.8	277.67	3.254	
11,811.0	6,905.0	11,840.2	6,908.1	139.2	139.2	-90.26	678.7	4,734.0	903.5	625.2	278.28	3.247	
11,900.0	6,904.2	11,929.2	6,907.4	141.7	141.7	-90.26	678.7	4,823.0	903.5	620.2	283.25	3.190	
11,909.4	6,904.2	11,938.6	6,907.3	141.9	141.9	-90.26	678.7	4,832.4	903.5	619.7	283.77	3.184	
12,000.0	6,903.3	12,029.2	6,906.5	144.5	144.5	-90.27	678.7	4,923.0	903.5	614.6	288.83	3.128	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,903.3	12,037.0	6,906.5	144.7	144.7	-90.27	678.7	4,930.9	903.5	614.2	289.26	3.123	
12,100.0	6,902.4	12,129.2	6,905.7	147.3	147.2	-90.27	678.7	5,023.0	903.5	609.1	294.41	3.069	
12,106.3	6,902.4	12,135.5	6,905.7	147.4	147.4	-90.27	678.7	5,029.3	903.5	608.7	294.76	3.065	
12,200.0	6,901.5	12,229.2	6,904.9	150.1	150.0	-90.28	678.7	5,123.0	903.5	603.5	299.99	3.012	
12,204.7	6,901.5	12,233.9	6,904.8	150.2	150.2	-90.28	678.7	5,127.7	903.5	603.2	300.25	3.009	
12,300.0	6,900.6	12,329.2	6,904.0	152.9	152.8	-90.28	678.7	5,223.0	903.5	597.9	305.58	2.957	
12,303.1	6,900.6	12,332.3	6,904.0	152.9	152.9	-90.28	678.7	5,226.1	903.5	597.7	305.75	2.955	
12,400.0	6,899.7	12,429.2	6,903.2	155.6	155.6	-90.28	678.7	5,323.0	903.5	592.3	311.16	2.904	
12,401.5	6,899.7	12,430.7	6,903.2	155.7	155.7	-90.28	678.7	5,324.6	903.5	592.2	311.25	2.903	
12,500.0	6,898.8	12,529.2	6,902.4	158.4	158.4	-90.29	678.7	5,423.0	903.5	586.7	316.75	2.852	
12,598.4	6,897.9	12,627.6	6,901.5	161.2	161.2	-90.29	678.7	5,521.4	903.5	581.2	322.25	2.804	
12,600.0	6,897.9	12,629.2	6,901.5	161.2	161.2	-90.29	678.7	5,523.0	903.5	581.1	322.34	2.803	
12,696.8	6,897.0	12,726.0	6,900.7	163.9	163.9	-90.30	678.7	5,619.8	903.5	575.7	327.75	2.757	
12,700.0	6,897.0	12,729.2	6,900.7	164.0	164.0	-90.30	678.7	5,623.0	903.5	575.5	327.93	2.755	
12,795.2	6,896.1	12,824.4	6,899.9	166.7	166.7	-90.30	678.8	5,718.2	903.5	570.2	333.25	2.711	
12,800.0	6,896.1	12,829.2	6,899.9	166.8	166.8	-90.30	678.8	5,723.0	903.5	570.0	333.52	2.709	
12,893.7	6,895.3	12,922.9	6,899.1	169.4	169.4	-90.31	678.8	5,816.7	903.5	564.7	338.76	2.667	
12,900.0	6,895.2	12,929.2	6,899.0	169.6	169.6	-90.31	678.8	5,823.0	903.5	564.4	339.11	2.664	
12,992.1	6,894.4	13,021.3	6,898.3	172.2	172.2	-90.31	678.8	5,915.1	903.5	559.2	344.26	2.624	
13,000.0	6,894.3	13,029.2	6,898.2	172.4	172.4	-90.31	678.8	5,923.0	903.5	558.8	344.70	2.621	
13,090.5	6,893.5	13,119.7	6,897.4	175.0	174.9	-90.31	678.8	6,013.5	903.5	553.7	349.77	2.583	
13,100.0	6,893.4	13,129.2	6,897.4	175.2	175.2	-90.31	678.8	6,023.0	903.5	553.2	350.30	2.579	
13,188.9	6,892.6	13,218.1	6,896.6	177.7	177.7	-90.32	678.8	6,111.9	903.5	548.2	355.27	2.543	
13,200.0	6,892.5	13,229.2	6,896.5	178.0	178.0	-90.32	678.8	6,123.0	903.5	547.6	355.89	2.539	
13,287.4	6,891.7	13,316.6	6,895.8	180.5	180.4	-90.32	678.8	6,210.3	903.5	542.7	360.78	2.504	
13,300.0	6,891.6	13,329.2	6,895.7	180.8	180.8	-90.32	678.8	6,223.0	903.5	542.0	361.49	2.499	
13,385.8	6,890.8	13,415.0	6,895.0	183.2	183.2	-90.33	678.8	6,308.8	903.5	537.2	366.29	2.467	
13,400.0	6,890.7	13,429.2	6,894.9	183.6	183.6	-90.33	678.8	6,323.0	903.5	536.4	367.08	2.461	
13,484.2	6,889.9	13,513.4	6,894.2	186.0	185.9	-90.33	678.8	6,407.2	903.5	531.7	371.79	2.430	
13,500.0	6,889.8	13,529.2	6,894.0	186.4	186.4	-90.33	678.8	6,423.0	903.5	530.8	372.68	2.424	
13,582.6	6,889.0	13,611.8	6,893.3	188.7	188.7	-90.34	678.8	6,505.6	903.5	526.2	377.30	2.395	
13,600.0	6,888.9	13,629.2	6,893.2	189.2	189.2	-90.34	678.8	6,523.0	903.5	525.2	378.27	2.388	
13,681.1	6,888.1	13,710.3	6,892.5	191.5	191.4	-90.34	678.8	6,604.0	903.5	520.7	382.81	2.360	
13,700.0	6,888.0	13,729.2	6,892.4	192.0	192.0	-90.34	678.8	6,623.0	903.5	519.6	383.87	2.354	
13,779.5	6,887.3	13,808.7	6,891.7	194.2	194.2	-90.34	678.8	6,702.5	903.5	515.2	388.32	2.327	
13,800.0	6,887.1	13,829.2	6,891.5	194.8	194.8	-90.35	678.8	6,723.0	903.5	514.0	389.47	2.320	
13,877.9	6,886.4	13,907.1	6,890.9	197.0	196.9	-90.35	678.8	6,800.9	903.5	509.7	393.83	2.294	
13,900.0	6,886.2	13,929.2	6,890.7	197.6	197.6	-90.35	678.8	6,822.9	903.5	508.4	395.07	2.287	
13,976.3	6,885.5	14,005.5	6,890.1	199.7	199.7	-90.35	678.8	6,899.3	903.5	504.2	399.34	2.262	
14,000.0	6,885.3	14,029.2	6,889.9	200.4	200.4	-90.35	678.8	6,922.9	903.5	502.8	400.67	2.255	
14,074.8	6,884.6	14,104.0	6,889.2	202.5	202.4	-90.36	678.8	6,997.7	903.5	498.6	404.86	2.232	
14,100.0	6,884.4	14,129.2	6,889.0	203.2	203.1	-90.36	678.8	7,022.9	903.5	497.2	406.27	2.224	
14,173.2	6,883.7	14,202.4	6,888.4	205.3	205.2	-90.36	678.8	7,096.1	903.5	493.1	410.37	2.202	
14,200.0	6,883.5	14,229.2	6,888.2	206.0	205.9	-90.36	678.8	7,122.9	903.5	491.6	411.87	2.194	
14,271.6	6,882.8	14,300.8	6,887.6	208.0	208.0	-90.37	678.8	7,194.6	903.5	487.6	415.88	2.173	
14,300.0	6,882.6	14,329.2	6,887.4	208.8	208.7	-90.37	678.8	7,222.9	903.5	486.0	417.47	2.164	
14,370.0	6,881.9	14,399.2	6,886.8	210.8	210.7	-90.37	678.8	7,293.0	903.5	482.1	421.39	2.144	
14,400.0	6,881.7	14,429.2	6,886.5	211.6	211.5	-90.37	678.8	7,322.9	903.5	480.4	423.07	2.136	
14,468.5	6,881.0	14,497.7	6,886.0	213.5	213.5	-90.38	678.8	7,391.4	903.5	476.6	426.91	2.116	
14,500.0	6,880.8	14,529.2	6,885.7	214.4	214.3	-90.38	678.8	7,422.9	903.5	474.8	428.67	2.108	
14,566.9	6,880.2	14,596.1	6,885.1	216.3	216.2	-90.38	678.8	7,489.8	903.5	471.1	432.42	2.089	
14,572.2	6,880.1	14,601.4	6,885.1	216.4	216.4	-90.38	678.8	7,495.1	903.5	470.8	432.72	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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
14,584.2	6,880.0	14,613.0	6,885.0	216.8	216.7	-90.38	678.8	7,506.8	903.5	470.1	433.38	2.085 SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	180.00	-14.6	0.0	14.6	9.5	5.03	2.895	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	180.00	-14.6	0.0	14.6	9.5	5.12	2.847	
1,279.5	1,279.5	1,279.5	1,279.5	2.7	2.7	180.00	-14.6	0.0	14.6	9.1	5.48	2.661	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	180.00	-14.6	0.0	14.6	9.0	5.57	2.617	
1,377.9	1,377.9	1,377.9	1,377.9	3.0	3.0	180.00	-14.6	0.0	14.6	8.7	5.92	2.462	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	180.00	-14.6	0.0	14.6	8.6	6.02	2.422	
1,476.4	1,476.4	1,476.4	1,476.4	3.2	3.2	180.00	-14.6	0.0	14.6	8.2	6.36	2.291	
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	180.00	-14.6	0.0	14.6	8.1	6.47	2.254	
1,537.5	1,537.5	1,537.5	1,537.5	3.3	3.3	180.00	-14.6	0.0	14.6	7.9	6.64	2.196 CC	
1,574.8	1,574.8	1,574.7	1,574.7	3.4	3.4	-179.73	-14.7	-0.1	14.7	7.9	6.80	2.156	
1,600.0	1,600.0	1,599.8	1,599.8	3.5	3.4	-178.91	-14.9	-0.3	14.9	8.0	6.90	2.159	
1,650.0	1,650.0	1,649.6	1,649.6	3.6	3.5	-175.90	-15.9	-1.1	15.9	8.8	7.10	2.242	
1,673.2	1,673.2	1,672.7	1,672.6	3.6	3.6	-54.72	-16.6	-1.7	16.6	9.4	7.19	2.308	
1,700.0	1,700.0	1,699.3	1,699.2	3.7	3.6	-53.21	-17.5	-2.6	17.4	10.1	7.29	2.391	
1,771.6	1,771.6	1,770.5	1,770.3	3.8	3.8	-50.73	-21.0	-5.6	20.0	12.5	7.56	2.648	
1,800.0	1,799.9	1,798.7	1,798.4	3.9	3.8	-50.26	-22.7	-7.1	21.1	13.5	7.66	2.760	
1,870.1	1,869.9	1,868.2	1,867.6	4.0	3.9	-50.01	-27.9	-11.6	24.2	16.3	7.93	3.052	
1,900.0	1,899.7	1,897.9	1,897.0	4.1	4.0	-50.22	-30.5	-13.9	25.6	17.6	8.04	3.185	
1,968.5	1,967.8	1,965.7	1,964.3	4.2	4.2	-51.21	-37.3	-19.8	29.1	20.8	8.31	3.500	
2,000.0	1,999.1	1,996.9	1,995.1	4.3	4.2	-51.84	-40.8	-22.9	30.8	22.4	8.44	3.652	
2,066.9	2,065.5	2,063.1	2,060.3	4.4	4.4	-53.42	-49.1	-30.1	34.8	26.0	8.73	3.982	
2,100.0	2,098.2	2,095.8	2,092.5	4.5	4.5	-54.28	-53.6	-34.0	36.8	28.0	8.87	4.152	
2,165.3	2,162.6	2,160.4	2,155.7	4.7	4.7	-56.10	-63.4	-42.5	41.2	32.0	9.18	4.487	
2,200.0	2,196.6	2,194.9	2,189.6	4.7	4.8	-57.37	-68.8	-47.3	43.4	34.1	9.35	4.643	
2,249.9	2,245.5	2,244.7	2,238.2	4.9	4.9	-59.76	-76.6	-54.1	46.3	36.7	9.63	4.809	
2,263.8	2,259.1	2,258.5	2,251.8	4.9	5.0	-60.51	-78.8	-56.0	47.0	37.3	9.71	4.845	
2,300.0	2,294.5	2,294.7	2,287.1	5.0	5.1	-62.37	-84.4	-60.9	49.0	39.1	9.92	4.942	
2,362.2	2,355.4	2,356.7	2,347.8	5.2	5.3	-65.22	-94.2	-69.4	52.6	42.3	10.31	5.097	
2,400.0	2,392.3	2,394.4	2,384.7	5.4	5.4	-66.77	-100.1	-74.5	54.8	44.2	10.55	5.190	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,454.9	2,443.9	5.6	5.6	-69.01	-109.6	-82.8	58.4	47.4	10.96	5.327		
2,500.0	2,490.2	2,494.2	2,482.3	5.7	5.8	-70.32	-115.7	-88.1	60.8	49.5	11.23	5.412		
2,559.0	2,547.9	2,553.1	2,539.9	5.9	6.0	-72.11	-124.9	-96.2	64.4	52.8	11.64	5.531		
2,600.0	2,588.0	2,593.9	2,579.9	6.1	6.1	-73.23	-131.3	-101.8	67.0	55.0	11.94	5.609		
2,657.5	2,644.2	2,651.3	2,635.9	6.3	6.3	-74.67	-140.3	-109.6	70.6	58.2	12.36	5.710		
2,700.0	2,685.8	2,693.7	2,677.4	6.4	6.5	-75.64	-147.0	-115.4	73.3	60.6	12.68	5.781		
2,755.9	2,740.5	2,749.5	2,732.0	6.6	6.7	-76.82	-155.7	-123.0	76.9	63.8	13.10	5.867		
2,800.0	2,783.6	2,793.5	2,775.0	6.8	6.9	-77.67	-162.6	-129.0	79.7	66.3	13.44	5.932		
2,854.3	2,836.7	2,847.6	2,828.0	7.0	7.1	-78.64	-171.1	-136.4	83.3	69.4	13.86	6.005		
2,900.0	2,881.4	2,893.2	2,872.6	7.2	7.3	-79.39	-178.3	-142.6	86.3	72.0	14.22	6.064		
2,952.7	2,933.0	2,945.8	2,924.1	7.4	7.5	-80.19	-186.5	-149.8	89.7	75.1	14.65	6.126		
3,000.0	2,979.2	2,993.0	2,970.2	7.6	7.7	-80.87	-193.9	-156.3	92.8	77.8	15.02	6.180		
3,051.2	3,029.3	3,044.0	3,020.1	7.8	7.9	-81.54	-201.9	-163.2	96.2	80.8	15.44	6.233		
3,100.0	3,077.1	3,092.7	3,067.7	8.0	8.1	-82.15	-209.5	-169.9	99.5	83.6	15.84	6.282		
3,149.6	3,125.6	3,142.2	3,116.1	8.2	8.3	-82.72	-217.3	-176.6	102.8	86.6	16.25	6.327		
3,200.0	3,174.9	3,192.5	3,165.3	8.4	8.5	-83.27	-225.2	-183.5	106.2	89.5	16.66	6.372		
3,248.0	3,221.8	3,240.4	3,212.2	8.6	8.7	-83.76	-232.7	-190.1	109.4	92.3	17.07	6.411		
3,300.0	3,272.7	3,292.2	3,262.9	8.9	9.0	-84.25	-240.8	-197.1	112.9	95.4	17.50	6.451		
3,346.4	3,318.1	3,338.6	3,308.2	9.0	9.2	-84.67	-248.1	-203.5	116.0	98.1	17.89	6.485		
3,400.0	3,370.5	3,392.0	3,360.5	9.3	9.4	-85.13	-256.4	-210.8	119.7	101.3	18.34	6.522		
3,444.9	3,414.4	3,436.8	3,404.3	9.5	9.6	-85.49	-263.4	-216.9	122.7	104.0	18.73	6.552		
3,500.0	3,468.3	3,491.7	3,458.1	9.7	9.8	-85.91	-272.1	-224.4	126.4	107.2	19.20	6.586		
3,543.3	3,510.7	3,534.9	3,500.3	9.9	10.0	-86.23	-278.8	-230.3	129.4	109.8	19.57	6.611		
3,600.0	3,566.1	3,591.5	3,555.6	10.1	10.2	-86.62	-287.7	-238.0	133.2	113.2	20.05	6.643		
3,641.7	3,606.9	3,633.1	3,596.3	10.3	10.4	-86.89	-294.2	-243.7	136.1	115.7	20.41	6.665		
3,700.0	3,664.0	3,691.3	3,653.2	10.6	10.7	-87.25	-303.3	-251.6	140.0	119.1	20.92	6.695		
3,740.1	3,703.2	3,731.3	3,692.4	10.7	10.9	-87.49	-309.6	-257.1	142.8	121.5	21.27	6.714		
3,800.0	3,761.8	3,791.0	3,750.8	11.0	11.1	-87.82	-319.0	-265.3	146.9	125.1	21.79	6.742		
3,837.4	3,798.3	3,828.3	3,787.2	11.2	11.3	-88.03	-324.8	-270.3	149.4	127.3	22.11	6.758		
3,838.6	3,799.5	3,829.5	3,788.4	11.2	11.3	-88.03	-325.0	-270.5	149.5	127.4	22.12	6.759		
3,900.0	3,859.7	3,890.8	3,848.4	11.4	11.6	-88.18	-334.6	-278.9	153.7	131.1	22.61	6.799		
3,937.0	3,896.1	3,927.7	3,884.5	11.5	11.7	-88.03	-340.4	-283.9	156.3	133.4	22.88	6.833		
4,000.0	3,958.3	3,990.5	3,945.9	11.7	12.0	-87.41	-350.2	-292.5	160.7	137.4	23.31	6.897		
4,035.4	3,993.3	4,025.8	3,980.4	11.8	12.1	-86.86	-355.8	-297.3	163.3	139.7	23.53	6.939		
4,100.0	4,057.4	4,090.1	4,043.3	12.0	12.4	-85.53	-365.8	-306.1	168.0	144.1	23.91	7.026		
4,133.8	4,091.0	4,123.7	4,076.2	12.1	12.6	-84.67	-371.1	-310.7	170.6	146.5	24.09	7.081		
4,200.0	4,156.8	4,189.3	4,140.4	12.2	12.9	-82.71	-381.4	-319.7	175.9	151.5	24.42	7.204		
4,232.3	4,189.0	4,221.3	4,171.7	12.3	13.0	-81.63	-386.4	-324.0	178.6	154.1	24.55	7.276		
4,300.0	4,256.6	4,288.2	4,237.1	12.4	13.3	-79.12	-396.9	-333.2	184.8	160.0	24.80	7.454		
4,330.7	4,287.3	4,318.5	4,266.7	12.5	13.5	-77.90	-401.6	-337.3	187.9	163.0	24.88	7.551		
4,400.0	4,356.6	4,386.6	4,333.3	12.6	13.8	-74.96	-412.3	-346.6	195.4	170.4	25.04	7.804		
4,429.1	4,385.7	4,415.1	4,361.2	12.6	13.9	-73.67	-416.8	-350.5	198.9	173.8	25.08	7.928		
4,437.2	4,393.8	4,423.0	4,369.0	12.7	13.9	167.11	-418.0	-351.6	199.9	178.5	21.41	9.335		
4,500.0	4,456.6	4,486.3	4,431.0	12.7	14.2	170.01	-427.7	-360.0	207.7	185.7	22.03	9.430		
4,527.5	4,484.1	4,514.7	4,458.8	12.8	14.3	171.15	-431.8	-363.6	211.1	188.8	22.29	9.472		
4,600.0	4,556.6	4,589.8	4,532.9	12.9	14.5	173.74	-441.5	-372.0	219.4	196.5	22.91	9.576		
4,626.0	4,582.6	4,616.9	4,559.6	12.9	14.6	174.54	-444.6	-374.8	222.1	199.0	23.12	9.608		
4,700.0	4,656.6	4,694.6	4,636.6	13.1	14.8	176.45	-452.6	-381.7	229.2	205.5	23.67	9.684		
4,724.4	4,681.0	4,720.3	4,662.1	13.1	14.8	176.98	-454.9	-383.7	231.2	207.4	23.83	9.703		
4,800.0	4,756.6	4,800.3	4,741.7	13.2	15.0	178.33	-460.9	-388.9	236.7	212.4	24.31	9.739		
4,822.8	4,779.4	4,824.5	4,765.8	13.3	15.1	178.65	-462.3	-390.2	238.1	213.7	24.44	9.744		
4,900.0	4,856.6	4,906.7	4,847.8	13.4	15.2	179.47	-466.2	-393.6	241.7	216.9	24.84	9.731		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,929.3	4,870.4	13.4	15.3	179.63	-467.0	-394.2	242.4	217.5	24.94	9.721	
5,000.0	4,956.6	5,013.4	4,954.5	13.6	15.4	179.97	-468.6	-395.7	243.9	218.7	25.27	9.655	
5,019.7	4,976.3	5,034.4	4,975.5	13.6	15.4	180.00	-468.8	-395.8	244.1	218.7	25.34	9.631	
5,100.0	5,056.6	5,115.5	5,056.6	13.7	15.6	180.00	-468.8	-395.8	244.1	218.5	25.62	9.526	
5,118.1	5,074.7	5,133.6	5,074.7	13.8	15.6	180.00	-468.8	-395.8	244.1	218.4	25.68	9.503	
5,200.0	5,156.6	5,215.5	5,156.6	13.9	15.7	180.00	-468.8	-395.8	244.1	218.1	25.97	9.399	
5,216.5	5,173.1	5,232.0	5,173.1	13.9	15.7	180.00	-468.8	-395.8	244.1	218.0	26.03	9.378	
5,300.0	5,256.6	5,315.5	5,256.6	14.1	15.8	180.00	-468.8	-395.8	244.1	217.8	26.32	9.274	
5,314.9	5,271.5	5,330.4	5,271.5	14.1	15.9	180.00	-468.8	-395.8	244.1	217.7	26.37	9.256	
5,400.0	5,356.6	5,415.5	5,356.6	14.2	16.0	180.00	-468.8	-395.8	244.1	217.4	26.67	9.152	
5,413.4	5,370.0	5,428.9	5,370.0	14.3	16.0	180.00	-468.8	-395.8	244.1	217.4	26.72	9.136	
5,500.0	5,456.6	5,515.5	5,456.6	14.4	16.1	180.00	-468.8	-395.8	244.1	217.0	27.02	9.032	
5,511.8	5,468.4	5,527.3	5,468.4	14.4	16.1	180.00	-468.8	-395.8	244.1	217.0	27.07	9.018	
5,600.0	5,556.6	5,615.5	5,556.6	14.6	16.3	180.00	-468.8	-395.8	244.1	216.7	27.38	8.914	
5,610.2	5,566.8	5,625.7	5,566.8	14.6	16.3	180.00	-468.8	-395.8	244.1	216.7	27.42	8.902	
5,700.0	5,656.6	5,715.5	5,656.6	14.8	16.4	180.00	-468.8	-395.8	244.1	216.3	27.74	8.798	
5,708.6	5,665.2	5,724.1	5,665.2	14.8	16.4	180.00	-468.8	-395.8	244.1	216.3	27.77	8.788	
5,800.0	5,756.6	5,815.5	5,756.6	14.9	16.6	180.00	-468.8	-395.8	244.1	216.0	28.10	8.685	
5,807.1	5,763.7	5,822.6	5,763.7	14.9	16.6	180.00	-468.8	-395.8	244.1	215.9	28.13	8.677	
5,900.0	5,856.6	5,915.5	5,856.6	15.1	16.7	180.00	-468.8	-395.8	244.1	215.6	28.47	8.574	
5,905.5	5,862.1	5,921.0	5,862.1	15.1	16.7	180.00	-468.8	-395.8	244.1	215.6	28.49	8.567	
6,000.0	5,956.6	6,015.5	5,956.6	15.3	16.9	180.00	-468.8	-395.8	244.1	215.2	28.84	8.464	
6,003.9	5,960.5	6,019.4	5,960.5	15.3	16.9	180.00	-468.8	-395.8	244.1	215.2	28.85	8.460	
6,100.0	6,056.6	6,115.5	6,056.6	15.5	17.0	180.00	-468.8	-395.8	244.1	214.9	29.20	8.357	
6,102.3	6,058.9	6,117.8	6,058.9	15.5	17.0	180.00	-468.8	-395.8	244.1	214.9	29.21	8.355	
6,200.0	6,156.6	6,215.5	6,156.6	15.7	17.2	180.00	-468.8	-395.8	244.1	214.5	29.58	8.252	
6,200.8	6,157.4	6,216.3	6,157.4	15.7	17.2	180.00	-468.8	-395.8	244.1	214.5	29.58	8.252	
6,219.9	6,176.5	6,235.4	6,176.4	15.7	17.2	179.95	-468.8	-395.6	244.1	214.4	29.64	8.233	
6,272.2	6,228.8	6,287.5	6,228.5	15.8	17.3	179.20	-468.8	-392.4	244.1	214.3	29.76	8.203	
6,299.2	6,255.8	6,314.2	6,255.0	15.8	17.3	88.59	-468.8	-389.3	244.1	213.3	30.80	7.926	
6,300.0	6,256.6	6,315.0	6,255.7	15.8	17.3	88.57	-468.8	-389.2	244.1	213.3	30.81	7.925	
6,350.0	6,306.4	6,364.1	6,304.2	15.9	17.3	87.45	-468.8	-380.9	244.3	213.3	31.00	7.882	
6,397.6	6,353.6	6,410.7	6,349.4	15.9	17.3	86.39	-468.8	-370.0	244.6	213.4	31.13	7.855	
6,400.0	6,355.9	6,413.0	6,351.7	15.9	17.3	86.34	-468.8	-369.3	244.6	213.4	31.14	7.854	
6,450.0	6,404.8	6,461.6	6,398.0	15.9	17.3	85.26	-468.8	-354.7	244.9	213.7	31.24	7.840	
6,496.0	6,449.0	6,506.0	6,439.4	16.0	17.3	84.29	-468.8	-338.5	245.3	214.0	31.30	7.838	
6,500.0	6,452.8	6,509.8	6,442.9	16.0	17.3	84.20	-468.8	-337.0	245.3	214.0	31.30	7.838	
6,550.0	6,499.7	6,557.8	6,486.3	15.9	17.3	83.18	-468.8	-316.6	245.8	214.5	31.33	7.847	
6,594.5	6,540.3	6,600.0	6,523.2	15.9	17.2	82.31	-468.8	-296.2	246.3	215.0	31.33	7.861	
6,600.0	6,545.3	6,605.5	6,528.0	15.9	17.2	82.20	-468.8	-293.3	246.4	215.0	31.33	7.863	
6,650.0	6,589.3	6,653.0	6,567.8	15.9	17.2	81.26	-468.8	-267.5	247.0	215.6	31.33	7.882	
6,692.9	6,625.7	6,693.6	6,600.4	15.9	17.2	80.48	-468.8	-243.5	247.5	216.2	31.34	7.898	
6,700.0	6,631.6	6,700.0	6,605.5	15.9	17.2	80.36	-468.8	-239.5	247.6	216.3	31.33	7.901	
6,750.0	6,671.9	6,747.3	6,641.4	15.9	17.1	79.51	-468.8	-208.8	248.2	216.9	31.37	7.914	
6,791.3	6,703.6	6,785.9	6,669.3	15.9	17.1	78.85	-468.8	-182.0	248.8	217.4	31.43	7.914	
6,800.0	6,710.1	6,794.1	6,674.9	15.9	17.1	78.72	-468.8	-176.1	248.9	217.5	31.45	7.915	
6,850.0	6,745.9	6,840.7	6,706.1	16.0	17.0	77.98	-468.8	-141.5	249.6	218.0	31.60	7.898	
6,889.7	6,772.6	6,877.6	6,729.2	16.1	17.0	77.43	-468.8	-112.7	250.1	218.3	31.79	7.867	
6,900.0	6,779.2	6,887.1	6,734.9	16.1	17.0	77.30	-468.8	-105.1	250.2	218.4	31.84	7.858	
6,950.0	6,809.8	6,933.4	6,761.2	16.3	17.0	76.68	-468.8	-67.0	250.8	218.6	32.20	7.790	
6,988.2	6,831.3	6,968.6	6,779.5	16.4	17.0	76.25	-468.8	-36.9	251.3	218.7	32.57	7.716	
7,000.0	6,837.6	6,979.5	6,784.9	16.5	17.1	76.12	-468.8	-27.4	251.4	218.7	32.69	7.691	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,050.0	6,862.5	7,025.5	6,805.9	16.9	17.1	75.62	-468.8	13.5	252.0	218.6	33.33	7.559	
7,086.6	6,878.7	7,059.1	6,819.6	17.2	17.3	75.30	-468.8	44.1	252.3	218.4	33.91	7.442	
7,100.0	6,884.2	7,071.4	6,824.2	17.3	17.4	75.19	-468.8	55.5	252.5	218.3	34.13	7.397	
7,150.0	6,902.7	7,117.2	6,839.8	17.8	17.8	74.82	-468.8	98.6	252.9	217.8	35.10	7.206	
7,185.0	6,913.8	7,150.0	6,849.2	18.3	18.2	74.60	-468.8	130.0	253.2	217.3	35.88	7.056	
7,200.0	6,918.0	7,162.9	6,852.5	18.5	18.4	74.52	-468.8	142.5	253.3	217.0	36.22	6.992	
7,250.0	6,929.9	7,208.5	6,862.5	19.2	19.0	74.29	-468.8	187.0	253.5	216.0	37.50	6.760	
7,283.4	6,936.0	7,239.0	6,867.5	19.7	19.5	74.17	-468.8	217.1	253.7	215.2	38.45	6.597	
7,300.0	6,938.4	7,254.1	6,869.5	20.0	19.8	74.13	-468.8	232.0	253.8	214.8	38.93	6.518	
7,350.0	6,943.4	7,300.0	6,873.7	20.9	20.6	74.03	-468.8	277.7	253.9	213.4	40.49	6.270	
7,381.9	6,944.8	7,328.7	6,874.9	21.4	21.1	74.00	-468.8	306.4	253.9	212.4	41.55	6.111	
7,403.7	6,945.0	7,350.2	6,875.0	21.8	21.5	74.00	-468.8	327.9	253.9	211.6	42.31	6.001	
7,422.1	6,944.8	7,366.9	6,874.8	22.2	21.8	73.99	-468.8	344.6	253.9	211.0	42.96	5.911	
7,480.3	6,944.3	7,425.1	6,874.2	23.3	22.9	73.97	-468.8	402.7	253.9	208.8	45.14	5.626	
7,500.0	6,944.1	7,444.8	6,874.0	23.7	23.3	73.97	-468.8	422.4	253.9	208.1	45.89	5.534	
7,578.7	6,943.4	7,523.5	6,873.1	25.4	25.0	73.95	-468.8	501.2	254.0	204.9	49.03	5.180	
7,600.0	6,943.2	7,544.8	6,872.9	25.8	25.5	73.94	-468.8	522.4	254.0	204.1	49.90	5.090	
7,677.1	6,942.5	7,621.9	6,872.1	27.5	27.2	73.92	-468.8	599.6	254.0	200.8	53.17	4.777	
7,700.0	6,942.3	7,644.8	6,871.9	28.0	27.7	73.91	-468.8	622.4	254.0	199.9	54.16	4.690	
7,775.6	6,941.6	7,720.3	6,871.1	29.8	29.4	73.89	-468.8	698.0	254.1	196.5	57.52	4.417	
7,800.0	6,941.4	7,744.8	6,870.8	30.3	30.0	73.88	-468.8	722.4	254.1	195.4	58.62	4.334	
7,874.0	6,940.7	7,818.8	6,870.1	32.1	31.8	73.86	-468.8	796.4	254.1	192.1	62.02	4.097	
7,900.0	6,940.5	7,844.8	6,869.8	32.7	32.4	73.85	-468.8	822.4	254.1	190.9	63.23	4.019	
7,972.4	6,939.8	7,917.2	6,869.0	34.5	34.2	73.83	-468.8	894.8	254.1	187.5	66.64	3.814	
8,000.0	6,939.6	7,944.8	6,868.7	35.2	34.9	73.82	-468.8	922.4	254.1	186.2	67.95	3.740	
8,070.8	6,938.9	8,015.6	6,868.0	37.0	36.7	73.80	-468.8	993.3	254.2	182.8	71.35	3.562	
8,100.0	6,938.7	8,044.8	6,867.7	37.7	37.4	73.79	-468.8	1,022.4	254.2	181.4	72.76	3.493	
8,169.3	6,938.0	8,114.0	6,867.0	39.5	39.2	73.77	-468.8	1,091.7	254.2	178.1	76.15	3.338	
8,200.0	6,937.7	8,144.8	6,866.6	40.3	40.0	73.76	-468.8	1,122.4	254.2	176.6	77.65	3.274	
8,267.7	6,937.1	8,212.5	6,865.9	42.0	41.7	73.74	-468.8	1,190.1	254.2	173.2	81.00	3.139	
8,300.0	6,936.8	8,244.8	6,865.6	42.8	42.5	73.73	-468.8	1,222.4	254.3	171.7	82.61	3.078	
8,366.1	6,936.2	8,310.9	6,864.9	44.6	44.3	73.71	-468.8	1,288.5	254.3	168.4	85.91	2.960	
8,400.0	6,935.9	8,344.8	6,864.5	45.5	45.2	73.70	-468.8	1,322.4	254.3	166.7	87.61	2.903	
8,464.5	6,935.3	8,409.3	6,863.9	47.2	46.8	73.68	-468.8	1,386.9	254.3	163.5	90.87	2.799	
8,500.0	6,935.0	8,444.8	6,863.5	48.1	47.8	73.67	-468.8	1,422.4	254.3	161.7	92.66	2.745	
8,563.0	6,934.5	8,507.7	6,862.8	49.8	49.5	73.65	-468.8	1,485.4	254.4	158.5	95.86	2.654	
8,600.0	6,934.1	8,544.8	6,862.5	50.7	50.4	73.64	-468.8	1,522.4	254.4	156.6	97.74	2.603	
8,661.4	6,933.6	8,606.2	6,861.8	52.4	52.1	73.62	-468.8	1,583.8	254.4	153.5	100.88	2.522	
8,700.0	6,933.2	8,644.8	6,861.4	53.4	53.1	73.61	-468.8	1,622.4	254.4	151.6	102.85	2.474	
8,759.8	6,932.7	8,704.6	6,860.8	55.0	54.7	73.59	-468.8	1,682.2	254.4	148.5	105.93	2.402	
8,800.0	6,932.3	8,744.8	6,860.4	56.1	55.8	73.58	-468.8	1,722.4	254.5	146.5	107.99	2.356	
8,858.2	6,931.8	8,803.0	6,859.8	57.7	57.4	73.56	-468.8	1,780.6	254.5	143.5	111.00	2.293	
8,900.0	6,931.4	8,844.8	6,859.3	58.8	58.5	73.55	-468.8	1,822.4	254.5	141.3	113.15	2.249	
8,956.7	6,930.9	8,901.4	6,858.7	60.3	60.0	73.53	-468.8	1,879.0	254.5	138.4	116.09	2.192	
9,000.0	6,930.5	8,944.8	6,858.3	61.5	61.2	73.52	-468.8	1,922.4	254.5	136.2	118.33	2.151	
9,055.1	6,930.0	8,999.9	6,857.7	63.0	62.7	73.50	-468.8	1,977.4	254.6	133.4	121.19	2.100	
9,100.0	6,929.6	9,044.8	6,857.2	64.2	63.9	73.49	-468.8	2,022.3	254.6	131.0	123.53	2.061	
9,153.5	6,929.1	9,098.3	6,856.7	65.6	65.3	73.47	-468.8	2,075.9	254.6	128.3	126.32	2.016	
9,200.0	6,928.7	9,144.8	6,856.2	66.9	66.6	73.46	-468.8	2,122.3	254.6	125.9	128.74	1.978	
9,251.9	6,928.2	9,196.7	6,855.6	68.3	68.0	73.44	-468.8	2,174.3	254.6	123.2	131.45	1.937	
9,300.0	6,927.8	9,244.8	6,855.1	69.6	69.3	73.43	-468.8	2,222.3	254.7	120.7	133.96	1.901	
9,350.4	6,927.3	9,295.1	6,854.6	71.0	70.7	73.41	-468.8	2,272.7	254.7	118.1	136.59	1.864	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,400.0	6,926.9	9,344.8	6,854.1	72.4	72.1	73.40	-468.8	2,322.3	254.7	115.5	139.19	1.830	
9,448.8	6,926.4	9,393.6	6,853.6	73.7	73.4	73.38	-468.8	2,371.1	254.7	113.0	141.75	1.797	
9,500.0	6,926.0	9,444.8	6,853.0	75.1	74.8	73.37	-468.8	2,422.3	254.7	110.3	144.43	1.764	
9,547.2	6,925.5	9,492.0	6,852.5	76.4	76.1	73.35	-468.8	2,469.5	254.8	107.8	146.91	1.734	
9,600.0	6,925.1	9,544.8	6,852.0	77.9	77.6	73.34	-468.8	2,522.3	254.8	105.1	149.68	1.702	
9,645.6	6,924.6	9,590.4	6,851.5	79.1	78.8	73.32	-468.8	2,568.0	254.8	102.7	152.08	1.675	
9,700.0	6,924.1	9,644.8	6,851.0	80.6	80.3	73.31	-468.8	2,622.3	254.8	99.9	154.94	1.645	
9,744.1	6,923.7	9,688.8	6,850.5	81.8	81.5	73.29	-468.8	2,666.4	254.8	97.6	157.26	1.620	
9,800.0	6,923.2	9,744.8	6,849.9	83.4	83.1	73.28	-468.8	2,722.3	254.9	94.7	160.20	1.591	
9,842.5	6,922.9	9,787.3	6,849.5	84.5	84.2	73.26	-468.8	2,764.8	254.9	92.4	162.44	1.569	
9,900.0	6,922.3	9,844.8	6,848.9	86.1	85.8	73.25	-468.8	2,822.3	254.9	89.4	165.47	1.540	
9,940.9	6,922.0	9,885.7	6,848.4	87.2	86.9	73.23	-468.8	2,863.2	254.9	87.3	167.63	1.521	
10,000.0	6,921.4	9,944.8	6,847.8	88.9	88.6	73.22	-468.8	2,922.3	254.9	84.2	170.75	1.493 Level 3	
10,039.3	6,921.1	9,984.1	6,847.4	90.0	89.7	73.20	-468.8	2,961.6	255.0	82.1	172.82	1.475 Level 3	
10,100.0	6,920.5	10,044.8	6,846.8	91.6	91.3	73.19	-468.8	3,022.3	255.0	79.0	176.02	1.449 Level 3	
10,137.8	6,920.2	10,082.5	6,846.4	92.7	92.4	73.17	-468.8	3,060.1	255.0	77.0	178.02	1.432 Level 3	
10,200.0	6,919.6	10,144.8	6,845.7	94.4	94.1	73.16	-468.8	3,122.3	255.0	73.7	181.31	1.407 Level 3	
10,236.2	6,919.3	10,181.0	6,845.3	95.4	95.1	73.15	-468.8	3,158.5	255.0	71.8	183.22	1.392 Level 3	
10,300.0	6,918.7	10,244.8	6,844.7	97.2	96.9	73.13	-468.8	3,222.3	255.1	68.5	186.59	1.367 Level 3	
10,334.6	6,918.4	10,279.4	6,844.3	98.1	97.8	73.12	-468.8	3,256.9	255.1	66.6	188.42	1.354 Level 3	
10,400.0	6,917.8	10,344.8	6,843.6	99.9	99.6	73.10	-468.8	3,322.3	255.1	63.2	191.88	1.329 Level 3	
10,433.0	6,917.5	10,377.8	6,843.3	100.9	100.6	73.09	-468.8	3,355.3	255.1	61.5	193.63	1.318 Level 3	
10,500.0	6,916.9	10,444.8	6,842.6	102.7	102.4	73.07	-468.8	3,422.3	255.1	58.0	197.17	1.294 Level 3	
10,531.5	6,916.6	10,476.2	6,842.3	103.6	103.3	73.06	-468.8	3,453.7	255.2	56.3	198.84	1.283 Level 3	
10,600.0	6,916.0	10,544.8	6,841.5	105.5	105.2	73.04	-468.8	3,522.3	255.2	52.7	202.46	1.260 Level 3	
10,629.9	6,915.7	10,574.7	6,841.2	106.3	106.0	73.03	-468.8	3,552.2	255.2	51.1	204.05	1.251 Level 3	
10,700.0	6,915.1	10,644.8	6,840.5	108.3	108.0	73.01	-468.8	3,622.3	255.2	47.5	207.76	1.228 Level 2	
10,728.3	6,914.8	10,673.1	6,840.2	109.1	108.8	73.00	-468.8	3,650.6	255.2	46.0	209.26	1.220 Level 2	
10,800.0	6,914.2	10,744.8	6,839.5	111.0	110.7	72.98	-468.8	3,722.3	255.3	42.2	213.05	1.198 Level 2	
10,826.7	6,913.9	10,771.5	6,839.2	111.8	111.5	72.97	-468.8	3,749.0	255.3	40.8	214.47	1.190 Level 2	
10,900.0	6,913.3	10,844.8	6,838.4	113.8	113.5	72.95	-468.8	3,822.2	255.3	37.0	218.35	1.169 Level 2	
10,925.2	6,913.1	10,869.9	6,838.2	114.5	114.2	72.94	-468.8	3,847.4	255.3	35.6	219.68	1.162 Level 2	
11,000.0	6,912.4	10,944.8	6,837.4	116.6	116.3	72.92	-468.8	3,922.2	255.3	31.7	223.65	1.142 Level 2	
11,023.6	6,912.2	10,968.4	6,837.1	117.3	117.0	72.91	-468.8	3,945.8	255.4	30.5	224.90	1.135 Level 2	
11,100.0	6,911.5	11,044.8	6,836.3	119.4	119.1	72.89	-468.8	4,022.2	255.4	26.4	228.95	1.115 Level 2	
11,122.0	6,911.3	11,066.8	6,836.1	120.0	119.7	72.88	-468.8	4,044.3	255.4	25.3	230.12	1.110 Level 2	
11,200.0	6,910.6	11,144.8	6,835.3	122.2	121.9	72.86	-468.8	4,122.2	255.4	21.2	234.25	1.090 Level 2	
11,220.4	6,910.4	11,165.2	6,835.1	122.7	122.4	72.85	-468.8	4,142.7	255.4	20.1	235.33	1.085 Level 2	
11,300.0	6,909.7	11,244.8	6,834.2	125.0	124.7	72.83	-468.8	4,222.2	255.5	15.9	239.55	1.066 Level 2	
11,318.9	6,909.5	11,263.6	6,834.0	125.5	125.2	72.82	-468.8	4,241.1	255.5	14.9	240.55	1.062 Level 2	
11,400.0	6,908.8	11,344.8	6,833.2	127.7	127.4	72.80	-468.8	4,322.2	255.5	10.7	244.85	1.044 Level 2	
11,417.3	6,908.6	11,362.1	6,833.0	128.2	127.9	72.79	-468.8	4,339.5	255.5	9.7	245.77	1.040 Level 2	
11,500.0	6,907.9	11,444.8	6,832.2	130.5	130.2	72.77	-468.8	4,422.2	255.5	5.4	250.15	1.022 Level 2	
11,515.7	6,907.7	11,460.5	6,832.0	131.0	130.7	72.76	-468.8	4,437.9	255.6	4.6	250.99	1.018 Level 2	
11,600.0	6,907.0	11,544.8	6,831.1	133.3	133.0	72.74	-468.8	4,522.2	255.6	0.1	255.46	1.001 Level 2	
11,614.1	6,906.8	11,558.9	6,831.0	133.7	133.4	72.73	-468.8	4,536.4	255.6	-0.6	256.21	0.998 Level 1	
11,700.0	6,906.0	11,644.8	6,830.1	136.1	135.8	72.71	-468.8	4,622.2	255.6	-5.1	260.76	0.980 Level 1	
11,712.6	6,905.9	11,657.3	6,829.9	136.5	136.2	72.70	-468.8	4,634.8	255.6	-5.8	261.42	0.978 Level 1	
11,800.0	6,905.1	11,744.8	6,829.0	138.9	138.6	72.68	-468.8	4,722.2	255.7	-10.4	266.06	0.961 Level 1	
11,811.0	6,905.0	11,755.8	6,828.9	139.2	138.9	72.67	-468.8	4,733.2	255.7	-11.0	266.64	0.959 Level 1	
11,900.0	6,904.2	11,844.8	6,828.0	141.7	141.4	72.65	-468.8	4,822.2	255.7	-15.6	271.36	0.942 Level 1	
11,909.4	6,904.2	11,854.2	6,827.9	141.9	141.6	72.65	-468.8	4,831.6	255.7	-16.1	271.86	0.941 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	11,944.8	6,826.9	144.5	144.2	72.62	-468.8	4,922.2	255.8	-20.9	276.66	0.924	Level 1
12,007.8	6,903.3	11,952.6	6,826.9	144.7	144.4	72.62	-468.8	4,930.0	255.8	-21.3	277.08	0.923	Level 1
12,100.0	6,902.4	12,044.7	6,825.9	147.3	147.0	72.59	-468.8	5,022.2	255.8	-26.2	281.97	0.907	Level 1
12,106.3	6,902.4	12,051.0	6,825.8	147.4	147.1	72.59	-468.8	5,028.5	255.8	-26.5	282.30	0.906	Level 1
12,200.0	6,901.5	12,144.7	6,824.9	150.1	149.8	72.56	-468.8	5,122.2	255.8	-31.4	287.27	0.891	Level 1
12,204.7	6,901.5	12,149.4	6,824.8	150.2	149.9	72.56	-468.8	5,126.9	255.8	-31.7	287.52	0.890	Level 1
12,300.0	6,900.6	12,244.7	6,823.8	152.9	152.5	72.53	-468.8	5,222.2	255.9	-36.7	292.57	0.875	Level 1
12,303.1	6,900.6	12,247.9	6,823.8	152.9	152.6	72.53	-468.8	5,225.3	255.9	-36.8	292.73	0.874	Level 1
12,400.0	6,899.7	12,344.7	6,822.8	155.6	155.3	72.50	-468.8	5,322.2	255.9	-41.9	297.87	0.859	Level 1
12,401.5	6,899.7	12,346.3	6,822.7	155.7	155.4	72.50	-468.8	5,323.7	255.9	-42.0	297.95	0.859	Level 1
12,500.0	6,898.8	12,444.7	6,821.7	158.4	158.1	72.47	-468.8	5,422.2	256.0	-47.2	303.17	0.844	Level 1
12,598.4	6,897.9	12,543.1	6,820.7	161.2	160.9	72.44	-468.8	5,520.6	256.0	-52.4	308.38	0.830	Level 1
12,600.0	6,897.9	12,544.7	6,820.7	161.2	160.9	72.44	-468.8	5,522.2	256.0	-52.5	308.46	0.830	Level 1
12,696.8	6,897.0	12,641.6	6,819.7	163.9	163.6	72.41	-468.8	5,619.0	256.1	-57.5	313.59	0.816	Level 1
12,700.0	6,897.0	12,644.7	6,819.6	164.0	163.7	72.41	-468.8	5,622.1	256.1	-57.7	313.76	0.816	Level 1
12,795.2	6,896.1	12,740.0	6,818.6	166.7	166.4	72.38	-468.8	5,717.4	256.1	-62.7	318.81	0.803	Level 1
12,800.0	6,896.1	12,744.7	6,818.6	166.8	166.5	72.38	-468.8	5,722.1	256.1	-63.0	319.06	0.803	Level 1
12,893.7	6,895.3	12,838.4	6,817.6	169.4	169.1	72.35	-468.8	5,815.8	256.1	-67.9	324.02	0.790	Level 1
12,900.0	6,895.2	12,844.7	6,817.6	169.6	169.3	72.35	-468.8	5,822.1	256.1	-68.2	324.36	0.790	Level 1
12,992.1	6,894.4	12,936.8	6,816.6	172.2	171.9	72.32	-468.8	5,914.2	256.2	-73.1	329.23	0.778	Level 1
13,000.0	6,894.3	12,944.7	6,816.5	172.4	172.1	72.32	-468.8	5,922.1	256.2	-73.5	329.65	0.777	Level 1
13,090.5	6,893.5	13,035.3	6,815.6	175.0	174.6	72.30	-468.8	6,012.7	256.2	-78.2	334.45	0.766	Level 1
13,100.0	6,893.4	13,044.7	6,815.5	175.2	174.9	72.29	-468.8	6,022.1	256.2	-78.7	334.95	0.765	Level 1
13,188.9	6,892.6	13,133.7	6,814.5	177.7	177.4	72.27	-468.8	6,111.1	256.3	-83.4	339.66	0.754	Level 1
13,200.0	6,892.5	13,144.7	6,814.4	178.0	177.7	72.26	-468.8	6,122.1	256.3	-84.0	340.24	0.753	Level 1
13,287.4	6,891.7	13,232.1	6,813.5	180.5	180.2	72.24	-468.8	6,209.5	256.3	-88.6	344.87	0.743	Level 1
13,300.0	6,891.6	13,244.7	6,813.4	180.8	180.5	72.23	-468.8	6,222.1	256.3	-89.2	345.53	0.742	Level 1
13,385.8	6,890.8	13,330.5	6,812.5	183.2	182.9	72.21	-468.8	6,307.9	256.3	-93.7	350.07	0.732	Level 1
13,400.0	6,890.7	13,344.7	6,812.3	183.6	183.3	72.20	-468.8	6,322.1	256.3	-94.5	350.83	0.731	Level 1
13,484.2	6,889.9	13,429.0	6,811.5	186.0	185.7	72.18	-468.8	6,406.3	256.4	-98.9	355.28	0.722	Level 1
13,500.0	6,889.8	13,444.7	6,811.3	186.4	186.1	72.17	-468.8	6,422.1	256.4	-99.7	356.12	0.720	Level 1
13,582.6	6,889.0	13,527.4	6,810.4	188.7	188.4	72.15	-468.8	6,504.7	256.4	-104.1	360.49	0.711	Level 1
13,600.0	6,888.9	13,544.7	6,810.3	189.2	188.9	72.14	-468.8	6,522.1	256.4	-105.0	361.41	0.710	Level 1
13,681.1	6,888.1	13,625.8	6,809.4	191.5	191.2	72.12	-468.8	6,603.2	256.5	-109.2	365.69	0.701	Level 1
13,700.0	6,888.0	13,644.7	6,809.2	192.0	191.7	72.11	-468.8	6,622.1	256.5	-110.2	366.69	0.699	Level 1
13,779.5	6,887.3	13,724.2	6,808.4	194.2	193.9	72.09	-468.8	6,701.6	256.5	-114.4	370.90	0.692	Level 1
13,800.0	6,887.1	13,744.7	6,808.2	194.8	194.5	72.09	-468.8	6,722.1	256.5	-115.5	371.98	0.690	Level 1
13,877.9	6,886.4	13,822.7	6,807.4	197.0	196.7	72.06	-468.8	6,800.0	256.6	-119.5	376.10	0.682	Level 1
13,900.0	6,886.2	13,844.7	6,807.1	197.6	197.3	72.06	-468.8	6,822.1	256.6	-120.7	377.27	0.680	Level 1
13,976.3	6,885.5	13,921.1	6,806.3	199.7	199.4	72.03	-468.8	6,898.4	256.6	-124.7	381.30	0.673	Level 1
14,000.0	6,885.3	13,944.7	6,806.1	200.4	200.1	72.03	-468.8	6,922.1	256.6	-125.9	382.55	0.671	Level 1
14,074.8	6,884.6	14,019.5	6,805.3	202.5	202.2	72.00	-468.8	6,996.8	256.6	-129.9	386.50	0.664	Level 1
14,100.0	6,884.4	14,044.7	6,805.0	203.2	202.9	72.00	-468.8	7,022.1	256.7	-131.2	387.84	0.662	Level 1
14,173.2	6,883.7	14,117.9	6,804.3	205.3	205.0	71.98	-468.8	7,095.3	256.7	-135.0	391.70	0.655	Level 1
14,200.0	6,883.5	14,144.7	6,804.0	206.0	205.7	71.97	-468.8	7,122.1	256.7	-136.4	393.12	0.653	Level 1
14,271.6	6,882.8	14,216.4	6,803.3	208.0	207.7	71.95	-468.8	7,193.7	256.7	-140.2	396.90	0.647	Level 1
14,300.0	6,882.6	14,244.7	6,803.0	208.8	208.5	71.94	-468.8	7,222.1	256.7	-141.7	398.40	0.644	Level 1
14,370.0	6,881.9	14,314.8	6,802.2	210.8	210.5	71.92	-468.8	7,292.1	256.8	-145.3	402.10	0.639	Level 1
14,400.0	6,881.7	14,344.7	6,801.9	211.6	211.3	71.91	-468.8	7,322.1	256.8	-146.9	403.68	0.636	Level 1
14,468.5	6,881.0	14,413.2	6,801.2	213.5	213.2	71.89	-468.8	7,390.5	256.8	-150.5	407.30	0.631	Level 1
14,500.0	6,880.8	14,444.7	6,800.9	214.4	214.1	71.88	-468.8	7,422.0	256.8	-152.1	408.96	0.628	Level 1
14,566.9	6,880.2	14,511.6	6,800.2	216.3	216.0	71.86	-468.8	7,488.9	256.9	-155.6	412.49	0.623	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,584.2	6,880.0	14,528.9	6,800.0	216.8	216.5	71.85	-468.8	7,506.2	256.9	-156.5	413.40	0.621	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	97.4	97.4	0.1	0.1	0.00	14.6	0.0	14.6	14.4	0.17	86.190	
100.0	100.0	99.0	99.0	0.1	0.1	0.00	14.6	0.0	14.6	14.4	0.17	84.622	
196.8	196.8	195.8	195.8	0.3	0.3	0.00	14.6	0.0	14.6	14.0	0.61	24.039	
200.0	200.0	199.0	199.0	0.3	0.3	0.00	14.6	0.0	14.6	14.0	0.62	23.490	
295.3	295.3	294.3	294.3	0.5	0.5	0.00	14.6	0.0	14.6	13.5	1.05	13.896	
300.0	300.0	299.0	299.0	0.5	0.5	0.00	14.6	0.0	14.6	13.5	1.07	13.620	
393.7	393.7	392.7	392.7	0.7	0.7	0.00	14.6	0.0	14.6	13.1	1.49	9.773	
400.0	400.0	399.0	399.0	0.8	0.8	0.00	14.6	0.0	14.6	13.1	1.52	9.591	
492.1	492.1	491.1	491.1	1.0	1.0	0.00	14.6	0.0	14.6	12.6	1.93	7.537	
500.0	500.0	499.0	499.0	1.0	1.0	0.00	14.6	0.0	14.6	12.6	1.97	7.401	
590.5	590.5	589.5	589.5	1.2	1.2	0.00	14.6	0.0	14.6	12.2	2.38	6.133	
600.0	600.0	599.0	599.0	1.2	1.2	0.00	14.6	0.0	14.6	12.2	2.42	6.025	
689.0	689.0	688.0	688.0	1.4	1.4	0.00	14.6	0.0	14.6	11.8	2.82	5.170	
700.0	700.0	699.0	699.0	1.4	1.4	0.00	14.6	0.0	14.6	11.7	2.87	5.081	
787.4	787.4	786.4	786.4	1.6	1.6	0.00	14.6	0.0	14.6	11.3	3.26	4.469	
800.0	800.0	799.0	799.0	1.7	1.7	0.00	14.6	0.0	14.6	11.3	3.32	4.393	
885.8	885.8	884.8	884.8	1.9	1.9	0.00	14.6	0.0	14.6	10.9	3.70	3.935	
900.0	900.0	899.0	899.0	1.9	1.9	0.00	14.6	0.0	14.6	10.8	3.77	3.868	
984.2	984.2	983.2	983.2	2.1	2.1	0.00	14.6	0.0	14.6	10.4	4.15	3.515	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.00	14.6	0.0	14.6	10.4	4.22	3.456	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	0.00	14.6	0.0	14.6	10.0	4.59	3.176	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.3	0.00	14.6	0.0	14.6	9.9	4.67	3.123	
1,181.1	1,181.1	1,180.1	1,180.1	2.5	2.5	0.00	14.6	0.0	14.6	9.5	5.03	2.897	
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.00	14.6	0.0	14.6	9.5	5.12	2.849	
1,279.5	1,279.5	1,278.5	1,278.5	2.7	2.7	0.00	14.6	0.0	14.6	9.1	5.47	2.663	
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	0.00	14.6	0.0	14.6	9.0	5.57	2.618	
1,377.9	1,377.9	1,376.9	1,376.9	3.0	3.0	0.00	14.6	0.0	14.6	8.7	5.92	2.463	
1,400.0	1,400.0	1,399.0	1,399.0	3.0	3.0	0.00	14.6	0.0	14.6	8.6	6.01	2.423	
1,444.1	1,444.1	1,443.1	1,443.1	3.1	3.1	0.00	14.6	0.0	14.6	8.4	6.21	2.345 CC	
1,476.4	1,476.4	1,475.4	1,475.4	3.2	3.2	-0.44	14.6	-0.1	14.6	8.2	6.35	2.293	
1,500.0	1,500.0	1,499.0	1,499.0	3.2	3.2	-1.65	14.6	-0.4	14.6	8.1	6.46	2.258	
1,574.8	1,574.8	1,573.7	1,573.7	3.4	3.4	-10.38	14.6	-2.7	14.8	8.0	6.77	2.188	
1,600.0	1,600.0	1,598.9	1,598.8	3.5	3.4	-14.85	14.6	-3.9	15.1	8.2	6.88	2.193	
1,650.0	1,650.0	1,648.7	1,648.5	3.6	3.5	-25.27	14.6	-6.9	16.1	9.0	7.10	2.275	
1,673.2	1,673.2	1,671.8	1,671.6	3.6	3.6	89.43	14.6	-8.6	16.9	9.7	7.19	2.355	
1,700.0	1,700.0	1,698.4	1,698.1	3.7	3.6	84.52	14.6	-10.8	18.1	10.8	7.30	2.481	
1,771.6	1,771.6	1,769.5	1,768.9	3.8	3.8	75.03	14.6	-17.8	22.3	14.7	7.59	2.940	
1,800.0	1,799.9	1,797.6	1,796.8	3.9	3.9	72.54	14.6	-21.1	24.3	16.6	7.70	3.157	
1,870.1	1,869.9	1,867.0	1,865.5	4.0	4.0	68.55	14.7	-30.3	29.9	21.9	7.99	3.740	
1,900.0	1,899.7	1,896.5	1,894.7	4.1	4.1	67.55	14.7	-34.7	32.5	24.4	8.11	4.006	
1,968.5	1,967.8	1,964.0	1,961.3	4.2	4.3	66.30	14.7	-46.0	39.0	30.5	8.40	4.634	
2,000.0	1,999.1	1,995.0	1,991.7	4.3	4.4	66.09	14.7	-51.7	42.1	33.6	8.54	4.933	
2,066.9	2,065.5	2,060.9	2,056.2	4.4	4.6	66.15	14.8	-64.9	49.3	40.5	8.85	5.572	
2,100.0	2,098.2	2,093.7	2,088.4	4.5	4.7	66.56	14.8	-71.7	52.9	43.9	9.01	5.866	
2,165.3	2,162.6	2,158.7	2,152.0	4.7	4.9	68.22	14.8	-85.2	59.5	50.1	9.36	6.353	
2,200.0	2,196.6	2,193.2	2,185.7	4.7	5.0	69.47	14.8	-92.4	62.7	53.2	9.55	6.572	
2,249.9	2,245.5	2,242.8	2,234.2	4.9	5.2	71.64	14.9	-102.7	67.3	57.5	9.85	6.836	
2,263.8	2,259.1	2,256.6	2,247.7	4.9	5.2	72.31	14.9	-105.6	68.6	58.6	9.93	6.902	
2,300.0	2,294.5	2,292.6	2,283.0	5.0	5.4	73.95	14.9	-113.1	71.9	61.7	10.16	7.070	
2,362.2	2,355.4	2,354.5	2,343.4	5.2	5.6	76.43	14.9	-125.9	77.7	67.1	10.58	7.341	
2,400.0	2,392.3	2,392.1	2,380.2	5.4	5.7	77.77	14.9	-133.7	81.2	70.4	10.83	7.499	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,452.3	2,439.2	5.6	6.0	79.68	15.0	-146.3	87.1	75.8	11.26	7.732	
2,500.0	2,490.2	2,491.5	2,477.5	5.7	6.1	80.79	15.0	-154.4	90.9	79.4	11.54	7.877	
2,559.0	2,547.9	2,550.2	2,534.9	5.9	6.3	82.28	15.0	-166.6	96.7	84.7	11.97	8.076	
2,600.0	2,588.0	2,590.9	2,574.7	6.1	6.5	83.22	15.1	-175.1	100.7	88.5	12.27	8.208	
2,657.5	2,644.2	2,648.1	2,630.6	6.3	6.7	84.42	15.1	-187.0	106.5	93.8	12.71	8.378	
2,700.0	2,685.8	2,690.4	2,672.0	6.4	6.9	85.22	15.1	-195.8	110.8	97.7	13.03	8.497	
2,755.9	2,740.5	2,745.9	2,726.3	6.6	7.1	86.19	15.1	-207.4	116.4	102.9	13.47	8.642	
2,800.0	2,783.6	2,789.8	2,769.2	6.8	7.3	86.89	15.2	-216.5	120.9	107.1	13.81	8.751	
2,854.3	2,836.7	2,843.8	2,822.1	7.0	7.5	87.68	15.2	-227.7	126.4	112.2	14.24	8.875	
2,900.0	2,881.4	2,889.2	2,866.5	7.2	7.7	88.30	15.2	-237.2	131.1	116.5	14.61	8.973	
2,952.7	2,933.0	2,941.7	2,917.8	7.4	7.9	88.96	15.3	-248.1	136.5	121.5	15.03	9.079	
3,000.0	2,979.2	2,988.7	2,963.7	7.6	8.1	89.50	15.3	-257.8	141.3	125.9	15.41	9.169	
3,051.2	3,029.3	3,039.5	3,013.5	7.8	8.4	90.05	15.3	-268.4	146.6	130.8	15.83	9.260	
3,100.0	3,077.1	3,088.1	3,061.0	8.0	8.6	90.54	15.3	-278.5	151.7	135.4	16.23	9.343	
3,149.6	3,125.6	3,137.4	3,109.2	8.2	8.8	91.01	15.4	-288.8	156.8	140.2	16.64	9.421	
3,200.0	3,174.9	3,187.5	3,158.3	8.4	9.0	91.45	15.4	-299.2	162.0	145.0	17.06	9.497	
3,248.0	3,221.8	3,235.3	3,205.0	8.6	9.2	91.85	15.4	-309.1	167.0	149.6	17.46	9.564	
3,300.0	3,272.7	3,286.9	3,255.5	8.9	9.4	92.25	15.5	-319.9	172.4	154.5	17.90	9.634	
3,346.4	3,318.1	3,333.1	3,300.7	9.0	9.6	92.59	15.5	-329.5	177.3	159.0	18.29	9.693	
3,400.0	3,370.5	3,387.4	3,353.8	9.3	9.8	93.03	15.5	-340.5	182.8	164.0	18.73	9.760	
3,444.9	3,414.4	3,433.3	3,398.9	9.5	10.0	93.60	15.5	-349.2	187.1	168.0	19.07	9.810	
3,500.0	3,468.3	3,489.7	3,454.5	9.7	10.2	94.53	15.6	-358.7	191.9	172.5	19.48	9.851	
3,543.3	3,510.7	3,534.0	3,498.3	9.9	10.3	95.43	15.6	-365.5	195.5	175.7	19.81	9.871	
3,600.0	3,566.1	3,591.9	3,555.6	10.1	10.4	96.84	15.6	-373.3	199.8	179.6	20.23	9.881	
3,641.7	3,606.9	3,634.4	3,597.9	10.3	10.6	98.03	15.6	-378.3	202.9	182.3	20.52	9.883	
3,700.0	3,664.0	3,693.7	3,656.8	10.6	10.7	99.90	15.6	-384.2	206.8	185.9	20.93	9.880	
3,740.1	3,703.2	3,734.3	3,697.3	10.7	10.8	101.32	15.6	-387.6	209.5	188.3	21.20	9.880	
3,800.0	3,761.8	3,794.8	3,757.6	11.0	10.9	103.65	15.7	-391.5	213.4	191.8	21.59	9.885	
3,837.4	3,798.3	3,832.3	3,795.1	11.2	11.0	105.21	15.7	-393.3	215.8	194.0	21.81	9.896	
3,838.6	3,799.5	3,833.5	3,796.4	11.2	11.0	105.27	15.7	-393.4	215.9	194.1	21.82	9.897	
3,900.0	3,859.7	3,895.1	3,857.9	11.4	11.1	107.93	15.7	-395.3	219.8	197.7	22.13	9.934	
3,937.0	3,896.1	3,932.1	3,894.9	11.5	11.1	109.49	15.7	-395.7	222.1	199.8	22.28	9.970	
4,000.0	3,958.3	3,994.5	3,957.3	11.7	11.2	111.98	15.7	-395.8	225.8	203.3	22.52	10.028	
4,035.4	3,993.3	4,029.5	3,992.3	11.8	11.3	113.21	15.7	-395.8	227.8	205.2	22.64	10.062	
4,100.0	4,057.4	4,093.6	4,056.4	12.0	11.4	115.15	15.7	-395.8	231.2	208.4	22.87	10.111	
4,133.8	4,091.0	4,127.2	4,090.0	12.1	11.5	116.02	15.7	-395.8	232.9	209.9	22.98	10.134	
4,200.0	4,156.8	4,193.1	4,155.8	12.2	11.6	117.43	15.7	-395.8	235.7	212.5	23.20	10.159	
4,232.3	4,189.0	4,225.2	4,188.0	12.3	11.6	117.98	15.7	-395.8	236.8	213.5	23.30	10.164	
4,300.0	4,256.6	4,292.8	4,255.6	12.4	11.7	118.87	15.7	-395.8	238.8	215.2	23.52	10.151	
4,330.7	4,287.3	4,323.5	4,286.3	12.5	11.8	119.16	15.7	-395.8	239.4	215.8	23.62	10.137	
4,400.0	4,356.6	4,392.8	4,355.6	12.6	11.9	119.53	15.7	-395.8	240.3	216.4	23.84	10.077	
4,429.1	4,385.7	4,421.9	4,384.7	12.6	12.0	119.58	15.7	-395.8	240.4	216.4	23.93	10.043	
4,437.2	4,393.8	4,430.0	4,392.8	12.7	12.0	0.00	15.7	-395.8	240.4	220.3	20.12	11.947	
4,500.0	4,456.6	4,492.8	4,455.6	12.7	12.1	0.00	15.7	-395.8	240.4	220.0	20.36	11.804	
4,527.5	4,484.1	4,520.3	4,483.1	12.8	12.1	0.00	15.7	-395.8	240.4	219.9	20.47	11.742	
4,600.0	4,556.6	4,592.8	4,555.6	12.9	12.2	0.00	15.7	-395.8	240.4	219.6	20.76	11.580	
4,626.0	4,582.6	4,618.8	4,581.6	12.9	12.3	0.00	15.7	-395.8	240.4	219.5	20.86	11.523	
4,700.0	4,656.6	4,692.8	4,655.6	13.1	12.4	0.00	15.7	-395.8	240.4	219.2	21.15	11.364	
4,724.4	4,681.0	4,717.2	4,680.0	13.1	12.5	0.00	15.7	-395.8	240.4	219.1	21.25	11.312	
4,800.0	4,756.6	4,792.8	4,755.6	13.2	12.6	0.00	15.7	-395.8	240.4	218.8	21.55	11.154	
4,822.8	4,779.4	4,815.6	4,778.4	13.3	12.6	0.00	15.7	-395.8	240.4	218.7	21.64	11.107	
4,900.0	4,856.6	4,892.8	4,855.6	13.4	12.8	0.00	15.7	-395.8	240.4	218.4	21.95	10.951	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,914.0	4,876.8	13.4	12.8	0.00	15.7	-395.8	240.4	218.3	22.04	10.908	
5,000.0	4,956.6	4,992.8	4,955.6	13.6	13.0	0.00	15.7	-395.8	240.4	218.0	22.35	10.754	
5,019.7	4,976.3	5,012.5	4,975.3	13.6	13.0	0.00	15.7	-395.8	240.4	217.9	22.43	10.716	
5,100.0	5,056.6	5,092.8	5,055.6	13.7	13.1	0.00	15.7	-395.8	240.4	217.6	22.76	10.563	
5,118.1	5,074.7	5,110.9	5,073.7	13.8	13.2	0.00	15.7	-395.8	240.4	217.5	22.83	10.529	
5,200.0	5,156.6	5,192.8	5,155.6	13.9	13.3	0.00	15.7	-395.8	240.4	217.2	23.16	10.378	
5,216.5	5,173.1	5,209.3	5,172.1	13.9	13.4	0.00	15.7	-395.8	240.4	217.1	23.23	10.348	
5,300.0	5,256.6	5,292.8	5,255.6	14.1	13.5	0.00	15.7	-395.8	240.4	216.8	23.57	10.199	
5,314.9	5,271.5	5,307.7	5,270.5	14.1	13.5	0.00	15.7	-395.8	240.4	216.7	23.63	10.173	
5,400.0	5,356.6	5,392.8	5,355.6	14.2	13.7	0.00	15.7	-395.8	240.4	216.4	23.98	10.025	
5,413.4	5,370.0	5,406.2	5,369.0	14.3	13.7	0.00	15.7	-395.8	240.4	216.3	24.03	10.003	
5,500.0	5,456.6	5,492.8	5,455.6	14.4	13.9	0.00	15.7	-395.8	240.4	216.0	24.39	9.857	
5,511.8	5,468.4	5,504.6	5,467.4	14.4	13.9	0.00	15.7	-395.8	240.4	215.9	24.43	9.838	
5,600.0	5,556.6	5,592.8	5,555.6	14.6	14.1	0.00	15.7	-395.8	240.4	215.6	24.80	9.694	
5,610.2	5,566.8	5,603.0	5,565.8	14.6	14.1	0.00	15.7	-395.8	240.4	215.5	24.84	9.677	
5,700.0	5,656.6	5,692.8	5,655.6	14.8	14.3	0.00	15.7	-395.8	240.4	215.2	25.21	9.535	
5,708.6	5,665.2	5,701.4	5,664.2	14.8	14.3	0.00	15.7	-395.8	240.4	215.1	25.24	9.522	
5,800.0	5,756.6	5,792.8	5,755.6	14.9	14.4	0.00	15.7	-395.8	240.4	214.7	25.62	9.381	
5,807.1	5,763.7	5,799.9	5,762.7	14.9	14.5	0.00	15.7	-395.8	240.4	214.7	25.65	9.371	
5,900.0	5,856.6	5,892.8	5,855.6	15.1	14.6	0.00	15.7	-395.8	240.4	214.3	26.04	9.232	
5,905.5	5,862.1	5,898.3	5,861.1	15.1	14.7	0.00	15.7	-395.8	240.4	214.3	26.06	9.224	
6,000.0	5,956.6	5,992.8	5,955.6	15.3	14.8	0.00	15.7	-395.8	240.4	213.9	26.45	9.087	
6,003.9	5,960.5	5,996.7	5,959.5	15.3	14.8	0.00	15.7	-395.8	240.4	213.9	26.47	9.081	
6,100.0	6,056.6	6,092.8	6,055.6	15.5	15.0	0.00	15.7	-395.8	240.4	213.5	26.87	8.946	
6,102.3	6,058.9	6,095.1	6,057.9	15.5	15.0	0.00	15.7	-395.8	240.4	213.5	26.88	8.942	
6,200.0	6,156.6	6,192.8	6,155.6	15.7	15.2	0.00	15.7	-395.8	240.4	213.1	27.29	8.809	
6,200.8	6,157.4	6,193.6	6,156.4	15.7	15.2	0.00	15.7	-395.8	240.4	213.1	27.29	8.808	
6,236.0	6,192.5	6,228.7	6,191.5	15.7	15.3	0.00	15.7	-395.8	240.4	212.9	27.44	8.760	
6,272.2	6,228.8	6,265.0	6,227.8	15.8	15.3	0.19	15.7	-395.0	240.4	212.8	27.59	8.712	
6,299.2	6,255.8	6,291.9	6,254.6	15.8	15.4	-89.50	15.7	-393.2	240.4	209.7	30.69	7.832	
6,300.0	6,256.6	6,292.7	6,255.4	15.8	15.4	-89.49	15.7	-393.1	240.4	209.7	30.69	7.832	
6,350.0	6,306.4	6,342.4	6,304.7	15.9	15.4	-88.93	15.7	-387.2	240.4	209.6	30.78	7.811	
6,397.6	6,353.6	6,389.6	6,351.1	15.9	15.5	-88.41	15.7	-378.3	240.5	209.6	30.83	7.800	
6,400.0	6,355.9	6,391.9	6,353.4	15.9	15.5	-88.38	15.7	-377.8	240.5	209.6	30.83	7.800	
6,450.0	6,404.8	6,441.3	6,401.1	15.9	15.5	-87.83	15.7	-365.1	240.5	209.7	30.85	7.798	
6,496.0	6,449.0	6,486.7	6,444.1	16.0	15.5	-87.34	15.7	-350.6	240.6	209.8	30.84	7.802	
6,500.0	6,452.8	6,490.6	6,447.7	16.0	15.5	-87.30	15.7	-349.3	240.6	209.8	30.84	7.803	
6,550.0	6,499.7	6,539.7	6,493.0	15.9	15.5	-86.78	15.7	-330.3	240.8	209.9	30.82	7.811	
6,594.5	6,540.3	6,583.2	6,532.0	15.9	15.5	-86.33	15.7	-310.9	240.9	210.1	30.81	7.819	
6,600.0	6,545.3	6,588.6	6,536.8	15.9	15.5	-86.28	15.7	-308.3	240.9	210.1	30.80	7.820	
6,650.0	6,589.3	6,637.5	6,578.8	15.9	15.5	-85.79	15.7	-283.5	241.0	210.2	30.80	7.826	
6,692.9	6,625.7	6,679.2	6,613.3	15.9	15.5	-85.39	15.7	-260.1	241.2	210.3	30.82	7.824	
6,700.0	6,631.6	6,686.2	6,618.9	15.9	15.5	-85.33	15.7	-256.0	241.2	210.3	30.83	7.823	
6,750.0	6,671.9	6,734.7	6,657.0	15.9	15.6	-84.89	15.7	-225.8	241.3	210.4	30.91	7.808	
6,791.3	6,703.6	6,774.8	6,686.8	15.9	15.7	-84.54	15.7	-199.1	241.5	210.4	31.03	7.782	
6,800.0	6,710.1	6,783.2	6,692.9	15.9	15.7	-84.47	15.7	-193.3	241.5	210.4	31.06	7.775	
6,850.0	6,745.9	6,831.5	6,726.4	16.0	15.8	-84.08	15.7	-158.5	241.7	210.4	31.30	7.720	
6,889.7	6,772.6	6,869.9	6,751.3	16.1	16.0	-83.79	15.7	-129.2	241.8	210.2	31.59	7.655	
6,900.0	6,779.2	6,879.8	6,757.4	16.1	16.0	-83.72	15.7	-121.5	241.8	210.2	31.66	7.637	
6,950.0	6,809.8	6,927.9	6,785.8	16.3	16.3	-83.39	15.7	-82.7	242.0	209.8	32.16	7.525	
6,988.2	6,831.3	6,964.6	6,805.7	16.4	16.6	-83.16	15.7	-51.8	242.1	209.5	32.64	7.418	
7,000.0	6,837.6	6,976.0	6,811.5	16.5	16.7	-83.09	15.7	-42.0	242.1	209.3	32.80	7.383	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,050.0	6,862.5	7,024.0	6,834.4	16.9	17.1	-82.83	15.7	0.1	242.3	208.7	33.59	7.212	
7,086.6	6,878.7	7,059.1	6,849.3	17.2	17.4	-82.66	15.7	31.9	242.4	208.1	34.28	7.069	
7,100.0	6,884.2	7,071.9	6,854.4	17.3	17.6	-82.60	15.7	43.7	242.4	207.8	34.55	7.015	
7,150.0	6,902.7	7,119.8	6,871.4	17.8	18.2	-82.40	15.7	88.4	242.5	206.8	35.67	6.798	
7,185.0	6,913.8	7,153.3	6,881.5	18.3	18.6	-82.28	15.7	120.4	242.6	206.0	36.56	6.636	
7,200.0	6,918.0	7,167.6	6,885.4	18.5	18.8	-82.24	15.7	134.2	242.6	205.6	36.95	6.565	
7,250.0	6,929.9	7,215.4	6,896.2	19.2	19.5	-82.11	15.7	180.7	242.7	204.3	38.37	6.324	
7,283.4	6,936.0	7,247.4	6,901.8	19.7	20.0	-82.04	15.7	212.2	242.7	203.3	39.40	6.160	
7,300.0	6,938.4	7,263.2	6,904.0	20.0	20.3	-82.02	15.7	227.8	242.7	202.8	39.92	6.080	
7,350.0	6,943.4	7,310.9	6,908.6	20.9	21.1	-81.97	15.7	275.3	242.8	201.2	41.58	5.838	
7,381.9	6,944.8	7,341.4	6,909.8	21.4	21.7	-81.95	15.7	305.7	242.8	200.1	42.69	5.686	
7,403.7	6,945.0	7,362.2	6,910.0	21.8	22.0	-81.95	15.7	326.6	242.8	199.3	43.46	5.585	
7,404.0	6,945.0	7,362.5	6,910.0	21.8	22.1	-81.95	15.7	326.9	242.8	199.3	43.47	5.584	
7,480.3	6,944.3	7,438.7	6,909.1	23.3	23.5	-81.91	15.7	403.1	242.8	196.4	46.41	5.231	
7,500.0	6,944.1	7,458.4	6,908.9	23.7	23.9	-81.90	15.7	422.8	242.8	195.6	47.19	5.145	
7,578.7	6,943.4	7,537.1	6,908.0	25.4	25.6	-81.86	15.7	501.5	242.8	192.4	50.43	4.814	
7,600.0	6,943.2	7,558.4	6,907.8	25.8	26.0	-81.85	15.7	522.8	242.8	191.5	51.33	4.731	
7,677.1	6,942.5	7,635.6	6,906.9	27.5	27.7	-81.82	15.7	599.9	242.8	188.1	54.71	4.439	
7,700.0	6,942.3	7,658.4	6,906.7	28.0	28.3	-81.81	15.7	622.8	242.9	187.1	55.72	4.358	
7,775.6	6,941.6	7,734.0	6,905.8	29.8	30.0	-81.77	15.7	698.3	242.9	183.7	59.18	4.104	
7,800.0	6,941.4	7,758.4	6,905.5	30.3	30.6	-81.76	15.7	722.8	242.9	182.6	60.31	4.027	
7,874.0	6,940.7	7,832.4	6,904.7	32.1	32.3	-81.72	15.7	796.8	242.9	179.1	63.81	3.806	
7,900.0	6,940.5	7,858.4	6,904.4	32.7	33.0	-81.71	15.7	822.8	242.9	177.9	65.06	3.734	
7,972.4	6,939.8	7,930.8	6,903.6	34.5	34.8	-81.67	15.7	895.2	242.9	174.4	68.57	3.543	
8,000.0	6,939.6	7,958.4	6,903.3	35.2	35.4	-81.66	15.7	922.8	242.9	173.0	69.92	3.475	
8,070.8	6,938.9	8,029.3	6,902.5	37.0	37.2	-81.62	15.7	993.6	243.0	169.5	73.43	3.309	
8,100.0	6,938.7	8,058.4	6,902.2	37.7	37.9	-81.61	15.7	1,022.7	243.0	168.1	74.88	3.245	
8,169.3	6,938.0	8,127.7	6,901.4	39.5	39.7	-81.58	15.7	1,092.0	243.0	164.6	78.36	3.101	
8,200.0	6,937.7	8,158.4	6,901.1	40.3	40.5	-81.56	15.7	1,122.7	243.0	163.1	79.91	3.041	
8,267.7	6,937.1	8,226.1	6,900.3	42.0	42.2	-81.53	15.7	1,190.4	243.0	159.7	83.36	2.915	
8,300.0	6,936.8	8,258.4	6,900.0	42.8	43.1	-81.51	15.7	1,222.7	243.0	158.0	85.01	2.859	
8,366.1	6,936.2	8,324.5	6,899.2	44.6	44.8	-81.48	15.7	1,288.9	243.1	154.6	88.42	2.749	
8,400.0	6,935.9	8,358.4	6,898.8	45.5	45.7	-81.46	15.7	1,322.7	243.1	152.9	90.16	2.696	
8,464.5	6,935.3	8,423.0	6,898.1	47.2	47.4	-81.43	15.7	1,387.3	243.1	149.6	93.52	2.599	
8,500.0	6,935.0	8,458.4	6,897.7	48.1	48.3	-81.41	15.7	1,422.7	243.1	147.7	95.36	2.549	
8,563.0	6,934.5	8,521.4	6,897.0	49.8	50.0	-81.38	15.7	1,485.7	243.1	144.5	98.65	2.464	
8,600.0	6,934.1	8,558.4	6,896.6	50.7	51.0	-81.37	15.7	1,522.7	243.1	142.5	100.59	2.417	
8,661.4	6,933.6	8,619.8	6,895.9	52.4	52.6	-81.34	15.7	1,584.1	243.1	139.3	103.82	2.342	
8,700.0	6,933.2	8,658.4	6,895.5	53.4	53.6	-81.32	15.7	1,622.7	243.2	137.3	105.86	2.297	
8,759.8	6,932.7	8,718.2	6,894.8	55.0	55.2	-81.29	15.7	1,682.5	243.2	134.2	109.02	2.231	
8,800.0	6,932.3	8,758.4	6,894.4	56.1	56.3	-81.27	15.7	1,722.7	243.2	132.0	111.15	2.188	
8,858.2	6,931.8	8,816.6	6,893.7	57.7	57.9	-81.24	15.7	1,781.0	243.2	129.0	114.24	2.129	
8,900.0	6,931.4	8,858.4	6,893.3	58.8	59.0	-81.22	15.7	1,822.7	243.2	126.8	116.46	2.088	
8,956.7	6,930.9	8,915.1	6,892.6	60.3	60.5	-81.19	15.7	1,879.4	243.2	123.8	119.48	2.036	
9,000.0	6,930.5	8,958.4	6,892.2	61.5	61.7	-81.17	15.7	1,922.7	243.3	121.5	121.80	1.997	
9,055.1	6,930.0	9,013.5	6,891.5	63.0	63.2	-81.14	15.7	1,977.8	243.3	118.5	124.74	1.950	
9,100.0	6,929.6	9,058.4	6,891.0	64.2	64.4	-81.12	15.7	2,022.7	243.3	116.1	127.15	1.913	
9,153.5	6,929.1	9,111.9	6,890.4	65.6	65.9	-81.10	15.7	2,076.2	243.3	113.3	130.02	1.871	
9,200.0	6,928.7	9,158.4	6,889.9	66.9	67.1	-81.07	15.7	2,122.7	243.3	110.8	132.51	1.836	
9,251.9	6,928.2	9,210.3	6,889.3	68.3	68.5	-81.05	15.7	2,174.6	243.3	108.0	135.30	1.799	
9,300.0	6,927.8	9,258.4	6,888.8	69.6	69.9	-81.02	15.7	2,222.7	243.4	105.5	137.89	1.765	
9,350.4	6,927.3	9,308.8	6,888.2	71.0	71.2	-81.00	15.7	2,273.0	243.4	102.8	140.60	1.731	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,400.0	6,926.9	9,358.4	6,887.7	72.4	72.6	-80.98	15.7	2,322.7	243.4	100.1	143.28	1.699	
9,448.8	6,926.4	9,407.2	6,887.1	73.7	73.9	-80.95	15.7	2,371.5	243.4	97.5	145.91	1.668	
9,500.0	6,926.0	9,458.4	6,886.6	75.1	75.3	-80.93	15.7	2,422.7	243.4	94.8	148.67	1.637	
9,547.2	6,925.5	9,505.6	6,886.1	76.4	76.6	-80.90	15.7	2,469.9	243.4	92.2	151.23	1.610	
9,600.0	6,925.1	9,558.4	6,885.5	77.9	78.1	-80.88	15.7	2,522.7	243.5	89.4	154.08	1.580	
9,645.6	6,924.6	9,604.0	6,885.0	79.1	79.3	-80.86	15.7	2,568.3	243.5	86.9	156.55	1.555	
9,700.0	6,924.1	9,658.4	6,884.3	80.6	80.8	-80.83	15.7	2,622.6	243.5	84.0	159.49	1.527	
9,744.1	6,923.7	9,702.5	6,883.9	81.8	82.0	-80.81	15.7	2,666.7	243.5	81.6	161.88	1.504	
9,800.0	6,923.2	9,758.4	6,883.2	83.4	83.6	-80.78	15.7	2,722.6	243.5	78.6	164.91	1.477 Level 3	
9,842.5	6,922.9	9,800.9	6,882.8	84.5	84.7	-80.76	15.7	2,765.1	243.5	76.3	167.22	1.456 Level 3	
9,900.0	6,922.3	9,858.4	6,882.1	86.1	86.3	-80.73	15.7	2,822.6	243.6	73.2	170.34	1.430 Level 3	
9,940.9	6,922.0	9,899.3	6,881.7	87.2	87.5	-80.71	15.7	2,863.6	243.6	71.0	172.56	1.412 Level 3	
10,000.0	6,921.4	9,958.4	6,881.0	88.9	89.1	-80.68	15.7	2,922.6	243.6	67.8	175.77	1.386 Level 3	
10,039.3	6,921.1	9,997.7	6,880.6	90.0	90.2	-80.67	15.7	2,962.0	243.6	65.7	177.91	1.369 Level 3	
10,100.0	6,920.5	10,058.4	6,879.9	91.6	91.8	-80.64	15.7	3,022.6	243.6	62.4	181.21	1.344 Level 3	
10,137.8	6,920.2	10,096.2	6,879.5	92.7	92.9	-80.62	15.7	3,060.4	243.6	60.4	183.26	1.329 Level 3	
10,200.0	6,919.6	10,158.4	6,878.8	94.4	94.6	-80.59	15.7	3,122.6	243.7	57.0	186.65	1.305 Level 3	
10,236.2	6,919.3	10,194.6	6,878.4	95.4	95.6	-80.57	15.7	3,158.8	243.7	55.1	188.62	1.292 Level 3	
10,300.0	6,918.7	10,258.4	6,877.7	97.2	97.4	-80.54	15.7	3,222.6	243.7	51.6	192.09	1.269 Level 3	
10,334.6	6,918.4	10,293.0	6,877.3	98.1	98.3	-80.52	15.7	3,257.2	243.7	49.7	193.98	1.256 Level 3	
10,400.0	6,917.8	10,358.4	6,876.5	99.9	100.2	-80.49	15.7	3,322.6	243.7	46.2	197.54	1.234 Level 2	
10,433.0	6,917.5	10,391.4	6,876.2	100.9	101.1	-80.48	15.7	3,355.6	243.7	44.4	199.34	1.223 Level 2	
10,500.0	6,916.9	10,458.4	6,875.4	102.7	102.9	-80.44	15.7	3,422.6	243.8	40.8	202.99	1.201 Level 2	
10,531.5	6,916.6	10,489.9	6,875.1	103.6	103.8	-80.43	15.7	3,454.1	243.8	39.1	204.70	1.191 Level 2	
10,600.0	6,916.0	10,558.4	6,874.3	105.5	105.7	-80.39	15.7	3,522.6	243.8	35.4	208.44	1.170 Level 2	
10,629.9	6,915.7	10,588.3	6,874.0	106.3	106.5	-80.38	15.7	3,552.5	243.8	33.7	210.07	1.161 Level 2	
10,700.0	6,915.1	10,658.4	6,873.2	108.3	108.5	-80.35	15.7	3,622.6	243.8	29.9	213.89	1.140 Level 2	
10,728.3	6,914.8	10,686.7	6,872.9	109.1	109.3	-80.33	15.7	3,650.9	243.9	28.4	215.44	1.132 Level 2	
10,800.0	6,914.2	10,758.4	6,872.1	111.0	111.3	-80.30	15.7	3,722.6	243.9	24.5	219.35	1.112 Level 2	
10,826.7	6,913.9	10,785.1	6,871.8	111.8	112.0	-80.28	15.7	3,749.3	243.9	23.1	220.81	1.105 Level 2	
10,900.0	6,913.3	10,858.4	6,871.0	113.8	114.0	-80.25	15.7	3,822.6	243.9	19.1	224.80	1.085 Level 2	
10,925.2	6,913.1	10,883.6	6,870.7	114.5	114.7	-80.24	15.7	3,847.7	243.9	17.7	226.18	1.078 Level 2	
11,000.0	6,912.4	10,958.4	6,869.9	116.6	116.8	-80.20	15.7	3,922.6	243.9	13.7	230.26	1.059 Level 2	
11,023.6	6,912.2	10,982.0	6,869.6	117.3	117.5	-80.19	15.7	3,946.2	244.0	12.4	231.55	1.054 Level 2	
11,100.0	6,911.5	11,058.4	6,868.7	119.4	119.6	-80.15	15.7	4,022.6	244.0	8.3	235.72	1.035 Level 2	
11,122.0	6,911.3	11,080.4	6,868.5	120.0	120.2	-80.14	15.7	4,044.6	244.0	7.1	236.92	1.030 Level 2	
11,200.0	6,910.6	11,158.4	6,867.6	122.2	122.4	-80.10	15.7	4,122.5	244.0	2.8	241.18	1.012 Level 2	
11,220.4	6,910.4	11,178.8	6,867.4	122.7	122.9	-80.09	15.7	4,143.0	244.0	1.7	242.30	1.007 Level 2	
11,300.0	6,909.7	11,258.4	6,866.5	125.0	125.2	-80.06	15.7	4,222.5	244.1	-2.6	246.64	0.990 Level 1	
11,318.9	6,909.5	11,277.3	6,866.3	125.5	125.7	-80.05	15.7	4,241.4	244.1	-3.6	247.67	0.985 Level 1	
11,400.0	6,908.8	11,358.4	6,865.4	127.7	128.0	-80.01	15.7	4,322.5	244.1	-8.0	252.10	0.968 Level 1	
11,417.3	6,908.6	11,375.7	6,865.2	128.2	128.4	-80.00	15.7	4,339.8	244.1	-8.9	253.05	0.965 Level 1	
11,500.0	6,907.9	11,458.4	6,864.3	130.5	130.7	-79.96	15.7	4,422.5	244.1	-13.4	257.57	0.948 Level 1	
11,515.7	6,907.7	11,474.1	6,864.1	131.0	131.2	-79.95	15.7	4,438.3	244.1	-14.3	258.42	0.945 Level 1	
11,600.0	6,907.0	11,558.4	6,863.2	133.3	133.5	-79.91	15.7	4,522.5	244.2	-18.9	263.03	0.928 Level 1	
11,614.1	6,906.8	11,572.5	6,863.0	133.7	133.9	-79.90	15.7	4,536.7	244.2	-19.6	263.80	0.926 Level 1	
11,700.0	6,906.0	11,658.4	6,862.1	136.1	136.3	-79.86	15.7	4,622.5	244.2	-24.3	268.49	0.910 Level 1	
11,712.6	6,905.9	11,671.0	6,861.9	136.5	136.7	-79.86	15.7	4,635.1	244.2	-25.0	269.18	0.907 Level 1	
11,800.0	6,905.1	11,758.4	6,861.0	138.9	139.1	-79.81	15.7	4,722.5	244.2	-29.7	273.95	0.892 Level 1	
11,811.0	6,905.0	11,769.4	6,860.8	139.2	139.4	-79.81	15.7	4,733.5	244.3	-30.3	274.55	0.890 Level 1	
11,900.0	6,904.2	11,858.4	6,859.8	141.7	141.9	-79.77	15.7	4,822.5	244.3	-35.1	279.41	0.874 Level 1	
11,909.4	6,904.2	11,867.8	6,859.7	141.9	142.2	-79.76	15.7	4,831.9	244.3	-35.6	279.93	0.873 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	11,958.4	6,858.7	144.5	144.7	-79.72	15.7	4,922.5	244.3	-40.5	284.87	0.858	Level 1
12,007.8	6,903.3	11,966.2	6,858.6	144.7	144.9	-79.71	15.7	4,930.3	244.3	-41.0	285.30	0.856	Level 1
12,100.0	6,902.4	12,058.4	6,857.6	147.3	147.5	-79.67	15.7	5,022.5	244.4	-46.0	290.34	0.842	Level 1
12,106.3	6,902.4	12,064.7	6,857.5	147.4	147.7	-79.67	15.7	5,028.8	244.4	-46.3	290.68	0.841	Level 1
12,200.0	6,901.5	12,158.4	6,856.5	150.1	150.3	-79.62	15.7	5,122.5	244.4	-51.4	295.80	0.826	Level 1
12,204.7	6,901.5	12,163.1	6,856.5	150.2	150.4	-79.62	15.7	5,127.2	244.4	-51.6	296.05	0.826	Level 1
12,300.0	6,900.6	12,258.4	6,855.4	152.9	153.1	-79.57	15.7	5,222.5	244.4	-56.8	301.26	0.811	Level 1
12,303.1	6,900.6	12,261.5	6,855.4	152.9	153.1	-79.57	15.7	5,225.6	244.4	-57.0	301.43	0.811	Level 1
12,400.0	6,899.7	12,358.4	6,854.3	155.6	155.9	-79.53	15.7	5,322.5	244.5	-62.2	306.72	0.797	Level 1
12,401.5	6,899.7	12,359.9	6,854.3	155.7	155.9	-79.53	15.7	5,324.0	244.5	-62.3	306.80	0.797	Level 1
12,500.0	6,898.8	12,458.4	6,853.2	158.4	158.6	-79.48	15.7	5,422.5	244.5	-67.7	312.18	0.783	Level 1
12,598.4	6,897.9	12,556.8	6,852.1	161.2	161.4	-79.43	15.7	5,520.9	244.6	-73.0	317.55	0.770	Level 1
12,600.0	6,897.9	12,558.4	6,852.1	161.2	161.4	-79.43	15.7	5,522.5	244.6	-73.1	317.64	0.770	Level 1
12,696.8	6,897.0	12,655.2	6,851.0	163.9	164.2	-79.38	15.7	5,619.3	244.6	-78.3	322.92	0.757	Level 1
12,700.0	6,897.0	12,658.4	6,850.9	164.0	164.2	-79.38	15.7	5,622.5	244.6	-78.5	323.09	0.757	Level 1
12,795.2	6,896.1	12,753.6	6,849.9	166.7	166.9	-79.34	15.7	5,717.7	244.6	-83.7	328.29	0.745	Level 1
12,800.0	6,896.1	12,758.4	6,849.8	166.8	167.0	-79.33	15.7	5,722.4	244.6	-83.9	328.55	0.745	Level 1
12,893.7	6,895.3	12,852.1	6,848.8	169.4	169.7	-79.29	15.7	5,816.1	244.7	-89.0	333.66	0.733	Level 1
12,900.0	6,895.2	12,858.4	6,848.7	169.6	169.8	-79.29	15.7	5,822.4	244.7	-89.3	334.01	0.733	Level 1
12,992.1	6,894.4	12,950.5	6,847.7	172.2	172.4	-79.24	15.7	5,914.5	244.7	-94.3	339.03	0.722	Level 1
13,000.0	6,894.3	12,958.4	6,847.6	172.4	172.6	-79.24	15.7	5,922.4	244.7	-94.7	339.46	0.721	Level 1
13,090.5	6,893.5	13,048.9	6,846.6	175.0	175.2	-79.20	15.7	6,013.0	244.8	-99.6	344.40	0.711	Level 1
13,100.0	6,893.4	13,058.4	6,846.5	175.2	175.4	-79.19	15.7	6,022.4	244.8	-100.2	344.92	0.710	Level 1
13,188.9	6,892.6	13,147.3	6,845.5	177.7	177.9	-79.15	15.7	6,111.4	244.8	-105.0	349.77	0.700	Level 1
13,200.0	6,892.5	13,158.4	6,845.4	178.0	178.2	-79.14	15.7	6,122.4	244.8	-105.6	350.37	0.699	Level 1
13,287.4	6,891.7	13,245.8	6,844.4	180.5	180.7	-79.10	15.7	6,209.8	244.8	-110.3	355.13	0.689	Level 1
13,300.0	6,891.6	13,258.4	6,844.3	180.8	181.0	-79.09	15.7	6,222.4	244.8	-111.0	355.82	0.688	Level 1
13,385.8	6,890.8	13,344.2	6,843.3	183.2	183.4	-79.05	15.7	6,308.2	244.9	-115.6	360.50	0.679	Level 1
13,400.0	6,890.7	13,358.4	6,843.2	183.6	183.8	-79.05	15.7	6,322.4	244.9	-116.4	361.27	0.678	Level 1
13,484.2	6,889.9	13,442.6	6,842.2	186.0	186.2	-79.01	15.7	6,406.6	244.9	-120.9	365.86	0.669	Level 1
13,500.0	6,889.8	13,458.4	6,842.0	186.4	186.6	-79.00	15.7	6,422.4	244.9	-121.8	366.72	0.668	Level 1
13,582.6	6,889.0	13,541.0	6,841.1	188.7	188.9	-78.96	15.7	6,505.0	245.0	-126.3	371.22	0.660	Level 1
13,600.0	6,888.9	13,558.4	6,840.9	189.2	189.4	-78.95	15.7	6,522.4	245.0	-127.2	372.17	0.658	Level 1
13,681.1	6,888.1	13,639.5	6,840.0	191.5	191.7	-78.91	15.7	6,603.5	245.0	-131.6	376.59	0.651	Level 1
13,700.0	6,888.0	13,658.4	6,839.8	192.0	192.2	-78.90	15.7	6,622.4	245.0	-132.6	377.62	0.649	Level 1
13,779.5	6,887.3	13,737.9	6,838.9	194.2	194.4	-78.87	15.7	6,701.9	245.0	-136.9	381.95	0.642	Level 1
13,800.0	6,887.1	13,758.4	6,838.7	194.8	195.0	-78.86	15.7	6,722.4	245.1	-138.0	383.06	0.640	Level 1
13,877.9	6,886.4	13,836.3	6,837.8	197.0	197.2	-78.82	15.7	6,800.3	245.1	-142.2	387.31	0.633	Level 1
13,900.0	6,886.2	13,858.4	6,837.6	197.6	197.8	-78.81	15.7	6,822.4	245.1	-143.4	388.51	0.631	Level 1
13,976.3	6,885.5	13,934.7	6,836.8	199.7	200.0	-78.77	15.7	6,898.7	245.1	-147.5	392.66	0.624	Level 1
14,000.0	6,885.3	13,958.4	6,836.5	200.4	200.6	-78.76	15.7	6,922.4	245.1	-148.8	393.95	0.622	Level 1
14,074.8	6,884.6	14,033.2	6,835.7	202.5	202.7	-78.72	15.7	6,997.1	245.2	-152.9	398.02	0.616	Level 1
14,100.0	6,884.4	14,058.4	6,835.4	203.2	203.4	-78.71	15.7	7,022.4	245.2	-154.2	399.39	0.614	Level 1
14,173.2	6,883.7	14,131.6	6,834.6	205.3	205.5	-78.68	15.7	7,095.6	245.2	-158.2	403.38	0.608	Level 1
14,200.0	6,883.5	14,158.4	6,834.3	206.0	206.2	-78.66	15.7	7,122.4	245.2	-159.6	404.83	0.606	Level 1
14,271.6	6,882.8	14,230.0	6,833.5	208.0	208.2	-78.63	15.7	7,194.0	245.3	-163.5	408.73	0.600	Level 1
14,300.0	6,882.6	14,258.4	6,833.2	208.8	209.0	-78.62	15.7	7,222.4	245.3	-165.0	410.27	0.598	Level 1
14,370.0	6,881.9	14,328.4	6,832.4	210.8	211.0	-78.58	15.7	7,292.4	245.3	-168.8	414.08	0.592	Level 1
14,400.0	6,881.7	14,358.4	6,832.1	211.6	211.8	-78.57	15.7	7,322.3	245.3	-170.4	415.71	0.590	Level 1
14,468.5	6,881.0	14,426.9	6,831.3	213.5	213.7	-78.54	15.7	7,390.8	245.3	-174.1	419.43	0.585	Level 1
14,500.0	6,880.8	14,458.4	6,830.9	214.4	214.6	-78.52	15.7	7,422.3	245.3	-175.8	421.15	0.583	Level 1
14,566.9	6,880.2	14,525.3	6,830.2	216.3	216.5	-78.49	15.7	7,489.2	245.4	-179.4	424.78	0.578	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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									
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
14,584.2	6,880.0	14,542.5	6,830.0	216.8	217.0	-78.48	15.7	7,506.5	245.4	-180.3	425.72	0.576	Level 1, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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						
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	180.00	-43.7	0.0	43.7				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-43.7	0.0	43.7	43.5	0.17	257.255	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-43.7	0.0	43.7	43.5	0.17	252.598	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-43.7	0.0	43.7	43.1	0.61	71.851	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-43.7	0.0	43.7	43.1	0.62	70.217	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-43.7	0.0	43.7	42.7	1.05	41.600	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-43.7	0.0	43.7	42.6	1.07	40.776	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-43.7	0.0	43.7	42.2	1.49	29.275	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-43.7	0.0	43.7	42.2	1.52	28.730	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-43.7	0.0	43.7	41.8	1.94	22.584	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-43.7	0.0	43.7	41.7	1.97	22.178	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-43.7	0.0	43.7	41.3	2.38	18.382	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-43.7	0.0	43.7	41.3	2.42	18.059	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-43.7	0.0	43.7	40.9	2.82	15.499	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-43.7	0.0	43.7	40.8	2.87	15.231	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-43.7	0.0	43.7	40.5	3.26	13.397	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-43.7	0.0	43.7	40.4	3.32	13.169	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-43.7	0.0	43.7	40.0	3.71	11.798	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-43.7	0.0	43.7	39.9	3.77	11.598	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-43.7	0.0	43.7	39.6	4.15	10.539	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-43.7	0.0	43.7	39.5	4.22	10.362	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	180.00	-43.7	0.0	43.7	39.1	4.59	9.523	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-43.7	0.0	43.7	39.0	4.67	9.364	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	180.00	-43.7	0.0	43.7	38.7	5.03	8.686	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	180.00	-43.7	0.0	43.7	38.6	5.12	8.542	
1,279.5	1,279.5	1,279.5	1,279.5	2.7	2.7	180.00	-43.7	0.0	43.7	38.2	5.48	7.984	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	180.00	-43.7	0.0	43.7	38.1	5.57	7.852	
1,337.4	1,337.4	1,337.4	1,337.4	2.9	2.9	180.00	-43.7	0.0	43.7	38.0	5.74	7.622 CC	
1,377.9	1,377.9	1,377.6	1,377.6	3.0	3.0	-179.93	-43.8	-0.1	43.8	37.9	5.91	7.419 ES	
1,400.0	1,400.0	1,399.3	1,399.3	3.0	3.0	-179.78	-44.1	-0.2	44.1	38.1	6.00	7.350	
1,476.4	1,476.4	1,474.6	1,474.5	3.2	3.1	-178.67	-46.2	-1.1	46.3	39.9	6.30	7.338	
1,500.0	1,500.0	1,497.8	1,497.7	3.2	3.2	-178.16	-47.2	-1.5	47.3	40.9	6.40	7.394	
1,574.8	1,574.8	1,571.3	1,571.0	3.4	3.3	-176.23	-51.6	-3.4	51.8	45.1	6.70	7.733	
1,600.0	1,600.0	1,595.9	1,595.6	3.5	3.3	-175.51	-53.4	-4.2	53.7	46.9	6.80	7.902	
1,650.0	1,650.0	1,644.8	1,644.3	3.6	3.4	-174.03	-57.6	-6.0	58.2	51.2	7.01	8.307	
1,673.2	1,673.2	1,667.5	1,666.8	3.6	3.5	-53.79	-59.8	-7.0	60.5	53.4	7.10	8.526	
1,700.0	1,700.0	1,693.5	1,692.7	3.7	3.5	-53.20	-62.6	-8.2	63.3	56.1	7.20	8.786	
1,771.6	1,771.6	1,763.2	1,761.8	3.8	3.7	-52.35	-71.0	-11.8	71.1	63.6	7.47	9.513	
1,800.0	1,799.9	1,790.7	1,789.0	3.9	3.7	-52.25	-74.8	-13.5	74.3	66.7	7.58	9.809	
1,870.1	1,869.9	1,858.5	1,855.8	4.0	3.9	-52.46	-85.0	-17.9	82.7	74.9	7.85	10.540	
1,900.0	1,899.7	1,887.3	1,884.2	4.1	4.0	-52.71	-89.8	-20.0	86.5	78.5	7.96	10.859	
1,968.5	1,967.8	1,953.2	1,948.8	4.2	4.2	-53.54	-101.8	-25.2	95.5	87.2	8.24	11.583	
2,000.0	1,999.1	1,983.4	1,978.3	4.3	4.3	-54.02	-107.7	-27.7	99.8	91.4	8.37	11.921	
2,066.9	2,065.5	2,047.9	2,041.0	4.4	4.5	-55.21	-121.3	-33.6	109.4	100.7	8.66	12.621	
2,100.0	2,098.2	2,080.6	2,072.8	4.5	4.6	-55.93	-128.4	-36.7	114.0	105.2	8.81	12.934	
2,165.3	2,162.6	2,145.3	2,135.6	4.7	4.8	-57.64	-142.4	-42.8	122.6	113.5	9.13	13.428	
2,200.0	2,196.6	2,179.6	2,169.0	4.7	5.0	-58.67	-149.8	-46.0	126.9	117.6	9.30	13.642	
2,249.9	2,245.5	2,228.9	2,216.9	4.9	5.1	-60.32	-160.5	-50.6	132.8	123.2	9.57	13.876	
2,263.8	2,259.1	2,242.7	2,230.3	4.9	5.2	-60.82	-163.5	-51.9	134.4	124.8	9.65	13.928	
2,300.0	2,294.5	2,278.5	2,265.1	5.0	5.3	-62.08	-171.3	-55.3	138.7	128.8	9.86	14.060	
2,362.2	2,355.4	2,340.1	2,325.0	5.2	5.6	-64.08	-184.7	-61.1	146.1	135.8	10.24	14.261	
2,400.0	2,392.3	2,377.5	2,361.3	5.4	5.7	-65.19	-192.8	-64.6	150.7	140.2	10.48	14.378	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,437.5	2,419.6	5.6	6.0	-66.84	-205.8	-70.2	158.1	147.3	10.88	14.541	
2,500.0	2,490.2	2,476.5	2,457.5	5.7	6.2	-67.83	-214.2	-73.9	163.1	151.9	11.14	14.641	
2,559.0	2,547.9	2,534.9	2,514.3	5.9	6.4	-69.21	-226.9	-79.4	170.5	159.0	11.54	14.772	
2,600.0	2,588.0	2,575.5	2,553.6	6.1	6.6	-70.10	-235.7	-83.2	175.7	163.9	11.83	14.856	
2,657.5	2,644.2	2,632.3	2,608.9	6.3	6.8	-71.26	-248.0	-88.5	183.1	170.9	12.24	14.959	
2,700.0	2,685.8	2,674.4	2,649.8	6.4	7.0	-72.06	-257.1	-92.5	188.6	176.1	12.55	15.030	
2,755.9	2,740.5	2,729.7	2,703.6	6.6	7.3	-73.05	-269.1	-97.7	195.9	183.0	12.97	15.111	
2,800.0	2,783.6	2,773.4	2,746.0	6.8	7.5	-73.77	-278.6	-101.8	201.7	188.4	13.30	15.170	
2,854.3	2,836.7	2,827.2	2,798.2	7.0	7.7	-74.61	-290.2	-106.8	208.9	195.2	13.72	15.233	
2,900.0	2,881.4	2,872.4	2,842.1	7.2	7.9	-75.27	-300.1	-111.1	215.0	200.9	14.07	15.283	
2,952.7	2,933.0	2,924.6	2,892.9	7.4	8.2	-75.99	-311.4	-116.0	222.1	207.6	14.48	15.333	
3,000.0	2,979.2	2,971.3	2,938.3	7.6	8.4	-76.60	-321.5	-120.4	228.4	213.5	14.86	15.374	
3,051.2	3,029.3	3,022.0	2,987.5	7.8	8.6	-77.22	-332.5	-125.1	235.3	220.0	15.27	15.413	
3,100.0	3,077.1	3,070.3	3,034.5	8.0	8.9	-77.78	-343.0	-129.7	241.9	226.2	15.66	15.448	
3,149.6	3,125.6	3,119.4	3,082.2	8.2	9.1	-78.32	-353.6	-134.3	248.6	232.6	16.06	15.479	
3,200.0	3,174.9	3,169.3	3,130.6	8.4	9.3	-78.83	-364.4	-139.0	255.5	239.0	16.47	15.508	
3,248.0	3,221.8	3,216.8	3,176.8	8.6	9.5	-79.30	-374.7	-143.5	262.0	245.2	16.87	15.532	
3,300.0	3,272.7	3,268.2	3,226.8	8.9	9.8	-79.78	-385.9	-148.3	269.1	251.8	17.30	15.556	
3,346.4	3,318.1	3,314.2	3,271.5	9.0	10.0	-80.19	-395.8	-152.6	275.5	257.8	17.69	15.575	
3,400.0	3,370.5	3,367.2	3,323.0	9.3	10.3	-80.64	-407.3	-157.6	282.9	264.7	18.14	15.596	
3,444.9	3,414.4	3,411.6	3,366.1	9.5	10.5	-81.00	-417.0	-161.8	289.0	270.5	18.52	15.611	
3,500.0	3,468.3	3,466.2	3,419.1	9.7	10.7	-81.41	-428.8	-166.9	296.6	277.7	18.98	15.628	
3,543.3	3,510.7	3,509.0	3,460.8	9.9	10.9	-81.73	-438.1	-170.9	302.6	283.3	19.35	15.640	
3,600.0	3,566.1	3,565.1	3,515.3	10.1	11.2	-82.12	-450.3	-176.2	310.5	290.6	19.83	15.654	
3,641.7	3,606.9	3,606.4	3,555.4	10.3	11.4	-82.40	-459.2	-180.1	316.3	296.1	20.19	15.664	
3,700.0	3,664.0	3,664.1	3,611.5	10.6	11.7	-82.77	-471.7	-185.5	324.3	303.7	20.69	15.676	
3,740.1	3,703.2	3,703.9	3,650.1	10.7	11.9	-83.01	-480.3	-189.2	329.9	308.9	21.04	15.683	
3,800.0	3,761.8	3,763.1	3,707.6	11.0	12.2	-83.36	-493.2	-194.8	338.3	316.7	21.55	15.693	
3,837.4	3,798.3	3,800.1	3,743.6	11.2	12.4	-83.57	-501.2	-198.3	343.5	321.6	21.88	15.699	
3,838.6	3,799.5	3,801.3	3,744.7	11.2	12.4	-83.58	-501.4	-198.4	343.6	321.7	21.89	15.700	
3,900.0	3,859.7	3,862.1	3,803.8	11.4	12.7	-83.98	-514.6	-204.1	352.3	329.9	22.39	15.736	
3,937.0	3,896.1	3,898.7	3,839.4	11.5	12.8	-84.11	-522.6	-207.5	357.5	334.9	22.65	15.785	
4,000.0	3,958.3	3,961.0	3,900.0	11.7	13.2	-84.16	-536.1	-213.4	366.6	343.5	23.09	15.877	
4,035.4	3,993.3	3,996.0	3,934.0	11.8	13.3	-84.10	-543.7	-216.7	371.8	348.5	23.32	15.943	
4,100.0	4,057.4	4,059.8	3,996.0	12.0	13.6	-83.83	-557.5	-222.7	381.4	357.6	23.73	16.073	
4,133.8	4,091.0	4,093.2	4,028.4	12.1	13.8	-83.61	-564.7	-225.8	386.5	362.5	23.92	16.155	
4,200.0	4,156.8	4,158.4	4,091.8	12.2	14.1	-83.05	-578.9	-231.9	396.6	372.3	24.29	16.329	
4,232.3	4,189.0	4,190.1	4,122.6	12.3	14.3	-82.71	-585.8	-234.9	401.6	377.1	24.45	16.427	
4,300.0	4,256.6	4,256.6	4,187.2	12.4	14.6	-81.89	-600.2	-241.2	412.4	387.6	24.77	16.650	
4,330.7	4,287.3	4,286.6	4,216.4	12.5	14.8	-81.46	-606.7	-244.0	417.4	392.5	24.90	16.766	
4,400.0	4,356.6	4,354.3	4,282.1	12.6	15.1	-80.40	-621.3	-250.3	429.0	403.9	25.17	17.047	
4,429.1	4,385.7	4,382.6	4,309.6	12.6	15.2	-79.91	-627.5	-253.0	434.1	408.8	25.27	17.179	
4,437.2	4,393.8	4,390.5	4,317.3	12.7	15.3	160.65	-629.2	-253.7	435.5	412.6	22.92	19.004	
4,500.0	4,456.6	4,451.5	4,376.6	12.7	15.6	161.92	-642.4	-259.5	446.6	423.2	23.43	19.066	
4,527.5	4,484.1	4,478.3	4,402.6	12.8	15.7	162.47	-648.2	-262.0	451.6	427.9	23.65	19.094	
4,600.0	4,556.6	4,548.7	4,471.0	12.9	16.1	163.83	-663.5	-268.6	464.8	440.6	24.24	19.173	
4,626.0	4,582.6	4,573.9	4,495.5	12.9	16.2	164.30	-669.0	-271.0	469.6	445.2	24.45	19.203	
4,700.0	4,656.6	4,645.8	4,565.4	13.1	16.5	165.60	-684.6	-277.7	483.5	458.4	25.06	19.294	
4,724.4	4,681.0	4,669.5	4,588.4	13.1	16.7	166.01	-689.7	-280.0	488.1	462.8	25.26	19.325	
4,800.0	4,756.6	4,743.0	4,659.8	13.2	17.0	167.24	-705.6	-286.9	502.5	476.6	25.87	19.426	
4,822.8	4,779.4	4,765.2	4,681.4	13.3	17.1	167.59	-710.4	-288.9	506.9	480.9	26.05	19.457	
4,900.0	4,856.6	4,840.2	4,754.2	13.4	17.5	168.75	-726.7	-296.0	522.0	495.3	26.68	19.567	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,860.8	4,774.3	13.4	17.6	169.06	-731.2	-297.9	526.1	499.3	26.85	19.597	
5,000.0	4,956.6	4,937.3	4,848.6	13.6	18.0	170.16	-747.8	-305.1	541.7	514.2	27.48	19.715	
5,019.7	4,976.3	4,956.5	4,867.2	13.6	18.1	170.43	-751.9	-306.9	545.7	518.0	27.64	19.745	
5,100.0	5,056.6	5,034.5	4,943.1	13.7	18.5	171.48	-768.8	-314.2	561.8	533.5	28.27	19.869	
5,118.1	5,074.7	5,052.1	4,960.1	13.8	18.6	171.70	-772.6	-315.9	565.5	537.0	28.42	19.897	
5,200.0	5,156.6	5,131.7	5,037.5	13.9	19.0	172.70	-789.9	-323.4	582.1	553.1	29.07	20.028	
5,216.5	5,173.1	5,147.7	5,053.1	13.9	19.0	172.89	-793.4	-324.9	585.5	556.3	29.20	20.054	
5,300.0	5,256.6	5,228.8	5,131.9	14.1	19.4	173.84	-811.0	-332.5	602.7	572.9	29.85	20.189	
5,314.9	5,271.5	5,243.4	5,146.0	14.1	19.5	174.00	-814.1	-333.9	605.8	575.8	29.97	20.214	
5,400.0	5,356.6	5,326.0	5,226.3	14.2	19.9	174.90	-832.0	-341.6	623.5	592.9	30.63	20.353	
5,413.4	5,370.0	5,339.0	5,238.9	14.3	20.0	175.04	-834.8	-342.9	626.3	595.6	30.74	20.375	
5,500.0	5,456.6	5,423.2	5,320.7	14.4	20.4	175.90	-853.1	-350.8	644.5	613.1	31.41	20.518	
5,511.8	5,468.4	5,434.6	5,331.9	14.4	20.5	176.01	-855.6	-351.8	647.0	615.5	31.50	20.538	
5,600.0	5,556.6	5,520.3	5,415.1	14.6	20.9	176.84	-874.2	-359.9	665.7	633.5	32.18	20.684	
5,610.2	5,566.8	5,530.3	5,424.8	14.6	21.0	176.93	-876.3	-360.8	667.8	635.6	32.26	20.701	
5,700.0	5,656.6	5,633.7	5,525.5	14.8	21.4	177.82	-897.9	-370.2	686.3	653.3	32.96	20.823	
5,708.6	5,665.2	5,644.5	5,536.1	14.8	21.4	177.90	-899.9	-371.1	687.9	654.9	33.02	20.834	
5,800.0	5,756.6	5,759.6	5,649.1	14.9	21.8	178.67	-919.8	-379.7	703.5	669.9	33.64	20.911	
5,807.1	5,763.7	5,768.6	5,658.0	14.9	21.8	178.72	-921.1	-380.2	704.6	670.9	33.69	20.914	
5,900.0	5,856.6	5,887.5	5,775.6	15.1	22.1	179.30	-936.8	-387.1	716.8	682.5	34.26	20.925	
5,905.5	5,862.1	5,894.5	5,782.6	15.1	22.1	179.33	-937.6	-387.4	717.4	683.1	34.29	20.923	
6,000.0	5,956.6	6,016.7	5,904.2	15.3	22.4	179.72	-948.9	-392.3	726.1	691.3	34.79	20.872	
6,003.9	5,960.5	6,021.8	5,909.3	15.3	22.4	179.73	-949.2	-392.4	726.3	691.5	34.80	20.869	
6,100.0	6,056.6	6,146.9	6,034.2	15.5	22.6	179.95	-955.6	-395.2	731.2	696.0	35.23	20.754	
6,102.3	6,058.9	6,150.0	6,037.3	15.5	22.6	179.95	-955.6	-395.2	731.3	696.0	35.24	20.750	
6,200.0	6,156.6	6,269.3	6,156.6	15.7	22.8	-180.00	-957.0	-395.8	732.3	696.7	35.60	20.569	
6,200.8	6,157.4	6,270.1	6,157.4	15.7	22.8	-180.00	-957.0	-395.8	732.3	696.7	35.61	20.567	
6,220.5	6,177.1	6,289.9	6,177.1	15.7	22.8	179.98	-957.0	-395.6	732.3	696.7	35.67	20.532	
6,272.2	6,228.8	6,341.4	6,228.5	15.8	22.8	179.74	-957.0	-392.5	732.3	696.5	35.80	20.457	
6,299.2	6,255.8	6,368.0	6,255.0	15.8	22.9	89.54	-957.0	-389.4	732.3	700.7	31.69	23.111	
6,300.0	6,256.6	6,368.8	6,255.8	15.8	22.9	89.53	-957.0	-389.3	732.3	700.7	31.69	23.110	
6,350.0	6,306.4	6,418.0	6,304.3	15.9	22.9	89.16	-957.0	-381.1	732.4	700.6	31.82	23.013	
6,397.6	6,353.6	6,464.6	6,349.5	15.9	22.9	88.82	-957.0	-370.2	732.5	700.6	31.91	22.953	
6,400.0	6,355.9	6,466.9	6,351.8	15.9	22.9	88.80	-957.0	-369.6	732.5	700.6	31.92	22.950	
6,450.0	6,404.8	6,515.5	6,398.1	15.9	22.9	88.44	-957.0	-355.0	732.6	700.6	31.97	22.916	
6,496.0	6,449.0	6,560.0	6,439.6	16.0	22.8	88.12	-957.0	-338.9	732.7	700.7	31.99	22.907	
6,500.0	6,452.8	6,563.8	6,443.1	16.0	22.8	88.09	-957.0	-337.4	732.7	700.7	31.99	22.906	
6,550.0	6,499.7	6,611.8	6,486.5	15.9	22.8	87.75	-957.0	-316.9	732.9	700.9	31.98	22.914	
6,594.5	6,540.3	6,654.3	6,523.7	15.9	22.8	87.46	-957.0	-296.4	733.0	701.1	31.97	22.929	
6,600.0	6,545.3	6,659.6	6,528.3	15.9	22.8	87.42	-957.0	-293.8	733.1	701.1	31.97	22.931	
6,650.0	6,589.3	6,707.1	6,568.2	15.9	22.7	87.11	-957.0	-268.0	733.3	701.3	31.96	22.946	
6,692.9	6,625.7	6,747.7	6,600.8	15.9	22.7	86.85	-957.0	-243.9	733.4	701.5	31.96	22.950	
6,700.0	6,631.6	6,754.4	6,606.1	15.9	22.7	86.81	-957.0	-239.8	733.5	701.5	31.96	22.949	
6,750.0	6,671.9	6,800.0	6,640.8	15.9	22.6	86.53	-957.0	-210.2	733.7	701.7	32.00	22.926	
6,791.3	6,703.6	6,840.2	6,669.8	15.9	22.6	86.30	-957.0	-182.4	733.9	701.8	32.09	22.869	
6,800.0	6,710.1	6,848.3	6,675.5	15.9	22.6	86.25	-957.0	-176.6	733.9	701.8	32.11	22.858	
6,850.0	6,745.9	6,894.9	6,706.7	16.0	22.5	86.00	-957.0	-142.0	734.1	701.8	32.29	22.732	
6,889.7	6,772.6	6,931.9	6,729.9	16.1	22.5	85.81	-957.0	-113.2	734.3	701.8	32.52	22.576	
6,900.0	6,779.2	6,941.4	6,735.6	16.1	22.5	85.77	-957.0	-105.5	734.3	701.7	32.59	22.535	
6,950.0	6,809.8	6,987.7	6,761.9	16.3	22.4	85.55	-957.0	-67.4	734.5	701.5	33.00	22.258	
6,988.2	6,831.3	7,023.0	6,780.3	16.4	22.4	85.40	-957.0	-37.3	734.7	701.3	33.42	21.982	
7,000.0	6,837.6	7,033.9	6,785.6	16.5	22.4	85.36	-957.0	-27.8	734.7	701.2	33.56	21.894	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,050.0	6,862.5	7,080.0	6,806.7	16.9	22.3	85.19	-957.0	13.1	734.9	700.6	34.27	21.445	
7,086.6	6,878.7	7,113.6	6,820.4	17.2	22.3	85.07	-957.0	43.8	735.0	700.1	34.90	21.063	
7,100.0	6,884.2	7,125.9	6,825.1	17.3	22.3	85.04	-957.0	55.2	735.1	699.9	35.14	20.918	
7,150.0	6,902.7	7,171.7	6,840.7	17.8	22.3	84.91	-957.0	98.3	735.2	699.0	36.17	20.325	
7,185.0	6,913.8	7,203.8	6,849.9	18.3	22.3	84.83	-957.0	129.0	735.3	698.3	37.00	19.873	
7,200.0	6,918.0	7,217.5	6,853.5	18.5	22.3	84.80	-957.0	142.2	735.3	698.0	37.37	19.675	
7,250.0	6,929.9	7,263.2	6,863.4	19.2	22.4	84.72	-957.0	186.8	735.4	696.7	38.72	18.995	
7,283.4	6,936.0	7,293.8	6,868.5	19.7	22.4	84.68	-957.0	217.0	735.5	695.8	39.70	18.526	
7,300.0	6,938.4	7,308.9	6,870.5	20.0	22.5	84.66	-957.0	231.9	735.5	695.3	40.20	18.297	
7,350.0	6,943.4	7,354.5	6,874.7	20.9	22.7	84.63	-957.0	277.3	735.5	693.8	41.80	17.598	
7,381.9	6,944.8	7,383.6	6,875.9	21.4	23.0	84.62	-957.0	306.4	735.6	692.7	42.88	17.154	
7,403.7	6,945.0	7,403.9	6,876.0	21.8	23.2	84.62	-957.0	326.7	735.6	691.9	43.64	16.857	
7,480.3	6,944.3	7,480.5	6,875.8	23.3	24.3	84.66	-957.0	403.3	735.5	689.0	46.55	15.800	
7,500.0	6,944.1	7,500.2	6,875.7	23.7	24.6	84.67	-957.0	423.0	735.5	688.2	47.30	15.550	
7,578.7	6,943.4	7,578.9	6,875.5	25.4	26.1	84.70	-957.0	501.7	735.5	684.9	50.55	14.550	
7,600.0	6,943.2	7,600.2	6,875.4	25.8	26.5	84.71	-957.0	523.0	735.4	684.0	51.42	14.301	
7,677.1	6,942.5	7,677.3	6,875.2	27.5	28.1	84.75	-957.0	600.1	735.4	680.6	54.80	13.419	
7,700.0	6,942.3	7,700.1	6,875.2	28.0	28.6	84.76	-957.0	623.0	735.4	679.6	55.81	13.177	
7,775.6	6,941.6	7,775.7	6,874.9	29.8	30.3	84.80	-957.0	698.5	735.3	676.1	59.28	12.406	
7,800.0	6,941.4	7,800.1	6,874.9	30.3	30.8	84.81	-957.0	723.0	735.3	674.9	60.40	12.175	
7,874.0	6,940.7	7,874.1	6,874.7	32.1	32.6	84.85	-957.0	797.0	735.3	671.4	63.91	11.505	
7,900.0	6,940.5	7,900.1	6,874.6	32.7	33.2	84.86	-957.0	823.0	735.3	670.1	65.15	11.287	
7,972.4	6,939.8	7,972.6	6,874.4	34.5	34.9	84.90	-957.0	895.4	735.2	666.6	68.68	10.706	
8,000.0	6,939.6	8,000.1	6,874.3	35.2	35.6	84.91	-957.0	923.0	735.2	665.2	70.02	10.500	
8,070.8	6,938.9	8,071.0	6,874.1	37.0	37.3	84.94	-957.0	993.8	735.2	661.6	73.55	9.996	
8,100.0	6,938.7	8,100.1	6,874.0	37.7	38.0	84.96	-957.0	1,023.0	735.2	660.2	75.00	9.802	
8,169.3	6,938.0	8,169.4	6,873.8	39.5	39.7	84.99	-957.0	1,092.2	735.1	656.6	78.50	9.364	
8,200.0	6,937.7	8,200.1	6,873.8	40.3	40.5	85.01	-957.0	1,123.0	735.1	655.0	80.06	9.182	
8,267.7	6,937.1	8,267.8	6,873.6	42.0	42.2	85.04	-957.0	1,190.7	735.1	651.5	83.53	8.800	
8,300.0	6,936.8	8,300.1	6,873.5	42.8	43.1	85.06	-957.0	1,223.0	735.1	649.9	85.19	8.629	
8,366.1	6,936.2	8,366.3	6,873.3	44.6	44.8	85.09	-957.0	1,289.1	735.0	646.4	88.62	8.294	
8,400.0	6,935.9	8,400.1	6,873.2	45.5	45.6	85.10	-957.0	1,323.0	735.0	644.6	90.37	8.133	
8,464.5	6,935.3	8,464.7	6,873.0	47.2	47.3	85.14	-957.0	1,387.5	735.0	641.2	93.75	7.839	
8,500.0	6,935.0	8,500.1	6,872.9	48.1	48.2	85.15	-957.0	1,423.0	734.9	639.3	95.61	7.687	
8,563.0	6,934.5	8,563.1	6,872.7	49.8	49.9	85.18	-957.0	1,485.9	734.9	636.0	98.93	7.429	
8,600.0	6,934.1	8,600.1	6,872.6	50.7	50.8	85.20	-957.0	1,523.0	734.9	634.0	100.88	7.285	
8,661.4	6,933.6	8,661.5	6,872.5	52.4	52.5	85.23	-957.0	1,584.4	734.9	630.7	104.14	7.056	
8,700.0	6,933.2	8,700.1	6,872.4	53.4	53.5	85.25	-957.0	1,623.0	734.8	628.6	106.19	6.920	
8,759.8	6,932.7	8,760.0	6,872.2	55.0	55.1	85.28	-957.0	1,682.8	734.8	625.4	109.38	6.718	
8,800.0	6,932.3	8,800.1	6,872.1	56.1	56.1	85.30	-957.0	1,722.9	734.8	623.3	111.53	6.588	
8,858.2	6,931.8	8,858.4	6,871.9	57.7	57.7	85.33	-957.0	1,781.2	734.8	620.1	114.65	6.409	
8,900.0	6,931.4	8,900.1	6,871.8	58.8	58.8	85.35	-957.0	1,822.9	734.7	617.8	116.89	6.286	
8,956.7	6,930.9	8,956.8	6,871.6	60.3	60.3	85.38	-957.0	1,879.6	734.7	614.8	119.95	6.125	
9,000.0	6,930.5	9,000.1	6,871.5	61.5	61.5	85.40	-957.0	1,922.9	734.7	612.4	122.28	6.008	
9,055.1	6,930.0	9,055.2	6,871.4	63.0	63.0	85.42	-957.0	1,978.0	734.7	609.4	125.26	5.865	
9,100.0	6,929.6	9,100.1	6,871.2	64.2	64.2	85.45	-957.0	2,022.9	734.6	606.9	127.69	5.753	
9,153.5	6,929.1	9,153.6	6,871.1	65.6	65.6	85.47	-957.0	2,076.5	734.6	604.0	130.59	5.625	
9,200.0	6,928.7	9,200.1	6,871.0	66.9	66.9	85.49	-957.0	2,122.9	734.6	601.5	133.11	5.519	
9,251.9	6,928.2	9,252.1	6,870.8	68.3	68.3	85.52	-957.0	2,174.9	734.6	598.6	135.93	5.404	
9,300.0	6,927.8	9,300.1	6,870.7	69.6	69.6	85.54	-957.0	2,222.9	734.5	596.0	138.55	5.302	
9,350.4	6,927.3	9,350.5	6,870.5	71.0	70.9	85.57	-957.0	2,273.3	734.5	593.2	141.30	5.198	
9,400.0	6,926.9	9,400.1	6,870.4	72.4	72.3	85.59	-957.0	2,322.9	734.5	590.5	144.00	5.101	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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	
9,448.8	6,926.4	9,448.9	6,870.3	73.7	73.6	85.62	-957.0	2,371.7	734.5	587.8	146.67	5.008	
9,500.0	6,926.0	9,500.1	6,870.1	75.1	75.0	85.64	-957.0	2,422.9	734.4	585.0	149.47	4.914	
9,547.2	6,925.5	9,547.3	6,870.0	76.4	76.3	85.66	-957.0	2,470.2	734.4	582.4	152.05	4.830	
9,600.0	6,925.1	9,600.1	6,869.8	77.9	77.7	85.69	-957.0	2,522.9	734.4	579.5	154.94	4.740	
9,645.6	6,924.6	9,645.8	6,869.7	79.1	79.0	85.71	-957.0	2,568.6	734.4	576.9	157.45	4.664	
9,700.0	6,924.1	9,700.1	6,869.6	80.6	80.5	85.74	-957.0	2,622.9	734.3	573.9	160.43	4.577	
9,744.1	6,923.7	9,744.2	6,869.4	81.8	81.7	85.76	-957.0	2,667.0	734.3	571.5	162.85	4.509	
9,800.0	6,923.2	9,800.1	6,869.3	83.4	83.2	85.79	-957.0	2,722.9	734.3	568.4	165.92	4.426	
9,842.5	6,922.9	9,842.6	6,869.2	84.5	84.4	85.81	-957.0	2,765.4	734.3	566.0	168.26	4.364	
9,900.0	6,922.3	9,900.1	6,869.0	86.1	86.0	85.84	-957.0	2,822.9	734.3	562.8	171.43	4.283	
9,940.9	6,922.0	9,941.0	6,868.9	87.2	87.1	85.86	-957.0	2,863.8	734.2	560.6	173.68	4.228	
10,000.0	6,921.4	10,000.1	6,868.7	88.9	88.7	85.88	-957.0	2,922.9	734.2	557.3	176.94	4.150	
10,039.3	6,921.1	10,039.5	6,868.6	90.0	89.8	85.90	-957.0	2,962.3	734.2	555.1	179.11	4.099	
10,100.0	6,920.5	10,100.1	6,868.5	91.6	91.5	85.93	-957.0	3,022.9	734.2	551.7	182.45	4.024	
10,137.8	6,920.2	10,137.9	6,868.3	92.7	92.5	85.95	-957.0	3,060.7	734.1	549.6	184.54	3.978	
10,200.0	6,919.6	10,200.1	6,868.2	94.4	94.2	85.98	-957.0	3,122.9	734.1	546.1	187.98	3.905	
10,236.2	6,919.3	10,236.3	6,868.1	95.4	95.2	86.00	-957.0	3,159.1	734.1	544.1	189.98	3.864	
10,300.0	6,918.7	10,300.1	6,867.9	97.2	97.0	86.03	-957.0	3,222.9	734.1	540.6	193.51	3.794	
10,334.6	6,918.4	10,334.7	6,867.8	98.1	97.9	86.05	-957.0	3,257.5	734.1	538.6	195.42	3.756	
10,400.0	6,917.8	10,400.1	6,867.6	99.9	99.7	86.08	-957.0	3,322.9	734.0	535.0	199.04	3.688	
10,433.0	6,917.5	10,433.1	6,867.5	100.9	100.6	86.10	-957.0	3,356.0	734.0	533.1	200.87	3.654	
10,500.0	6,916.9	10,500.1	6,867.3	102.7	102.5	86.13	-957.0	3,422.9	734.0	529.4	204.58	3.588	
10,531.5	6,916.6	10,531.6	6,867.2	103.6	103.4	86.14	-957.0	3,454.4	734.0	527.7	206.32	3.557	
10,600.0	6,916.0	10,600.1	6,867.1	105.5	105.3	86.18	-957.0	3,522.9	733.9	523.8	210.12	3.493	
10,629.9	6,915.7	10,630.0	6,867.0	106.3	106.1	86.19	-957.0	3,552.8	733.9	522.2	211.78	3.466	
10,700.0	6,915.1	10,700.1	6,866.8	108.3	108.0	86.23	-957.0	3,622.9	733.9	518.2	215.67	3.403	
10,728.3	6,914.8	10,728.4	6,866.7	109.1	108.8	86.24	-957.0	3,651.2	733.9	516.6	217.24	3.378	
10,800.0	6,914.2	10,800.1	6,866.5	111.0	110.8	86.27	-957.0	3,722.9	733.9	512.6	221.22	3.317	
10,826.7	6,913.9	10,826.8	6,866.4	111.8	111.5	86.29	-957.0	3,749.7	733.9	511.1	222.71	3.295	
10,900.0	6,913.3	10,900.1	6,866.2	113.8	113.6	86.32	-957.0	3,822.9	733.8	507.0	226.78	3.236	
10,925.2	6,913.1	10,925.3	6,866.1	114.5	114.3	86.34	-957.0	3,848.1	733.8	505.6	228.18	3.216	
11,000.0	6,912.4	11,000.1	6,865.9	116.6	116.3	86.37	-957.0	3,922.9	733.8	501.4	232.34	3.158	
11,023.6	6,912.2	11,023.7	6,865.9	117.3	117.0	86.38	-957.0	3,946.5	733.8	500.1	233.65	3.140	
11,100.0	6,911.5	11,100.1	6,865.7	119.4	119.1	86.42	-957.0	4,022.9	733.7	495.8	237.90	3.084	
11,122.0	6,911.3	11,122.1	6,865.6	120.0	119.7	86.43	-957.0	4,044.9	733.7	494.6	239.13	3.068	
11,200.0	6,910.6	11,200.1	6,865.4	122.2	121.9	86.47	-957.0	4,122.9	733.7	490.2	243.47	3.014	
11,220.4	6,910.4	11,220.5	6,865.3	122.7	122.5	86.48	-957.0	4,143.3	733.7	489.1	244.61	2.999	
11,300.0	6,909.7	11,300.1	6,865.1	125.0	124.7	86.52	-957.0	4,222.9	733.7	484.6	249.04	2.946	
11,318.9	6,909.5	11,319.0	6,865.0	125.5	125.2	86.53	-957.0	4,241.8	733.7	483.6	250.09	2.934	
11,400.0	6,908.8	11,400.1	6,864.8	127.7	127.5	86.57	-957.0	4,322.9	733.6	479.0	254.61	2.881	
11,417.3	6,908.6	11,417.4	6,864.8	128.2	127.9	86.57	-957.0	4,340.2	733.6	478.0	255.57	2.871	
11,500.0	6,907.9	11,500.1	6,864.5	130.5	130.2	86.62	-957.0	4,422.9	733.6	473.4	260.18	2.820	
11,515.7	6,907.7	11,515.8	6,864.5	131.0	130.7	86.62	-957.0	4,438.6	733.6	472.5	261.06	2.810	
11,600.0	6,907.0	11,600.1	6,864.3	133.3	133.0	86.66	-957.0	4,522.9	733.6	467.8	265.76	2.760	
11,614.1	6,906.8	11,614.2	6,864.2	133.7	133.4	86.67	-957.0	4,537.0	733.5	467.0	266.55	2.752	
11,700.0	6,906.0	11,700.1	6,864.0	136.1	135.8	86.71	-957.0	4,622.9	733.5	462.2	271.33	2.703	
11,712.6	6,905.9	11,712.6	6,863.9	136.5	136.2	86.72	-957.0	4,635.5	733.5	461.5	272.04	2.696	
11,800.0	6,905.1	11,800.1	6,863.7	138.9	138.6	86.76	-957.0	4,722.9	733.5	456.6	276.91	2.649	
11,811.0	6,905.0	11,811.1	6,863.7	139.2	138.9	86.77	-957.0	4,733.9	733.5	455.9	277.53	2.643	
11,900.0	6,904.2	11,900.1	6,863.4	141.7	141.4	86.81	-957.0	4,822.9	733.4	450.9	282.50	2.596	
11,909.4	6,904.2	11,909.5	6,863.4	141.9	141.6	86.81	-957.0	4,832.3	733.4	450.4	283.02	2.591	
12,000.0	6,903.3	12,000.1	6,863.1	144.5	144.2	86.86	-957.0	4,922.9	733.4	445.3	288.08	2.546	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,903.3	12,007.9	6,863.1	144.7	144.4	86.86	-957.0	4,930.7	733.4	444.9	288.52	2.542	
12,100.0	6,902.4	12,100.1	6,862.9	147.3	146.9	86.91	-957.0	5,022.9	733.4	439.7	293.67	2.497	
12,106.3	6,902.4	12,106.3	6,862.9	147.4	147.1	86.91	-957.0	5,029.1	733.4	439.4	294.02	2.494	
12,200.0	6,901.5	12,200.1	6,862.6	150.1	149.7	86.96	-957.0	5,122.9	733.3	434.1	299.25	2.451	
12,204.7	6,901.5	12,204.8	6,862.6	150.2	149.9	86.96	-957.0	5,127.6	733.3	433.8	299.52	2.448	
12,300.0	6,900.6	12,300.1	6,862.3	152.9	152.5	87.01	-957.0	5,222.9	733.3	428.5	304.84	2.406	
12,303.1	6,900.6	12,303.2	6,862.3	152.9	152.6	87.01	-957.0	5,226.0	733.3	428.3	305.02	2.404	
12,400.0	6,899.7	12,400.1	6,862.0	155.6	155.3	87.05	-957.0	5,322.9	733.3	422.8	310.43	2.362	
12,401.5	6,899.7	12,401.6	6,862.0	155.7	155.4	87.05	-957.0	5,324.4	733.3	422.8	310.52	2.361	
12,500.0	6,898.8	12,500.1	6,861.8	158.4	158.1	87.10	-957.0	5,422.9	733.2	417.2	316.02	2.320	
12,598.4	6,897.9	12,598.5	6,861.5	161.2	160.8	87.15	-957.0	5,521.3	733.2	411.7	321.53	2.280	
12,600.0	6,897.9	12,600.1	6,861.5	161.2	160.9	87.15	-957.0	5,522.9	733.2	411.6	321.62	2.280	
12,696.8	6,897.0	12,696.9	6,861.2	163.9	163.6	87.20	-957.0	5,619.7	733.2	406.1	327.04	2.242	
12,700.0	6,897.0	12,700.1	6,861.2	164.0	163.7	87.20	-957.0	5,622.9	733.2	406.0	327.21	2.241	
12,795.2	6,896.1	12,795.3	6,860.9	166.7	166.3	87.25	-957.0	5,718.1	733.2	400.6	332.54	2.205	
12,800.0	6,896.1	12,800.0	6,860.9	166.8	166.5	87.25	-957.0	5,722.9	733.1	400.3	332.81	2.203	
12,893.7	6,895.3	12,893.7	6,860.7	169.4	169.1	87.29	-957.0	5,816.5	733.1	395.1	338.05	2.169	
12,900.0	6,895.2	12,900.0	6,860.6	169.6	169.3	87.30	-957.0	5,822.9	733.1	394.7	338.41	2.166	
12,992.1	6,894.4	12,992.1	6,860.4	172.2	171.8	87.34	-957.0	5,915.0	733.1	389.5	343.56	2.134	
13,000.0	6,894.3	13,000.0	6,860.4	172.4	172.1	87.35	-957.0	5,922.8	733.1	389.1	344.00	2.131	
13,090.5	6,893.5	13,090.6	6,860.1	175.0	174.6	87.39	-957.0	6,013.4	733.1	384.0	349.07	2.100	
13,100.0	6,893.4	13,100.0	6,860.1	175.2	174.9	87.39	-957.0	6,022.8	733.1	383.5	349.60	2.097	
13,188.9	6,892.6	13,189.0	6,859.8	177.7	177.3	87.44	-957.0	6,111.8	733.0	378.5	354.58	2.067	
13,200.0	6,892.5	13,200.0	6,859.8	178.0	177.7	87.44	-957.0	6,122.8	733.0	377.8	355.20	2.064	
13,287.4	6,891.7	13,287.4	6,859.6	180.5	180.1	87.49	-957.0	6,210.2	733.0	372.9	360.10	2.036	
13,300.0	6,891.6	13,300.0	6,859.5	180.8	180.4	87.49	-957.0	6,222.8	733.0	372.2	360.80	2.032	
13,385.8	6,890.8	13,385.8	6,859.3	183.2	182.8	87.53	-957.0	6,308.6	733.0	367.4	365.61	2.005	
13,400.0	6,890.7	13,400.0	6,859.2	183.6	183.2	87.54	-957.0	6,322.8	733.0	366.6	366.41	2.000	
13,484.2	6,889.9	13,484.3	6,859.0	186.0	185.6	87.58	-957.0	6,407.1	733.0	361.8	371.13	1.975	
13,500.0	6,889.8	13,500.0	6,859.0	186.4	186.0	87.59	-957.0	6,422.8	732.9	360.9	372.01	1.970	
13,582.6	6,889.0	13,582.7	6,858.7	188.7	188.3	87.63	-957.0	6,505.5	732.9	356.3	376.64	1.946	
13,600.0	6,888.9	13,600.0	6,858.7	189.2	188.8	87.64	-957.0	6,522.8	732.9	355.3	377.61	1.941	
13,681.1	6,888.1	13,681.1	6,858.5	191.5	191.1	87.68	-957.0	6,603.9	732.9	350.7	382.16	1.918	
13,700.0	6,888.0	13,700.0	6,858.4	192.0	191.6	87.69	-957.0	6,622.8	732.9	349.7	383.22	1.912	
13,779.5	6,887.3	13,779.5	6,858.2	194.2	193.9	87.73	-957.0	6,702.3	732.9	345.2	387.67	1.890	
13,800.0	6,887.1	13,800.0	6,858.1	194.8	194.4	87.74	-957.0	6,722.8	732.9	344.0	388.82	1.885	
13,877.9	6,886.4	13,878.0	6,857.9	197.0	196.6	87.77	-957.0	6,800.8	732.9	339.7	393.19	1.864	
13,900.0	6,886.2	13,900.0	6,857.8	197.6	197.2	87.78	-957.0	6,822.8	732.8	338.4	394.43	1.858	
13,976.3	6,885.5	13,976.4	6,857.6	199.7	199.4	87.82	-957.0	6,899.2	732.8	334.1	398.71	1.838	
14,000.0	6,885.3	14,000.0	6,857.6	200.4	200.0	87.83	-957.0	6,922.8	732.8	332.8	400.04	1.832	
14,074.8	6,884.6	14,074.8	6,857.4	202.5	202.1	87.87	-957.0	6,997.6	732.8	328.6	404.23	1.813	
14,100.0	6,884.4	14,100.0	6,857.3	203.2	202.8	87.88	-957.0	7,022.8	732.8	327.2	405.64	1.807	
14,173.2	6,883.7	14,173.2	6,857.1	205.3	204.9	87.92	-957.0	7,096.0	732.8	323.0	409.75	1.788	
14,200.0	6,883.5	14,200.0	6,857.0	206.0	205.6	87.93	-957.0	7,122.8	732.8	321.5	411.25	1.782	
14,271.6	6,882.8	14,271.6	6,856.8	208.0	207.6	87.97	-957.0	7,194.4	732.8	317.5	415.27	1.765	
14,300.0	6,882.6	14,300.0	6,856.7	208.8	208.4	87.98	-957.0	7,222.8	732.8	315.9	416.86	1.758	
14,370.0	6,881.9	14,370.1	6,856.5	210.8	210.4	88.01	-957.0	7,292.9	732.7	311.9	420.79	1.741	
14,400.0	6,881.7	14,400.0	6,856.4	211.6	211.2	88.03	-957.0	7,322.8	732.7	310.3	422.47	1.734	
14,468.5	6,881.0	14,468.5	6,856.3	213.5	213.1	88.06	-957.0	7,391.3	732.7	306.4	426.31	1.719	
14,500.0	6,880.8	14,500.3	6,856.2	214.4	214.0	88.08	-957.0	7,423.1	732.7	304.6	428.09	1.712	
14,566.9	6,880.2	14,567.2	6,856.0	216.3	215.9	88.11	-957.0	7,490.0	732.7	300.8	431.84	1.697	
14,584.2	6,880.0	14,584.5	6,856.0	216.8	216.4	88.12	-957.0	7,507.3	732.7	299.8	432.81	1.693 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
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Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	29.1	0.0	29.2				
98.4	98.4	97.4	97.4	0.1	0.1	0.00	29.1	0.0	29.1	29.0	0.17	172.381	
100.0	100.0	99.0	99.0	0.1	0.1	0.00	29.1	0.0	29.1	29.0	0.17	169.245	
196.8	196.8	195.8	195.8	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.61	48.078	
200.0	200.0	199.0	199.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.62	46.981	
295.3	295.3	294.3	294.3	0.5	0.5	0.00	29.1	0.0	29.1	28.1	1.05	27.793	
300.0	300.0	299.0	299.0	0.5	0.5	0.00	29.1	0.0	29.1	28.1	1.07	27.241	
393.7	393.7	392.7	392.7	0.7	0.7	0.00	29.1	0.0	29.1	27.7	1.49	19.546	
400.0	400.0	399.0	399.0	0.8	0.8	0.00	29.1	0.0	29.1	27.6	1.52	19.182	
492.1	492.1	491.1	491.1	1.0	1.0	0.00	29.1	0.0	29.1	27.2	1.93	15.073	
500.0	500.0	499.0	499.0	1.0	1.0	0.00	29.1	0.0	29.1	27.2	1.97	14.802	
590.5	590.5	589.5	589.5	1.2	1.2	0.00	29.1	0.0	29.1	26.8	2.38	12.266	
600.0	600.0	599.0	599.0	1.2	1.2	0.00	29.1	0.0	29.1	26.7	2.42	12.051	
689.0	689.0	688.0	688.0	1.4	1.4	0.00	29.1	0.0	29.1	26.3	2.82	10.341	
700.0	700.0	699.0	699.0	1.4	1.4	0.00	29.1	0.0	29.1	26.3	2.87	10.162	
787.4	787.4	786.4	786.4	1.6	1.6	0.00	29.1	0.0	29.1	25.9	3.26	8.938	
800.0	800.0	799.0	799.0	1.7	1.7	0.00	29.1	0.0	29.1	25.8	3.32	8.785	
885.8	885.8	884.8	884.8	1.9	1.9	0.00	29.1	0.0	29.1	25.4	3.70	7.870	
900.0	900.0	899.0	899.0	1.9	1.9	0.00	29.1	0.0	29.1	25.4	3.77	7.737	
984.2	984.2	983.2	983.2	2.1	2.1	0.00	29.1	0.0	29.1	25.0	4.15	7.030	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	0.00	29.1	0.0	29.1	24.9	4.22	6.912	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	0.00	29.1	0.0	29.1	24.6	4.59	6.352	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.3	0.00	29.1	0.0	29.1	24.5	4.67	6.246	
1,181.1	1,181.1	1,180.1	1,180.1	2.5	2.5	0.00	29.1	0.0	29.1	24.1	5.03	5.793	
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	0.00	29.1	0.0	29.1	24.0	5.12	5.697	
1,279.5	1,279.5	1,278.5	1,278.5	2.7	2.7	0.00	29.1	0.0	29.1	23.7	5.47	5.325	
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	0.00	29.1	0.0	29.1	23.6	5.57	5.237	
1,338.3	1,338.3	1,337.3	1,337.3	2.9	2.9	0.00	29.1	0.0	29.1	23.4	5.74	5.080 CC	
1,377.9	1,377.9	1,376.8	1,376.8	3.0	3.0	-0.21	29.2	-0.1	29.2	23.3	5.91	4.939 ES	
1,400.0	1,400.0	1,398.7	1,398.7	3.0	3.0	-0.70	29.4	-0.4	29.4	23.3	6.01	4.884	
1,476.4	1,476.4	1,474.6	1,474.6	3.2	3.2	-4.37	30.5	-2.3	30.6	24.3	6.34	4.827	
1,500.0	1,500.0	1,498.1	1,498.0	3.2	3.2	-6.05	31.1	-3.3	31.3	24.8	6.45	4.852	
1,574.8	1,574.8	1,572.2	1,572.0	3.4	3.4	-12.46	33.5	-7.4	34.4	27.6	6.78	5.076	
1,600.0	1,600.0	1,597.1	1,596.8	3.5	3.4	-14.85	34.6	-9.2	35.8	28.9	6.89	5.204	
1,650.0	1,650.0	1,646.4	1,645.9	3.6	3.5	-19.64	36.9	-13.2	39.4	32.2	7.11	5.538	
1,673.2	1,673.2	1,669.2	1,668.6	3.6	3.6	97.86	38.2	-15.3	41.3	34.1	7.21	5.727	
1,700.0	1,700.0	1,695.5	1,694.7	3.7	3.7	95.80	39.7	-17.9	43.8	36.5	7.33	5.984	
1,771.6	1,771.6	1,765.7	1,764.2	3.8	3.8	91.94	44.5	-25.9	51.9	44.3	7.62	6.808	
1,800.0	1,799.9	1,793.3	1,791.6	3.9	3.9	90.95	46.6	-29.5	55.6	47.8	7.74	7.178	
1,870.1	1,869.9	1,861.4	1,858.7	4.0	4.1	89.50	52.3	-39.2	65.6	57.6	8.04	8.163	
1,900.0	1,899.7	1,890.4	1,887.2	4.1	4.2	89.21	55.0	-43.7	70.4	62.2	8.17	8.616	
1,968.5	1,967.8	1,956.5	1,952.0	4.2	4.4	89.04	61.7	-55.0	82.2	73.7	8.48	9.694	
2,000.0	1,999.1	1,987.5	1,982.3	4.3	4.5	89.22	65.0	-60.6	87.9	79.3	8.63	10.188	
2,066.9	2,065.5	2,053.3	2,046.6	4.4	4.7	90.17	72.0	-72.3	100.0	91.0	8.95	11.163	
2,100.0	2,098.2	2,085.8	2,078.4	4.5	4.8	90.85	75.4	-78.2	105.9	96.8	9.12	11.619	
2,165.3	2,162.6	2,149.9	2,141.2	4.7	5.0	92.50	82.2	-89.6	117.9	108.4	9.47	12.448	
2,200.0	2,196.6	2,183.9	2,174.4	4.7	5.2	93.51	85.8	-95.7	124.3	114.6	9.66	12.867	
2,249.9	2,245.5	2,232.7	2,222.1	4.9	5.3	95.09	91.0	-104.5	133.6	123.7	9.95	13.431	
2,263.8	2,259.1	2,246.3	2,235.4	4.9	5.4	95.59	92.4	-106.9	136.3	126.2	10.03	13.581	
2,300.0	2,294.5	2,281.7	2,270.1	5.0	5.5	96.81	96.2	-113.2	143.2	132.9	10.26	13.963	
2,362.2	2,355.4	2,342.6	2,329.6	5.2	5.8	98.64	102.6	-124.1	155.2	144.6	10.65	14.575	
2,400.0	2,392.3	2,379.6	2,365.8	5.4	5.9	99.63	106.5	-130.7	162.6	151.7	10.89	14.928	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,438.9	2,423.8	5.6	6.1	101.03	112.8	-141.4	174.5	163.2	11.29	15.452	
2,500.0	2,490.2	2,477.4	2,461.5	5.7	6.3	101.84	116.9	-148.2	182.3	170.7	11.55	15.776	
2,559.0	2,547.9	2,535.2	2,518.0	5.9	6.5	102.94	123.0	-158.6	194.0	182.0	11.96	16.224	
2,600.0	2,588.0	2,575.2	2,557.2	6.1	6.7	103.63	127.3	-165.8	202.2	189.9	12.24	16.518	
2,657.5	2,644.2	2,631.4	2,612.2	6.3	6.9	104.50	133.2	-175.8	213.7	201.0	12.64	16.901	
2,700.0	2,685.8	2,673.0	2,652.9	6.4	7.1	105.09	137.6	-183.3	222.2	209.3	12.94	17.169	
2,755.9	2,740.5	2,727.7	2,706.3	6.6	7.3	105.80	143.4	-193.0	233.5	220.1	13.34	17.497	
2,800.0	2,783.6	2,770.9	2,748.5	6.8	7.5	106.31	148.0	-200.8	242.4	228.7	13.66	17.742	
2,854.3	2,836.7	2,824.0	2,800.5	7.0	7.7	106.90	153.6	-210.3	253.4	239.3	14.06	18.024	
2,900.0	2,881.4	2,868.7	2,844.2	7.2	7.9	107.35	158.4	-218.3	262.6	248.2	14.39	18.248	
2,952.7	2,933.0	2,920.3	2,894.7	7.4	8.1	107.83	163.8	-227.5	273.3	258.6	14.78	18.491	
3,000.0	2,979.2	2,966.5	2,939.9	7.6	8.3	108.23	168.7	-235.8	283.0	267.8	15.13	18.697	
3,051.2	3,029.3	3,016.6	2,988.9	7.8	8.5	108.64	174.0	-244.7	293.4	277.9	15.52	18.906	
3,100.0	3,077.1	3,064.3	3,035.6	8.0	8.7	109.00	179.1	-253.3	303.3	287.5	15.89	19.095	
3,149.6	3,125.6	3,112.9	3,083.1	8.2	8.9	109.34	184.2	-262.0	313.5	297.2	16.26	19.277	
3,200.0	3,174.9	3,162.2	3,131.3	8.4	9.1	109.67	189.4	-270.8	323.8	307.1	16.64	19.452	
3,248.0	3,221.8	3,209.1	3,177.2	8.6	9.3	109.96	194.4	-279.2	333.6	316.6	17.01	19.609	
3,300.0	3,272.7	3,260.0	3,227.0	8.9	9.6	110.26	199.8	-288.3	344.2	326.8	17.41	19.772	
3,346.4	3,318.1	3,305.4	3,271.4	9.0	9.8	110.51	204.6	-296.4	353.8	336.0	17.77	19.909	
3,400.0	3,370.5	3,357.8	3,322.7	9.3	10.0	110.79	210.2	-305.8	364.7	346.5	18.18	20.060	
3,444.9	3,414.4	3,401.7	3,365.6	9.5	10.2	111.00	214.8	-313.7	373.9	355.4	18.53	20.180	
3,500.0	3,468.3	3,455.6	3,418.3	9.7	10.4	111.26	220.5	-323.3	385.3	366.3	18.96	20.321	
3,543.3	3,510.7	3,498.0	3,459.8	9.9	10.6	111.45	225.0	-330.9	394.1	374.9	19.30	20.426	
3,600.0	3,566.1	3,553.5	3,514.0	10.1	10.8	111.68	230.9	-340.8	405.8	386.1	19.74	20.557	
3,641.7	3,606.9	3,597.6	3,557.3	10.3	11.0	111.88	235.4	-348.5	414.2	394.2	20.06	20.650	
3,700.0	3,664.0	3,660.2	3,618.8	10.6	11.2	112.29	241.3	-358.4	425.4	404.9	20.47	20.781	
3,740.1	3,703.2	3,703.5	3,661.5	10.7	11.3	112.64	245.0	-364.6	432.7	411.9	20.75	20.848	
3,800.0	3,761.8	3,768.2	3,725.4	11.0	11.5	113.27	249.8	-372.8	442.9	421.7	21.16	20.927	
3,837.4	3,798.3	3,808.6	3,765.5	11.2	11.6	113.72	252.5	-377.3	448.9	427.5	21.42	20.959	
3,838.6	3,799.5	3,809.9	3,766.8	11.2	11.6	113.74	252.6	-377.4	449.1	427.6	21.42	20.961	
3,900.0	3,859.7	3,876.4	3,833.0	11.4	11.8	114.68	256.3	-383.8	458.0	436.2	21.81	20.997	
3,937.0	3,896.1	3,916.7	3,873.0	11.5	11.9	115.21	258.2	-386.9	462.8	440.8	22.02	21.018	
4,000.0	3,958.3	3,985.3	3,941.4	11.7	12.0	116.08	260.7	-391.2	469.9	447.5	22.36	21.016	
4,035.4	3,993.3	4,023.9	3,980.0	11.8	12.1	116.54	261.8	-393.0	473.3	450.7	22.53	21.004	
4,100.0	4,057.4	4,094.4	4,050.5	12.0	12.2	117.36	263.1	-395.2	478.3	455.5	22.84	20.942	
4,133.8	4,091.0	4,131.4	4,087.5	12.1	12.3	117.77	263.4	-395.7	480.4	457.4	22.98	20.901	
4,200.0	4,156.8	4,199.8	4,155.8	12.2	12.4	118.49	263.4	-395.8	483.4	460.1	23.25	20.787	
4,232.3	4,189.0	4,232.0	4,188.0	12.3	12.4	118.77	263.4	-395.8	484.6	461.2	23.38	20.726	
4,300.0	4,256.6	4,299.6	4,255.6	12.4	12.5	119.22	263.4	-395.8	486.5	462.9	23.64	20.579	
4,330.7	4,287.3	4,330.2	4,286.3	12.5	12.6	119.36	263.4	-395.8	487.2	463.4	23.75	20.511	
4,400.0	4,356.6	4,399.5	4,355.6	12.6	12.7	119.56	263.4	-395.8	488.0	464.0	24.00	20.337	
4,429.1	4,385.7	4,428.6	4,384.7	12.6	12.7	119.58	263.4	-395.8	488.1	464.0	24.09	20.260	
4,437.2	4,393.8	4,436.7	4,392.8	12.7	12.8	0.00	263.4	-395.8	488.1	467.0	21.10	23.134	
4,500.0	4,456.6	4,499.5	4,455.6	12.7	12.9	0.00	263.4	-395.8	488.1	466.8	21.33	22.881	
4,527.5	4,484.1	4,527.1	4,483.1	12.8	12.9	0.00	263.4	-395.8	488.1	466.7	21.44	22.770	
4,600.0	4,556.6	4,599.5	4,555.6	12.9	13.0	0.00	263.4	-395.8	488.1	466.4	21.71	22.483	
4,626.0	4,582.6	4,625.5	4,581.6	12.9	13.1	0.00	263.4	-395.8	488.1	466.3	21.81	22.381	
4,700.0	4,656.6	4,699.5	4,655.6	13.1	13.2	0.00	263.4	-395.8	488.1	466.1	22.09	22.096	
4,724.4	4,681.0	4,723.9	4,680.0	13.1	13.2	0.00	263.4	-395.8	488.1	466.0	22.19	22.003	
4,800.0	4,756.6	4,799.5	4,755.6	13.2	13.4	0.00	263.4	-395.8	488.1	465.7	22.47	21.720	
4,822.8	4,779.4	4,822.3	4,778.4	13.3	13.4	0.00	263.4	-395.8	488.1	465.6	22.56	21.635	
4,900.0	4,856.6	4,899.5	4,855.6	13.4	13.5	0.00	263.4	-395.8	488.1	465.3	22.86	21.353	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,920.8	4,876.8	13.4	13.6	0.00	263.4	-395.8	488.1	465.2	22.94	21.277	
5,000.0	4,956.6	4,999.5	4,955.6	13.6	13.7	0.00	263.4	-395.8	488.1	464.9	23.25	20.997	
5,019.7	4,976.3	5,019.2	4,975.3	13.6	13.7	0.00	263.4	-395.8	488.1	464.8	23.32	20.928	
5,100.0	5,056.6	5,099.5	5,055.6	13.7	13.9	0.00	263.4	-395.8	488.1	464.5	23.64	20.651	
5,118.1	5,074.7	5,117.6	5,073.7	13.8	13.9	0.00	263.4	-395.8	488.1	464.4	23.71	20.589	
5,200.0	5,156.6	5,199.5	5,155.6	13.9	14.1	0.00	263.4	-395.8	488.1	464.1	24.03	20.314	
5,216.5	5,173.1	5,216.0	5,172.1	13.9	14.1	0.00	263.4	-395.8	488.1	464.1	24.09	20.259	
5,300.0	5,256.6	5,299.5	5,255.6	14.1	14.2	0.00	263.4	-395.8	488.1	463.7	24.42	19.987	
5,314.9	5,271.5	5,314.5	5,270.5	14.1	14.3	0.00	263.4	-395.8	488.1	463.7	24.48	19.938	
5,400.0	5,356.6	5,399.5	5,355.6	14.2	14.4	0.00	263.4	-395.8	488.1	463.3	24.82	19.668	
5,413.4	5,370.0	5,412.9	5,369.0	14.3	14.4	0.00	263.4	-395.8	488.1	463.3	24.87	19.626	
5,500.0	5,456.6	5,499.5	5,455.6	14.4	14.6	0.00	263.4	-395.8	488.1	462.9	25.22	19.358	
5,511.8	5,468.4	5,511.3	5,467.4	14.4	14.6	0.00	263.4	-395.8	488.1	462.9	25.26	19.322	
5,600.0	5,556.6	5,599.5	5,555.6	14.6	14.8	0.00	263.4	-395.8	488.1	462.5	25.62	19.056	
5,610.2	5,566.8	5,609.7	5,565.8	14.6	14.8	0.00	263.4	-395.8	488.1	462.5	25.66	19.026	
5,700.0	5,656.6	5,699.5	5,655.6	14.8	14.9	0.00	263.4	-395.8	488.1	462.1	26.02	18.762	
5,708.6	5,665.2	5,708.2	5,664.2	14.8	15.0	0.00	263.4	-395.8	488.1	462.1	26.05	18.737	
5,800.0	5,756.6	5,799.5	5,755.6	14.9	15.1	0.00	263.4	-395.8	488.1	461.7	26.42	18.477	
5,807.1	5,763.7	5,806.6	5,762.7	14.9	15.1	0.00	263.4	-395.8	488.1	461.7	26.45	18.457	
5,900.0	5,856.6	5,899.5	5,855.6	15.1	15.3	0.00	263.4	-395.8	488.1	461.3	26.82	18.198	
5,905.5	5,862.1	5,905.0	5,861.1	15.1	15.3	0.00	263.4	-395.8	488.1	461.3	26.85	18.183	
6,000.0	5,956.6	5,999.5	5,955.6	15.3	15.5	0.00	263.4	-395.8	488.1	460.9	27.23	17.927	
6,003.9	5,960.5	6,003.4	5,959.5	15.3	15.5	0.00	263.4	-395.8	488.1	460.9	27.24	17.917	
6,100.0	6,056.6	6,099.5	6,055.6	15.5	15.7	0.00	263.4	-395.8	488.1	460.5	27.64	17.664	
6,102.3	6,058.9	6,101.9	6,057.9	15.5	15.7	0.00	263.4	-395.8	488.1	460.5	27.65	17.657	
6,200.0	6,156.6	6,199.5	6,155.6	15.7	15.9	0.00	263.4	-395.8	488.1	460.1	28.04	17.406	
6,200.8	6,157.4	6,200.3	6,156.4	15.7	15.9	0.00	263.4	-395.8	488.1	460.1	28.05	17.404	
6,272.2	6,228.8	6,271.7	6,227.8	15.8	16.0	0.00	263.4	-395.8	488.1	459.8	28.34	17.225	
6,299.2	6,255.8	6,298.7	6,254.8	15.8	16.1	-90.02	263.4	-395.5	488.1	457.3	30.89	15.802	
6,300.0	6,256.6	6,299.5	6,255.6	15.8	16.1	-90.02	263.4	-395.5	488.1	457.3	30.89	15.800	
6,350.0	6,306.4	6,349.6	6,305.5	15.9	16.1	-90.07	263.4	-392.2	488.1	457.1	31.02	15.737	
6,397.6	6,353.6	6,397.2	6,352.7	15.9	16.2	-90.12	263.4	-385.9	488.1	457.0	31.10	15.697	
6,400.0	6,355.9	6,399.6	6,355.1	15.9	16.2	-90.12	263.4	-385.5	488.1	457.0	31.10	15.695	
6,450.0	6,404.8	6,449.7	6,404.1	15.9	16.2	-90.17	263.4	-375.3	488.1	457.0	31.15	15.672	
6,496.0	6,449.0	6,495.8	6,448.5	16.0	16.2	-90.21	263.4	-362.8	488.1	457.0	31.16	15.664	
6,500.0	6,452.8	6,499.8	6,452.3	16.0	16.2	-90.22	263.4	-361.6	488.1	457.0	31.17	15.663	
6,550.0	6,499.7	6,549.9	6,499.5	15.9	16.2	-90.26	263.4	-344.7	488.1	457.0	31.17	15.663	
6,594.5	6,540.3	6,594.6	6,540.4	15.9	16.2	-90.30	263.4	-326.9	488.2	457.0	31.16	15.667	
6,600.0	6,545.3	6,600.1	6,545.4	15.9	16.2	-90.31	263.4	-324.5	488.2	457.0	31.16	15.667	
6,650.0	6,589.3	6,650.3	6,589.8	15.9	16.2	-90.35	263.4	-301.1	488.2	457.0	31.16	15.667	
6,692.9	6,625.7	6,693.4	6,626.5	15.9	16.2	-90.39	263.4	-278.5	488.2	457.0	31.18	15.657	
6,700.0	6,631.6	6,700.5	6,632.5	15.9	16.2	-90.39	263.4	-274.6	488.2	457.0	31.18	15.655	
6,750.0	6,671.9	6,750.8	6,673.2	15.9	16.2	-90.43	263.4	-245.2	488.2	456.9	31.25	15.620	
6,791.3	6,703.6	6,792.3	6,705.2	15.9	16.2	-90.47	263.4	-218.8	488.2	456.8	31.36	15.564	
6,800.0	6,710.1	6,801.1	6,711.8	15.9	16.2	-90.47	263.4	-213.0	488.2	456.8	31.39	15.552	
6,850.0	6,745.9	6,851.3	6,748.0	16.0	16.3	-90.51	263.4	-178.1	488.2	456.5	31.62	15.441	
6,889.7	6,772.6	6,891.3	6,775.0	16.1	16.3	-90.53	263.4	-148.6	488.2	456.3	31.88	15.311	
6,900.0	6,779.2	6,901.7	6,781.7	16.1	16.4	-90.54	263.4	-140.8	488.2	456.2	31.95	15.277	
6,950.0	6,809.8	6,952.0	6,812.8	16.3	16.5	-90.57	263.4	-101.2	488.2	455.7	32.43	15.054	
6,988.2	6,831.3	6,990.4	6,834.6	16.4	16.7	-90.59	263.4	-69.5	488.2	455.3	32.90	14.837	
7,000.0	6,837.6	7,002.3	6,841.0	16.5	16.8	-90.60	263.4	-59.5	488.2	455.1	33.05	14.769	
7,050.0	6,862.5	7,052.7	6,866.1	16.9	17.1	-90.62	263.4	-15.9	488.2	454.3	33.84	14.424	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,878.7	7,089.6	6,882.6	17.2	17.5	-90.64	263.4	17.1	488.2	453.6	34.55	14.131	
7,100.0	6,884.2	7,103.1	6,888.2	17.3	17.6	-90.64	263.4	29.4	488.2	453.4	34.81	14.025	
7,150.0	6,902.7	7,153.5	6,907.1	17.8	18.1	-90.66	263.4	76.1	488.2	452.2	35.94	13.582	
7,185.0	6,913.8	7,188.8	6,918.3	18.3	18.6	-90.67	263.4	109.6	488.2	451.3	36.85	13.247	
7,200.0	6,918.0	7,203.9	6,922.6	18.5	18.8	-90.68	263.4	124.1	488.2	450.9	37.25	13.107	
7,250.0	6,929.9	7,254.3	6,934.7	19.2	19.5	-90.69	263.4	173.0	488.2	449.5	38.70	12.613	
7,283.4	6,936.0	7,288.0	6,940.8	19.7	20.0	-90.70	263.4	206.2	488.2	448.4	39.77	12.276	
7,300.0	6,938.4	7,304.7	6,943.3	20.0	20.3	-90.70	263.4	222.7	488.2	447.9	40.30	12.114	
7,350.0	6,943.4	7,355.1	6,948.4	20.9	21.2	-90.70	263.4	272.8	488.2	446.2	42.01	11.620	
7,381.9	6,944.8	7,387.3	6,949.8	21.4	21.7	-90.70	263.4	304.9	488.2	445.0	43.16	11.310	
7,403.7	6,945.0	7,409.3	6,950.0	21.8	22.1	-90.70	263.4	327.0	488.2	444.2	43.96	11.106	
7,480.3	6,944.3	7,485.9	6,949.3	23.3	23.6	-90.70	263.4	403.5	488.2	441.3	46.92	10.404	
7,480.3	6,944.3	7,485.9	6,949.3	23.3	23.6	-90.70	263.4	403.5	488.2	441.3	46.93	10.403	
7,500.0	6,944.1	7,505.6	6,949.1	23.7	24.0	-90.70	263.4	423.2	488.2	440.5	47.70	10.235	
7,578.7	6,943.4	7,584.3	6,948.4	25.4	25.7	-90.70	263.4	501.9	488.2	437.2	50.98	9.575	
7,600.0	6,943.2	7,605.6	6,948.2	25.8	26.1	-90.70	263.4	523.2	488.2	436.3	51.88	9.410	
7,677.1	6,942.5	7,682.7	6,947.5	27.5	27.8	-90.70	263.4	600.4	488.2	432.9	55.30	8.828	
7,700.0	6,942.3	7,705.6	6,947.3	28.0	28.3	-90.70	263.4	623.2	488.2	431.9	56.31	8.669	
7,775.6	6,941.6	7,781.1	6,946.6	29.8	30.1	-90.70	263.4	698.8	488.2	428.4	59.81	8.162	
7,800.0	6,941.4	7,805.6	6,946.4	30.3	30.6	-90.70	263.4	723.2	488.2	427.2	60.95	8.010	
7,874.0	6,940.7	7,879.6	6,945.7	32.1	32.4	-90.70	263.4	797.2	488.2	423.7	64.49	7.570	
7,900.0	6,940.5	7,905.6	6,945.5	32.7	33.0	-90.70	263.4	823.2	488.2	422.4	65.74	7.426	
7,972.4	6,939.8	7,978.0	6,944.8	34.5	34.8	-90.70	263.4	895.6	488.2	418.9	69.29	7.045	
8,000.0	6,939.6	8,005.6	6,944.6	35.2	35.5	-90.70	263.4	923.2	488.2	417.5	70.65	6.910	
8,070.8	6,938.9	8,076.4	6,943.9	37.0	37.3	-90.70	263.4	994.1	488.2	414.0	74.20	6.579	
8,100.0	6,938.7	8,105.6	6,943.6	37.7	38.0	-90.70	263.4	1,023.2	488.2	412.5	75.66	6.452	
8,169.3	6,938.0	8,174.8	6,943.0	39.5	39.7	-90.70	263.4	1,092.5	488.2	409.0	79.18	6.165	
8,200.0	6,937.7	8,205.6	6,942.7	40.3	40.5	-90.70	263.4	1,123.2	488.2	407.4	80.75	6.046	
8,267.7	6,937.1	8,273.3	6,942.1	42.0	42.3	-90.70	263.4	1,190.9	488.2	403.9	84.24	5.795	
8,300.0	6,936.8	8,305.6	6,941.8	42.8	43.1	-90.70	263.4	1,223.2	488.2	402.3	85.91	5.683	
8,366.1	6,936.2	8,371.7	6,941.2	44.6	44.8	-90.70	263.4	1,289.3	488.2	398.8	89.35	5.464	
8,400.0	6,935.9	8,405.6	6,940.9	45.5	45.7	-90.70	263.4	1,323.2	488.2	397.1	91.12	5.358	
8,464.5	6,935.3	8,470.1	6,940.3	47.2	47.4	-90.70	263.4	1,387.7	488.2	393.7	94.51	5.165	
8,500.0	6,935.0	8,505.6	6,940.0	48.1	48.3	-90.70	263.4	1,423.2	488.2	391.8	96.37	5.065	
8,563.0	6,934.5	8,568.5	6,939.5	49.8	50.0	-90.70	263.4	1,486.2	488.2	388.5	99.71	4.896	
8,600.0	6,934.1	8,605.6	6,939.1	50.7	51.0	-90.70	263.4	1,523.2	488.2	386.5	101.67	4.802	
8,661.4	6,933.6	8,667.0	6,938.6	52.4	52.6	-90.70	263.4	1,584.6	488.2	383.2	104.94	4.652	
8,700.0	6,933.2	8,705.6	6,938.2	53.4	53.6	-90.70	263.4	1,623.2	488.2	381.2	107.00	4.562	
8,759.8	6,932.7	8,765.4	6,937.7	55.0	55.2	-90.70	263.4	1,683.0	488.2	378.0	110.20	4.430	
8,800.0	6,932.3	8,805.6	6,937.3	56.1	56.3	-90.70	263.4	1,723.2	488.2	375.8	112.36	4.345	
8,858.2	6,931.8	8,863.8	6,936.8	57.7	57.9	-90.70	263.4	1,781.4	488.2	372.7	115.49	4.227	
8,900.0	6,931.4	8,905.6	6,936.4	58.8	59.0	-90.70	263.4	1,823.2	488.2	370.4	117.74	4.146	
8,956.7	6,930.9	8,962.2	6,935.9	60.3	60.5	-90.70	263.4	1,879.8	488.2	367.4	120.80	4.041	
9,000.0	6,930.5	9,005.6	6,935.5	61.5	61.7	-90.70	263.4	1,923.2	488.2	365.0	123.14	3.964	
9,055.1	6,930.0	9,060.7	6,935.0	63.0	63.2	-90.70	263.4	1,978.3	488.2	362.1	126.13	3.871	
9,100.0	6,929.6	9,105.6	6,934.6	64.2	64.4	-90.70	263.4	2,023.2	488.2	359.6	128.56	3.797	
9,153.5	6,929.1	9,159.1	6,934.1	65.6	65.9	-90.70	263.4	2,076.7	488.2	356.7	131.47	3.713	
9,200.0	6,928.7	9,205.6	6,933.7	66.9	67.1	-90.70	263.4	2,123.2	488.2	354.2	134.00	3.643	
9,251.9	6,928.2	9,257.5	6,933.2	68.3	68.5	-90.70	263.4	2,175.1	488.2	351.4	136.83	3.568	
9,300.0	6,927.8	9,305.6	6,932.8	69.6	69.9	-90.70	263.4	2,223.2	488.2	348.7	139.45	3.501	
9,350.4	6,927.3	9,355.9	6,932.3	71.0	71.2	-90.70	263.4	2,273.5	488.2	346.0	142.20	3.433	
9,400.0	6,926.9	9,405.6	6,931.9	72.4	72.6	-90.70	263.4	2,323.1	488.2	343.3	144.92	3.369	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,448.8	6,926.4	9,454.4	6,931.4	73.7	73.9	-90.70	263.4	2,371.9	488.2	340.6	147.59	3.308	
9,500.0	6,926.0	9,505.6	6,931.0	75.1	75.3	-90.70	263.4	2,423.1	488.2	337.8	150.39	3.246	
9,547.2	6,925.5	9,552.8	6,930.5	76.4	76.6	-90.70	263.4	2,470.4	488.2	335.2	152.98	3.191	
9,600.0	6,925.1	9,605.6	6,930.1	77.9	78.1	-90.70	263.4	2,523.1	488.2	332.3	155.88	3.132	
9,645.6	6,924.6	9,651.2	6,929.6	79.1	79.3	-90.70	263.4	2,568.8	488.2	329.8	158.39	3.082	
9,700.0	6,924.1	9,705.6	6,929.1	80.6	80.8	-90.70	263.4	2,623.1	488.2	326.8	161.37	3.025	
9,744.1	6,923.7	9,749.6	6,928.7	81.8	82.0	-90.70	263.4	2,667.2	488.2	324.4	163.80	2.980	
9,800.0	6,923.2	9,805.6	6,928.2	83.4	83.6	-90.70	263.4	2,723.1	488.2	321.3	166.88	2.925	
9,842.5	6,922.9	9,848.1	6,927.9	84.5	84.7	-90.70	263.4	2,765.6	488.2	319.0	169.22	2.885	
9,900.0	6,922.3	9,905.6	6,927.3	86.1	86.3	-90.70	263.4	2,823.1	488.2	315.8	172.39	2.832	
9,940.9	6,922.0	9,946.5	6,927.0	87.2	87.4	-90.70	263.4	2,864.0	488.2	313.5	174.65	2.795	
10,000.0	6,921.4	10,005.6	6,926.4	88.9	89.1	-90.70	263.4	2,923.1	488.2	310.3	177.91	2.744	
10,039.3	6,921.1	10,044.9	6,926.1	90.0	90.2	-90.70	263.4	2,962.5	488.2	308.1	180.08	2.711	
10,100.0	6,920.5	10,105.6	6,925.5	91.6	91.8	-90.70	263.4	3,023.1	488.2	304.8	183.43	2.661	
10,137.8	6,920.2	10,143.3	6,925.2	92.7	92.9	-90.70	263.4	3,060.9	488.2	302.7	185.52	2.631	
10,200.0	6,919.6	10,205.6	6,924.6	94.4	94.6	-90.70	263.4	3,123.1	488.2	299.2	188.96	2.584	
10,236.2	6,919.3	10,241.8	6,924.3	95.4	95.6	-90.70	263.4	3,159.3	488.2	297.2	190.96	2.556	
10,300.0	6,918.7	10,305.6	6,923.7	97.2	97.4	-90.70	263.4	3,223.1	488.2	293.7	194.50	2.510	
10,334.6	6,918.4	10,340.2	6,923.4	98.1	98.3	-90.70	263.4	3,257.7	488.2	291.8	196.41	2.485	
10,400.0	6,917.8	10,405.6	6,922.8	99.9	100.1	-90.70	263.4	3,323.1	488.2	288.2	200.04	2.441	
10,433.0	6,917.5	10,438.6	6,922.5	100.9	101.1	-90.70	263.4	3,356.2	488.2	286.3	201.87	2.418	
10,500.0	6,916.9	10,505.6	6,921.9	102.7	102.9	-90.70	263.4	3,423.1	488.2	282.6	205.58	2.375	
10,531.5	6,916.6	10,537.0	6,921.6	103.6	103.8	-90.70	263.4	3,454.6	488.2	280.9	207.33	2.355	
10,600.0	6,916.0	10,605.6	6,921.0	105.5	105.7	-90.70	263.4	3,523.1	488.2	277.1	211.13	2.312	
10,629.9	6,915.7	10,635.5	6,920.7	106.3	106.5	-90.70	263.4	3,553.0	488.2	275.4	212.79	2.294	
10,700.0	6,915.1	10,705.6	6,920.1	108.3	108.5	-90.70	263.4	3,623.1	488.2	271.5	216.68	2.253	
10,728.3	6,914.8	10,733.9	6,919.8	109.1	109.2	-90.70	263.4	3,651.4	488.2	269.9	218.25	2.237	
10,800.0	6,914.2	10,805.6	6,919.2	111.0	111.2	-90.70	263.4	3,723.1	488.2	266.0	222.23	2.197	
10,826.7	6,913.9	10,832.3	6,918.9	111.8	112.0	-90.70	263.4	3,749.8	488.2	264.5	223.72	2.182	
10,900.0	6,913.3	10,905.6	6,918.3	113.8	114.0	-90.70	263.4	3,823.1	488.2	260.4	227.79	2.143	
10,925.2	6,913.1	10,930.7	6,918.1	114.5	114.7	-90.70	263.4	3,848.3	488.2	259.0	229.19	2.130	
11,000.0	6,912.4	11,005.6	6,917.4	116.6	116.8	-90.70	263.4	3,923.1	488.2	254.8	233.35	2.092	
11,023.6	6,912.2	11,029.2	6,917.2	117.3	117.5	-90.70	263.4	3,946.7	488.2	253.5	234.67	2.080	
11,100.0	6,911.5	11,105.6	6,916.5	119.4	119.6	-90.70	263.4	4,023.1	488.2	249.3	238.92	2.043	
11,122.0	6,911.3	11,127.6	6,916.3	120.0	120.2	-90.70	263.4	4,045.1	488.2	248.0	240.14	2.033	
11,200.0	6,910.6	11,205.6	6,915.6	122.2	122.4	-90.70	263.4	4,123.1	488.2	243.7	244.48	1.997	
11,220.4	6,910.4	11,226.0	6,915.4	122.7	122.9	-90.70	263.4	4,143.5	488.2	242.6	245.62	1.988	
11,300.0	6,909.7	11,305.6	6,914.7	125.0	125.1	-90.70	263.4	4,223.1	488.2	238.1	250.05	1.952	
11,318.9	6,909.5	11,324.4	6,914.5	125.5	125.7	-90.70	263.4	4,241.9	488.2	237.1	251.10	1.944	
11,400.0	6,908.8	11,405.6	6,913.8	127.7	127.9	-90.70	263.4	4,323.1	488.2	232.6	255.62	1.910	
11,417.3	6,908.6	11,422.9	6,913.6	128.2	128.4	-90.70	263.4	4,340.4	488.2	231.6	256.59	1.903	
11,500.0	6,907.9	11,505.6	6,912.9	130.5	130.7	-90.70	263.4	4,423.1	488.2	227.0	261.20	1.869	
11,515.7	6,907.7	11,521.3	6,912.7	131.0	131.2	-90.70	263.4	4,438.8	488.2	226.1	262.07	1.863	
11,600.0	6,907.0	11,605.6	6,912.0	133.3	133.5	-90.70	263.4	4,523.1	488.2	221.4	266.77	1.830	
11,614.1	6,906.8	11,619.7	6,911.8	133.7	133.9	-90.70	263.4	4,537.2	488.2	220.6	267.56	1.825	
11,700.0	6,906.0	11,705.6	6,911.0	136.1	136.3	-90.70	263.4	4,623.1	488.2	215.8	272.35	1.793	
11,712.6	6,905.9	11,718.1	6,910.9	136.5	136.6	-90.70	263.4	4,635.6	488.2	215.1	273.05	1.788	
11,800.0	6,905.1	11,805.6	6,910.1	138.9	139.1	-90.70	263.4	4,723.0	488.2	210.3	277.93	1.757	
11,811.0	6,905.0	11,816.6	6,910.0	139.2	139.4	-90.70	263.4	4,734.0	488.2	209.7	278.54	1.753	
11,900.0	6,904.2	11,905.6	6,909.2	141.7	141.9	-90.70	263.4	4,823.0	488.2	204.7	283.51	1.722	
11,909.4	6,904.2	11,915.0	6,909.2	141.9	142.1	-90.70	263.4	4,832.5	488.2	204.2	284.03	1.719	
12,000.0	6,903.3	12,005.6	6,908.3	144.5	144.7	-90.70	263.4	4,923.0	488.2	199.1	289.09	1.689	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,903.3	12,013.4	6,908.3	144.7	144.9	-90.70	263.4	4,930.9	488.2	198.7	289.53	1.686	
12,100.0	6,902.4	12,105.6	6,907.4	147.3	147.4	-90.70	263.4	5,023.0	488.2	193.5	294.67	1.657	
12,106.3	6,902.4	12,111.8	6,907.4	147.4	147.6	-90.70	263.4	5,029.3	488.2	193.2	295.02	1.655	
12,200.0	6,901.5	12,205.6	6,906.5	150.1	150.2	-90.70	263.4	5,123.0	488.2	187.9	300.25	1.626	
12,204.7	6,901.5	12,210.3	6,906.5	150.2	150.4	-90.70	263.4	5,127.7	488.2	187.7	300.52	1.625	
12,300.0	6,900.6	12,305.6	6,905.6	152.9	153.0	-90.70	263.4	5,223.0	488.2	182.4	305.84	1.596	
12,303.1	6,900.6	12,308.7	6,905.6	152.9	153.1	-90.70	263.4	5,226.2	488.2	182.2	306.01	1.595	
12,400.0	6,899.7	12,405.6	6,904.7	155.6	155.8	-90.70	263.4	5,323.0	488.2	176.8	311.43	1.568	
12,401.5	6,899.7	12,407.1	6,904.7	155.7	155.9	-90.70	263.4	5,324.6	488.2	176.7	311.51	1.567	
12,500.0	6,898.8	12,505.6	6,903.8	158.4	158.6	-90.70	263.4	5,423.0	488.2	171.2	317.02	1.540	
12,598.4	6,897.9	12,604.0	6,902.9	161.2	161.4	-90.70	263.4	5,521.4	488.2	165.7	322.51	1.514	
12,600.0	6,897.9	12,605.6	6,902.9	161.2	161.4	-90.70	263.4	5,523.0	488.2	165.6	322.60	1.513	
12,696.8	6,897.0	12,702.4	6,902.0	163.9	164.1	-90.70	263.4	5,619.8	488.2	160.2	328.02	1.488	Level 3
12,700.0	6,897.0	12,705.6	6,902.0	164.0	164.2	-90.70	263.4	5,623.0	488.2	160.0	328.19	1.488	Level 3
12,795.2	6,896.1	12,800.8	6,901.1	166.7	166.9	-90.70	263.4	5,718.3	488.2	154.7	333.52	1.464	Level 3
12,800.0	6,896.1	12,805.6	6,901.1	166.8	167.0	-90.70	263.4	5,723.0	488.2	154.4	333.79	1.463	Level 3
12,893.7	6,895.3	12,899.2	6,900.3	169.4	169.6	-90.70	263.4	5,816.7	488.2	149.2	339.02	1.440	Level 3
12,900.0	6,895.2	12,905.6	6,900.2	169.6	169.8	-90.70	263.4	5,823.0	488.2	148.8	339.38	1.439	Level 3
12,992.1	6,894.4	12,997.7	6,899.4	172.2	172.4	-90.70	263.4	5,915.1	488.2	143.7	344.53	1.417	Level 3
13,000.0	6,894.3	13,005.6	6,899.3	172.4	172.6	-90.70	263.4	5,923.0	488.2	143.2	344.97	1.415	Level 3
13,090.5	6,893.5	13,096.1	6,898.5	175.0	175.1	-90.70	263.4	6,013.5	488.2	138.2	350.03	1.395	Level 3
13,100.0	6,893.4	13,105.6	6,898.4	175.2	175.4	-90.70	263.4	6,023.0	488.2	137.6	350.56	1.393	Level 3
13,188.9	6,892.6	13,194.5	6,897.6	177.7	177.9	-90.70	263.4	6,111.9	488.2	132.7	355.54	1.373	Level 3
13,200.0	6,892.5	13,205.6	6,897.5	178.0	178.2	-90.70	263.4	6,123.0	488.2	132.0	356.16	1.371	Level 3
13,287.4	6,891.7	13,292.9	6,896.7	180.5	180.6	-90.70	263.4	6,210.4	488.2	127.2	361.05	1.352	Level 3
13,300.0	6,891.6	13,305.6	6,896.6	180.8	181.0	-90.70	263.4	6,223.0	488.2	126.4	361.75	1.350	Level 3
13,385.8	6,890.8	13,391.4	6,895.8	183.2	183.4	-90.70	263.4	6,308.8	488.2	121.6	366.56	1.332	Level 3
13,400.0	6,890.7	13,405.6	6,895.7	183.6	183.8	-90.70	263.4	6,323.0	488.2	120.9	367.35	1.329	Level 3
13,484.2	6,889.9	13,489.8	6,894.9	186.0	186.1	-90.70	263.4	6,407.2	488.2	116.1	372.06	1.312	Level 3
13,500.0	6,889.8	13,505.6	6,894.8	186.4	186.6	-90.70	263.4	6,423.0	488.2	115.3	372.95	1.309	Level 3
13,582.6	6,889.0	13,588.2	6,894.0	188.7	188.9	-90.70	263.4	6,505.6	488.2	110.6	377.57	1.293	Level 3
13,600.0	6,888.9	13,605.6	6,893.9	189.2	189.4	-90.70	263.4	6,523.0	488.2	109.7	378.54	1.290	Level 3
13,681.1	6,888.1	13,686.6	6,893.1	191.5	191.7	-90.70	263.4	6,604.0	488.2	105.1	383.08	1.274	Level 3
13,700.0	6,888.0	13,705.6	6,893.0	192.0	192.2	-90.70	263.4	6,623.0	488.2	104.1	384.14	1.271	Level 3
13,779.5	6,887.3	13,785.1	6,892.3	194.2	194.4	-90.70	263.4	6,702.5	488.2	99.6	388.59	1.256	Level 3
13,800.0	6,887.1	13,805.6	6,892.1	194.8	195.0	-90.70	263.4	6,723.0	488.2	98.5	389.74	1.253	Level 3
13,877.9	6,886.4	13,883.5	6,891.4	197.0	197.2	-90.70	263.5	6,800.9	488.2	94.1	394.10	1.239	Level 2
13,900.0	6,886.2	13,905.6	6,891.2	197.6	197.8	-90.70	263.5	6,823.0	488.2	92.9	395.34	1.235	Level 2
13,976.3	6,885.5	13,981.9	6,890.5	199.7	199.9	-90.70	263.5	6,899.3	488.2	88.6	399.62	1.222	Level 2
14,000.0	6,885.3	14,005.6	6,890.3	200.4	200.6	-90.70	263.5	6,923.0	488.2	87.3	400.94	1.218	Level 2
14,074.8	6,884.6	14,080.3	6,889.6	202.5	202.7	-90.70	263.5	6,997.7	488.2	83.1	405.13	1.205	Level 2
14,100.0	6,884.4	14,105.6	6,889.4	203.2	203.4	-90.70	263.5	7,023.0	488.2	81.7	406.54	1.201	Level 2
14,173.2	6,883.7	14,178.8	6,888.7	205.3	205.4	-90.70	263.5	7,096.2	488.2	77.6	410.64	1.189	Level 2
14,200.0	6,883.5	14,205.6	6,888.5	206.0	206.2	-90.70	263.5	7,122.9	488.2	76.1	412.14	1.185	Level 2
14,271.6	6,882.8	14,277.2	6,887.8	208.0	208.2	-90.70	263.5	7,194.6	488.2	72.1	416.15	1.173	Level 2
14,300.0	6,882.6	14,305.6	6,887.6	208.8	209.0	-90.70	263.5	7,222.9	488.2	70.5	417.74	1.169	Level 2
14,370.0	6,881.9	14,375.6	6,886.9	210.8	210.9	-90.70	263.5	7,293.0	488.2	66.5	421.67	1.158	Level 2
14,400.0	6,881.7	14,405.6	6,886.7	211.6	211.8	-90.70	263.5	7,322.9	488.2	64.9	423.34	1.153	Level 2
14,468.5	6,881.0	14,474.0	6,886.0	213.5	213.7	-90.70	263.5	7,391.4	488.2	61.0	427.18	1.143	Level 2
14,500.0	6,880.8	14,505.6	6,885.8	214.4	214.6	-90.70	263.5	7,422.9	488.2	59.3	428.95	1.138	Level 2
14,566.9	6,880.2	14,572.5	6,885.2	216.3	216.5	-90.70	263.5	7,489.8	488.2	55.5	432.69	1.128	Level 2
14,572.6	6,880.1	14,578.2	6,885.1	216.5	216.6	-90.70	263.5	7,495.5	488.2	55.2	433.01	1.127	Level 2

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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									
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
14,584.2	6,880.0	14,589.5	6,885.0	216.8	216.9	-90.70	263.5	7,506.9	488.2	54.6	433.66	1.126	Level 2, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	-29.1	0.0	29.1				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-29.1	0.0	29.1	29.0	0.17	171.503	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-29.1	0.0	29.1	29.0	0.17	168.399	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-29.1	0.0	29.1	28.5	0.61	47.901	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-29.1	0.0	29.1	28.5	0.62	46.811	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-29.1	0.0	29.1	28.1	1.05	27.733	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-29.1	0.0	29.1	28.1	1.07	27.184	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-29.1	0.0	29.1	27.7	1.49	19.516	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-29.1	0.0	29.1	27.6	1.52	19.153	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-29.1	0.0	29.1	27.2	1.94	15.056	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-29.1	0.0	29.1	27.2	1.97	14.785	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-29.1	0.0	29.1	26.8	2.38	12.255	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-29.1	0.0	29.1	26.7	2.42	12.040	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-29.1	0.0	29.1	26.3	2.82	10.332	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-29.1	0.0	29.1	26.3	2.87	10.154	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-29.1	0.0	29.1	25.9	3.26	8.931	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-29.1	0.0	29.1	25.8	3.32	8.779	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-29.1	0.0	29.1	25.4	3.71	7.865	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-29.1	0.0	29.1	25.4	3.77	7.732	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-29.1	0.0	29.1	25.0	4.15	7.026	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-29.1	0.0	29.1	24.9	4.22	6.908	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	180.00	-29.1	0.0	29.1	24.6	4.59	6.349	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-29.1	0.0	29.1	24.5	4.67	6.243	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	180.00	-29.1	0.0	29.1	24.1	5.03	5.791	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	180.00	-29.1	0.0	29.1	24.0	5.12	5.695	
1,279.5	1,279.5	1,279.5	1,279.5	2.7	2.7	180.00	-29.1	0.0	29.1	23.7	5.48	5.323	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	180.00	-29.1	0.0	29.1	23.6	5.57	5.235	
1,377.9	1,377.9	1,377.9	1,377.9	3.0	3.0	180.00	-29.1	0.0	29.1	23.2	5.92	4.925	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	180.00	-29.1	0.0	29.1	23.1	6.02	4.844	
1,437.5	1,437.5	1,437.5	1,437.5	3.1	3.1	180.00	-29.1	0.0	29.1	23.0	6.19	4.712 CC	
1,476.4	1,476.4	1,476.1	1,476.1	3.2	3.2	-179.88	-29.2	-0.1	29.2	22.9	6.35	4.604 ES	
1,500.0	1,500.0	1,499.6	1,499.6	3.2	3.2	-179.59	-29.5	-0.2	29.5	23.1	6.45	4.575	
1,574.8	1,574.8	1,573.6	1,573.6	3.4	3.3	-177.58	-31.5	-1.3	31.5	24.8	6.75	4.669	
1,600.0	1,600.0	1,598.6	1,598.5	3.5	3.4	-176.62	-32.5	-1.9	32.6	25.7	6.85	4.756	
1,650.0	1,650.0	1,647.9	1,647.8	3.6	3.5	-174.45	-35.1	-3.4	35.3	28.3	7.05	5.007	
1,673.2	1,673.2	1,670.8	1,670.6	3.6	3.5	-53.88	-36.5	-4.2	36.8	29.7	7.14	5.152	
1,700.0	1,700.0	1,697.2	1,696.9	3.7	3.6	-52.99	-38.4	-5.3	38.6	31.4	7.25	5.329	
1,771.6	1,771.6	1,767.7	1,767.1	3.8	3.7	-51.63	-44.4	-8.8	43.9	36.3	7.51	5.838	
1,800.0	1,799.9	1,795.6	1,794.8	3.9	3.8	-51.44	-47.2	-10.4	46.1	38.5	7.62	6.050	
1,870.1	1,869.9	1,864.3	1,862.9	4.0	3.9	-51.58	-55.1	-14.9	51.9	44.0	7.88	6.587	
1,900.0	1,899.7	1,893.6	1,891.9	4.1	4.0	-51.85	-58.9	-17.1	54.6	46.6	8.00	6.824	
1,968.5	1,967.8	1,960.6	1,957.9	4.2	4.1	-52.83	-68.5	-22.6	61.0	52.7	8.27	7.373	
2,000.0	1,999.1	1,991.3	1,988.1	4.3	4.2	-53.41	-73.3	-25.4	64.1	55.7	8.40	7.634	
2,066.9	2,065.5	2,056.6	2,052.0	4.4	4.4	-54.83	-84.6	-31.9	71.1	62.4	8.69	8.186	
2,100.0	2,098.2	2,089.4	2,084.2	4.5	4.5	-55.70	-90.5	-35.3	74.6	65.7	8.84	8.438	
2,165.3	2,162.6	2,154.4	2,147.7	4.7	4.7	-57.87	-102.2	-42.0	80.8	71.6	9.15	8.827	
2,200.0	2,196.6	2,188.9	2,181.5	4.7	4.8	-59.24	-108.4	-45.6	83.8	74.5	9.33	8.990	
2,249.9	2,245.5	2,238.4	2,229.9	4.9	5.0	-61.47	-117.4	-50.7	87.9	78.3	9.60	9.164	
2,263.8	2,259.1	2,252.3	2,243.5	4.9	5.0	-62.14	-119.9	-52.2	89.1	79.4	9.68	9.202	
2,300.0	2,294.5	2,288.3	2,278.7	5.0	5.2	-63.81	-126.4	-55.9	92.0	82.1	9.89	9.303	
2,362.2	2,355.4	2,350.1	2,339.2	5.2	5.4	-66.43	-137.5	-62.3	97.2	87.0	10.27	9.465	
2,400.0	2,392.3	2,387.7	2,375.9	5.4	5.5	-67.89	-144.3	-66.2	100.5	90.0	10.51	9.561	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,447.9	2,434.9	5.6	5.7	-70.05	-155.1	-72.5	105.9	95.0	10.92	9.701	
2,500.0	2,490.2	2,487.1	2,473.1	5.7	5.9	-71.33	-162.2	-76.5	109.5	98.3	11.18	9.790	
2,559.0	2,547.9	2,545.8	2,530.6	5.9	6.1	-73.11	-172.8	-82.6	114.9	103.3	11.59	9.911	
2,600.0	2,588.0	2,586.5	2,570.4	6.1	6.3	-74.24	-180.1	-86.8	118.7	106.8	11.88	9.992	
2,657.5	2,644.2	2,643.6	2,626.3	6.3	6.5	-75.72	-190.4	-92.8	124.2	111.9	12.30	10.096	
2,700.0	2,685.8	2,685.9	2,667.6	6.4	6.6	-76.73	-198.0	-97.1	128.2	115.6	12.61	10.169	
2,755.9	2,740.5	2,741.4	2,722.0	6.6	6.9	-77.96	-208.0	-102.9	133.7	120.6	13.03	10.257	
2,800.0	2,783.6	2,785.3	2,764.8	6.8	7.0	-78.87	-215.9	-107.4	138.0	124.6	13.37	10.323	
2,854.3	2,836.7	2,839.3	2,817.7	7.0	7.3	-79.91	-225.7	-113.0	143.3	129.6	13.79	10.398	
2,900.0	2,881.4	2,884.7	2,862.1	7.2	7.4	-80.73	-233.8	-117.7	147.9	133.7	14.14	10.458	
2,952.7	2,933.0	2,937.1	2,913.4	7.4	7.7	-81.61	-243.3	-123.2	153.2	138.6	14.56	10.521	
3,000.0	2,979.2	2,984.1	2,959.3	7.6	7.9	-82.35	-251.8	-128.1	157.9	143.0	14.93	10.576	
3,051.2	3,029.3	3,035.0	3,009.1	7.8	8.1	-83.10	-260.9	-133.3	163.1	147.8	15.34	10.630	
3,100.0	3,077.1	3,083.5	3,056.5	8.0	8.3	-83.78	-269.7	-138.4	168.1	152.3	15.74	10.679	
3,149.6	3,125.6	3,132.8	3,104.8	8.2	8.5	-84.42	-278.6	-143.5	173.1	157.0	16.14	10.726	
3,200.0	3,174.9	3,182.9	3,153.8	8.4	8.7	-85.04	-287.6	-148.7	178.3	161.8	16.56	10.771	
3,248.0	3,221.8	3,230.6	3,200.4	8.6	8.9	-85.60	-296.2	-153.6	183.3	166.3	16.95	10.811	
3,300.0	3,272.7	3,282.3	3,251.0	8.9	9.1	-86.17	-305.5	-159.0	188.6	171.2	17.38	10.852	
3,346.4	3,318.1	3,328.5	3,296.1	9.0	9.3	-86.65	-313.8	-163.8	193.4	175.7	17.77	10.887	
3,400.0	3,370.5	3,381.7	3,348.2	9.3	9.5	-87.18	-323.4	-169.3	199.0	180.8	18.22	10.925	
3,444.9	3,414.4	3,426.3	3,391.8	9.5	9.7	-87.60	-331.5	-173.9	203.7	185.1	18.59	10.955	
3,500.0	3,468.3	3,481.1	3,445.4	9.7	10.0	-88.09	-341.3	-179.6	209.4	190.4	19.06	10.990	
3,543.3	3,510.7	3,524.1	3,487.5	9.9	10.2	-88.45	-349.1	-184.0	214.0	194.6	19.42	11.016	
3,600.0	3,566.1	3,580.5	3,542.7	10.1	10.4	-88.91	-359.3	-189.9	219.9	200.0	19.90	11.049	
3,641.7	3,606.9	3,622.0	3,583.2	10.3	10.6	-89.23	-366.7	-194.2	224.3	204.1	20.26	11.072	
3,700.0	3,664.0	3,679.9	3,639.9	10.6	10.8	-89.66	-377.2	-200.2	230.5	209.7	20.76	11.102	
3,740.1	3,703.2	3,719.8	3,678.9	10.7	11.0	-89.94	-384.4	-204.3	234.7	213.6	21.10	11.122	
3,800.0	3,761.8	3,779.3	3,737.1	11.0	11.3	-90.34	-395.1	-210.5	241.0	219.4	21.61	11.150	
3,837.4	3,798.3	3,816.4	3,773.5	11.2	11.4	-90.58	-401.8	-214.3	245.0	223.0	21.94	11.167	
3,838.6	3,799.5	3,817.6	3,774.6	11.2	11.4	-90.59	-402.0	-214.5	245.1	223.1	21.95	11.168	
3,900.0	3,859.7	3,878.7	3,834.4	11.4	11.7	-90.94	-413.0	-220.8	251.6	229.2	22.44	11.214	
3,937.0	3,896.1	3,915.5	3,870.4	11.5	11.9	-91.01	-419.6	-224.6	255.5	232.8	22.70	11.256	
4,000.0	3,958.3	3,978.1	3,931.6	11.7	12.2	-90.87	-430.9	-231.1	262.1	239.0	23.13	11.331	
4,035.4	3,993.3	4,013.4	3,966.1	11.8	12.3	-90.67	-437.3	-234.8	265.9	242.5	23.36	11.379	
4,100.0	4,057.4	4,077.5	4,028.8	12.0	12.6	-90.09	-448.8	-241.4	272.7	248.9	23.77	11.471	
4,133.8	4,091.0	4,111.1	4,061.6	12.1	12.7	-89.68	-454.9	-244.9	276.2	252.3	23.96	11.528	
4,200.0	4,156.8	4,176.6	4,125.7	12.2	13.0	-88.68	-466.7	-251.7	283.3	259.0	24.33	11.645	
4,232.3	4,189.0	4,208.5	4,157.0	12.3	13.2	-88.10	-472.4	-255.0	286.8	262.4	24.49	11.713	
4,300.0	4,256.6	4,275.4	4,222.4	12.4	13.5	-86.72	-484.5	-261.9	294.4	269.6	24.81	11.867	
4,330.7	4,287.3	4,305.6	4,251.9	12.5	13.6	-86.02	-489.9	-265.1	297.9	273.0	24.94	11.948	
4,400.0	4,356.6	4,373.7	4,318.5	12.6	13.9	-84.30	-502.2	-272.1	306.2	281.0	25.20	12.152	
4,429.1	4,385.7	4,402.2	4,346.4	12.6	14.0	-83.52	-507.3	-275.1	309.9	284.6	25.29	12.250	
4,437.2	4,393.8	4,410.1	4,354.2	12.7	14.1	-157.11	-508.8	-275.9	310.9	289.6	21.33	14.578	
4,500.0	4,456.6	4,471.5	4,414.2	12.7	14.4	158.96	-519.8	-282.3	319.1	297.2	21.82	14.621	
4,527.5	4,484.1	4,498.5	4,440.6	12.8	14.5	159.74	-524.7	-285.0	322.7	300.7	22.04	14.642	
4,600.0	4,556.6	4,569.3	4,509.9	12.9	14.8	161.71	-537.5	-292.4	332.7	310.1	22.63	14.704	
4,626.0	4,582.6	4,594.7	4,534.8	12.9	14.9	162.38	-542.0	-295.0	336.4	313.5	22.84	14.729	
4,700.0	4,656.6	4,667.2	4,605.6	13.1	15.2	164.24	-555.1	-302.5	347.1	323.6	23.44	14.809	
4,724.4	4,681.0	4,691.0	4,628.9	13.1	15.3	164.82	-559.4	-305.0	350.7	327.0	23.64	14.837	
4,800.0	4,756.6	4,765.0	4,701.3	13.2	15.7	166.57	-572.7	-312.7	362.1	337.8	24.25	14.931	
4,822.8	4,779.4	4,787.3	4,723.1	13.3	15.8	167.07	-576.8	-315.0	365.6	341.1	24.43	14.961	
4,900.0	4,856.6	4,862.8	4,796.9	13.4	16.1	168.71	-590.4	-322.8	377.6	352.6	25.06	15.069	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,883.6	4,817.3	13.4	16.2	169.15	-594.1	-325.0	381.0	355.7	25.23	15.101	
5,000.0	4,956.6	4,960.6	4,892.6	13.6	16.6	170.69	-608.0	-333.0	393.6	367.8	25.86	15.221	
5,019.7	4,976.3	4,979.8	4,911.4	13.6	16.6	171.06	-611.5	-335.0	396.8	370.8	26.02	15.252	
5,100.0	5,056.6	5,058.4	4,988.3	13.7	17.0	172.51	-625.6	-343.1	410.1	383.4	26.66	15.384	
5,118.1	5,074.7	5,076.1	5,005.6	13.8	17.1	172.83	-628.8	-344.9	413.1	386.3	26.80	15.414	
5,200.0	5,156.6	5,156.2	5,084.0	13.9	17.4	174.19	-643.2	-353.2	426.9	399.5	27.45	15.555	
5,216.5	5,173.1	5,172.4	5,099.8	13.9	17.5	174.46	-646.2	-354.9	429.7	402.2	27.58	15.584	
5,300.0	5,256.6	5,254.0	5,179.6	14.1	17.9	175.75	-660.9	-363.4	444.1	415.9	28.23	15.733	
5,314.9	5,271.5	5,269.7	5,195.0	14.1	17.9	175.99	-663.7	-365.0	446.7	418.3	28.34	15.759	
5,400.0	5,356.6	5,366.0	5,289.6	14.2	18.3	177.26	-679.4	-374.1	460.2	431.2	28.96	15.890	
5,413.4	5,370.0	5,381.3	5,304.6	14.3	18.3	177.44	-681.7	-375.4	462.1	433.0	29.05	15.906	
5,500.0	5,456.6	5,480.8	5,402.9	14.4	18.6	178.41	-694.6	-382.8	473.1	443.5	29.60	15.985	
5,511.8	5,468.4	5,494.4	5,416.5	14.4	18.6	178.53	-696.1	-383.7	474.5	444.8	29.67	15.991	
5,600.0	5,556.6	5,596.7	5,518.2	14.6	18.9	179.22	-705.9	-389.3	482.8	452.6	30.16	16.008	
5,610.2	5,566.8	5,608.6	5,530.0	14.6	18.9	179.29	-706.9	-389.8	483.6	453.4	30.21	16.006	
5,700.0	5,656.6	5,713.6	5,634.7	14.8	19.1	179.73	-713.2	-393.5	489.0	458.4	30.64	15.959	
5,708.6	5,665.2	5,723.7	5,644.8	14.8	19.1	179.76	-713.7	-393.7	489.4	458.7	30.68	15.952	
5,800.0	5,756.6	5,830.9	5,752.0	14.9	19.3	179.94	-716.4	-395.3	491.7	460.7	31.05	15.835	
5,807.1	5,763.7	5,839.2	5,760.3	14.9	19.3	179.95	-716.5	-395.4	491.8	460.7	31.08	15.823	
5,900.0	5,856.6	5,935.5	5,856.6	15.1	19.4	179.95	-716.5	-395.4	491.8	460.4	31.40	15.665	
5,905.5	5,862.1	5,941.0	5,862.1	15.1	19.4	179.95	-716.5	-395.4	491.8	460.4	31.42	15.656	
6,000.0	5,956.6	6,035.5	5,956.6	15.3	19.5	179.95	-716.5	-395.4	491.8	460.1	31.73	15.501	
6,003.9	5,960.5	6,039.4	5,960.5	15.3	19.5	179.95	-716.5	-395.4	491.8	460.1	31.74	15.495	
6,100.0	6,056.6	6,135.5	6,056.6	15.5	19.6	179.95	-716.5	-395.4	491.8	459.8	32.06	15.340	
6,102.3	6,058.9	6,137.9	6,058.9	15.5	19.6	179.95	-716.5	-395.4	491.8	459.8	32.07	15.336	
6,200.0	6,156.6	6,235.5	6,156.6	15.7	19.8	179.95	-716.5	-395.4	491.8	459.4	32.40	15.180	
6,200.8	6,157.4	6,236.3	6,157.4	15.7	19.8	179.95	-716.5	-395.4	491.8	459.4	32.40	15.179	
6,272.2	6,228.8	6,307.7	6,228.8	15.8	19.9	179.95	-716.5	-395.4	491.8	459.2	32.64	15.066	
6,299.2	6,255.8	6,334.7	6,255.8	15.8	19.9	89.95	-716.5	-394.9	491.8	460.7	31.12	15.807	
6,300.0	6,256.6	6,335.5	6,256.6	15.8	19.9	89.95	-716.5	-394.9	491.8	460.7	31.12	15.806	
6,350.0	6,306.4	6,385.5	6,306.4	15.9	19.9	89.95	-716.5	-391.2	491.8	460.6	31.23	15.748	
6,397.6	6,353.6	6,433.1	6,353.5	15.9	20.0	89.96	-716.5	-384.5	491.8	460.5	31.30	15.715	
6,400.0	6,355.9	6,435.5	6,355.8	15.9	20.0	89.96	-716.5	-384.1	491.8	460.5	31.30	15.713	
6,450.0	6,404.8	6,485.4	6,404.7	15.9	20.0	89.96	-716.5	-373.5	491.8	460.5	31.33	15.698	
6,496.0	6,449.0	6,531.5	6,448.9	16.0	20.0	89.96	-716.5	-360.8	491.8	460.5	31.33	15.699	
6,500.0	6,452.8	6,535.4	6,452.6	16.0	20.0	89.96	-716.5	-359.6	491.8	460.5	31.33	15.699	
6,550.0	6,499.7	6,585.4	6,499.5	15.9	20.0	89.96	-716.5	-342.3	491.8	460.5	31.30	15.712	
6,594.5	6,540.3	6,629.8	6,540.2	15.9	19.9	89.96	-716.5	-324.2	491.8	460.6	31.27	15.729	
6,600.0	6,545.3	6,635.4	6,545.1	15.9	19.9	89.96	-716.5	-321.8	491.8	460.6	31.27	15.731	
6,650.0	6,589.3	6,685.3	6,589.2	15.9	19.9	89.97	-716.5	-298.2	491.8	460.6	31.23	15.748	
6,692.9	6,625.7	6,728.2	6,625.5	15.9	19.8	89.97	-716.5	-275.5	491.8	460.6	31.22	15.754	
6,700.0	6,631.6	6,735.3	6,631.4	15.9	19.8	89.97	-716.5	-271.6	491.8	460.6	31.22	15.755	
6,750.0	6,671.9	6,785.3	6,671.8	15.9	19.8	89.97	-716.5	-242.1	491.8	460.6	31.24	15.742	
6,791.3	6,703.6	6,826.6	6,703.5	15.9	19.7	89.97	-716.5	-215.6	491.8	460.5	31.32	15.705	
6,800.0	6,710.1	6,835.3	6,709.9	15.9	19.7	89.97	-716.5	-209.8	491.8	460.5	31.33	15.697	
6,850.0	6,745.9	6,885.3	6,745.8	16.0	19.7	89.98	-716.5	-175.0	491.8	460.3	31.51	15.609	
6,889.7	6,772.6	6,925.0	6,772.5	16.1	19.6	89.98	-716.5	-145.5	491.8	460.1	31.73	15.499	
6,900.0	6,779.2	6,935.3	6,779.1	16.1	19.6	89.98	-716.5	-137.7	491.8	460.0	31.80	15.469	
6,950.0	6,809.8	6,985.2	6,809.7	16.3	19.6	89.98	-716.5	-98.2	491.8	459.6	32.21	15.268	
6,988.2	6,831.3	7,023.4	6,831.2	16.4	19.5	89.98	-716.5	-66.7	491.8	459.2	32.64	15.067	
7,000.0	6,837.6	7,035.2	6,837.5	16.5	19.5	89.99	-716.5	-56.7	491.8	459.1	32.78	15.003	
7,050.0	6,862.5	7,085.2	6,862.4	16.9	19.4	89.99	-716.5	-13.3	491.8	458.3	33.52	14.674	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,878.7	7,121.8	6,878.6	17.2	19.4	89.99	-716.5	19.5	491.8	457.7	34.18	14.391	
7,100.0	6,884.2	7,135.2	6,884.1	17.3	19.4	89.99	-716.5	31.7	491.8	457.4	34.43	14.286	
7,150.0	6,902.7	7,185.2	6,902.7	17.8	19.3	90.00	-716.5	78.1	491.8	456.3	35.51	13.850	
7,185.0	6,913.8	7,220.2	6,913.8	18.3	19.3	90.00	-716.5	111.3	491.8	455.5	36.39	13.518	
7,200.0	6,918.0	7,235.2	6,918.0	18.5	19.3	90.00	-716.5	125.7	491.8	455.1	36.77	13.377	
7,222.0	6,923.7	7,257.2	6,923.7	18.8	19.3	90.00	-716.5	146.9	491.8	454.5	37.38	13.158	
7,250.0	6,929.9	7,285.2	6,929.9	19.2	19.3	90.00	-716.5	174.2	491.8	453.7	38.18	12.881	
7,283.4	6,936.0	7,318.7	6,936.0	19.7	19.7	90.00	-716.5	207.1	491.8	452.6	39.22	12.541	
7,300.0	6,938.4	7,335.2	6,938.5	20.0	19.9	90.01	-716.5	223.5	491.8	452.1	39.74	12.376	
7,350.0	6,943.4	7,385.2	6,943.5	20.9	20.8	90.01	-716.5	273.2	491.8	450.4	41.42	11.873	
7,381.9	6,944.8	7,417.1	6,944.9	21.4	21.4	90.01	-716.5	305.0	491.8	449.3	42.55	11.558	
7,403.7	6,945.0	7,438.9	6,945.1	21.8	21.8	90.01	-716.5	326.9	491.8	448.5	43.34	11.349	
7,441.5	6,944.6	7,476.8	6,944.6	22.6	22.5	90.00	-716.5	364.7	491.8	447.1	44.78	10.983	
7,480.3	6,944.3	7,515.5	6,944.1	23.3	23.2	89.98	-716.5	403.5	491.8	445.6	46.28	10.627	
7,500.0	6,944.1	7,535.2	6,943.9	23.7	23.7	89.98	-716.5	423.2	491.8	444.8	47.06	10.450	
7,578.7	6,943.4	7,613.9	6,942.9	25.4	25.3	89.95	-716.5	501.9	491.8	441.5	50.32	9.774	
7,600.0	6,943.2	7,635.2	6,942.6	25.8	25.8	89.94	-716.5	523.2	491.8	440.6	51.23	9.601	
7,677.1	6,942.5	7,712.4	6,941.7	27.5	27.4	89.91	-716.5	600.3	491.8	437.2	54.62	9.005	
7,700.0	6,942.3	7,735.2	6,941.4	28.0	28.0	89.90	-716.5	623.2	491.8	436.2	55.65	8.839	
7,775.6	6,941.6	7,810.8	6,940.5	29.8	29.7	89.87	-716.5	698.7	491.8	432.7	59.13	8.318	
7,800.0	6,941.4	7,835.2	6,940.2	30.3	30.3	89.86	-716.5	723.1	491.8	431.6	60.27	8.160	
7,874.0	6,940.7	7,909.2	6,939.2	32.1	32.0	89.83	-716.5	797.1	491.8	428.0	63.80	7.709	
7,900.0	6,940.5	7,935.2	6,938.9	32.7	32.7	89.82	-716.5	823.1	491.8	426.8	65.06	7.560	
7,972.4	6,939.8	8,007.6	6,938.0	34.5	34.4	89.79	-716.5	895.6	491.8	423.2	68.60	7.170	
8,000.0	6,939.6	8,035.2	6,937.7	35.2	35.1	89.78	-716.5	923.1	491.8	421.9	69.96	7.030	
8,070.8	6,938.9	8,106.1	6,936.8	37.0	36.9	89.75	-716.5	994.0	491.8	418.3	73.50	6.691	
8,100.0	6,938.7	8,135.2	6,936.4	37.7	37.6	89.74	-716.5	1,023.1	491.8	416.9	74.97	6.560	
8,169.3	6,938.0	8,204.5	6,935.6	39.5	39.3	89.72	-716.5	1,092.4	491.9	413.4	78.49	6.266	
8,200.0	6,937.7	8,235.2	6,935.2	40.3	40.1	89.70	-716.5	1,123.1	491.9	411.8	80.06	6.143	
8,267.7	6,937.1	8,302.9	6,934.4	42.0	41.9	89.68	-716.5	1,190.8	491.9	408.3	83.55	5.887	
8,300.0	6,936.8	8,335.2	6,934.0	42.8	42.7	89.67	-716.5	1,223.1	491.9	406.6	85.22	5.772	
8,366.1	6,936.2	8,401.3	6,933.2	44.6	44.4	89.64	-716.5	1,289.2	491.9	403.2	88.66	5.548	
8,400.0	6,935.9	8,435.2	6,932.7	45.5	45.3	89.63	-716.5	1,323.1	491.9	401.4	90.43	5.439	
8,464.5	6,935.3	8,499.8	6,931.9	47.2	47.0	89.60	-716.5	1,387.6	491.9	398.0	93.82	5.243	
8,500.0	6,935.0	8,535.2	6,931.5	48.1	47.9	89.59	-716.5	1,423.1	491.9	396.2	95.69	5.140	
8,563.0	6,934.5	8,598.2	6,930.7	49.8	49.6	89.56	-716.5	1,486.1	491.9	392.8	99.02	4.967	
8,600.0	6,934.1	8,635.2	6,930.3	50.7	50.5	89.55	-716.5	1,523.1	491.9	390.9	100.99	4.871	
8,661.4	6,933.6	8,696.6	6,929.5	52.4	52.2	89.53	-716.5	1,584.5	491.9	387.6	104.26	4.718	
8,700.0	6,933.2	8,735.2	6,929.0	53.4	53.2	89.51	-716.5	1,623.1	491.9	385.5	106.32	4.626	
8,759.8	6,932.7	8,795.0	6,928.3	55.0	54.8	89.49	-716.5	1,682.9	491.9	382.3	109.52	4.491	
8,800.0	6,932.3	8,835.2	6,927.8	56.1	55.9	89.47	-716.5	1,723.1	491.9	380.2	111.67	4.404	
8,858.2	6,931.8	8,893.5	6,927.1	57.7	57.4	89.45	-716.5	1,781.3	491.9	377.1	114.81	4.284	
8,900.0	6,931.4	8,935.2	6,926.5	58.8	58.6	89.43	-716.5	1,823.1	491.9	374.8	117.06	4.202	
8,956.7	6,930.9	8,991.9	6,925.8	60.3	60.1	89.41	-716.5	1,879.7	491.9	371.8	120.12	4.095	
9,000.0	6,930.5	9,035.2	6,925.3	61.5	61.2	89.39	-716.5	1,923.0	491.9	369.4	122.46	4.017	
9,055.1	6,930.0	9,090.3	6,924.6	63.0	62.7	89.37	-716.5	1,978.1	491.9	366.4	125.45	3.921	
9,100.0	6,929.6	9,135.2	6,924.1	64.2	63.9	89.36	-716.5	2,023.0	491.9	364.0	127.88	3.846	
9,153.5	6,929.1	9,188.7	6,923.4	65.6	65.4	89.34	-716.5	2,076.6	491.9	361.1	130.79	3.761	
9,200.0	6,928.7	9,235.2	6,922.8	66.9	66.7	89.32	-716.5	2,123.0	491.9	358.6	133.32	3.689	
9,251.9	6,928.2	9,287.2	6,922.2	68.3	68.1	89.30	-716.5	2,175.0	491.9	355.7	136.15	3.613	
9,300.0	6,927.8	9,335.2	6,921.6	69.6	69.4	89.28	-716.5	2,223.0	491.9	353.1	138.77	3.544	
9,350.4	6,927.3	9,385.6	6,921.0	71.0	70.7	89.26	-716.5	2,273.4	491.9	350.4	141.53	3.476	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,400.0	6,926.9	9,435.2	6,920.3	72.4	72.1	89.24	-716.5	2,323.0	491.9	347.6	144.24	3.410	
9,448.8	6,926.4	9,484.0	6,919.7	73.7	73.4	89.22	-716.5	2,371.8	491.9	345.0	146.91	3.348	
9,500.0	6,926.0	9,535.2	6,919.1	75.1	74.8	89.20	-716.5	2,423.0	491.9	342.2	149.72	3.285	
9,547.2	6,925.5	9,582.4	6,918.5	76.4	76.1	89.18	-716.5	2,470.2	491.9	339.6	152.31	3.230	
9,600.0	6,925.1	9,635.2	6,917.9	77.9	77.6	89.16	-716.5	2,523.0	491.9	336.7	155.20	3.169	
9,645.6	6,924.6	9,680.9	6,917.3	79.1	78.8	89.14	-716.5	2,568.6	491.9	334.2	157.71	3.119	
9,700.0	6,924.1	9,735.2	6,916.6	80.6	80.3	89.12	-716.5	2,623.0	491.9	331.2	160.70	3.061	
9,744.1	6,923.7	9,779.3	6,916.1	81.8	81.5	89.11	-716.5	2,667.1	491.9	328.8	163.12	3.016	
9,800.0	6,923.2	9,835.2	6,915.4	83.4	83.1	89.08	-716.5	2,723.0	491.9	325.7	166.20	2.960	
9,842.5	6,922.9	9,877.7	6,914.9	84.5	84.2	89.07	-716.5	2,765.5	491.9	323.4	168.54	2.919	
9,900.0	6,922.3	9,935.2	6,914.1	86.1	85.8	89.05	-716.5	2,823.0	491.9	320.2	171.71	2.865	
9,940.9	6,922.0	9,976.1	6,913.6	87.2	86.9	89.03	-716.5	2,863.9	491.9	317.9	173.97	2.828	
10,000.0	6,921.4	10,035.2	6,912.9	88.9	88.6	89.01	-716.5	2,923.0	491.9	314.7	177.23	2.776	
10,039.3	6,921.1	10,074.6	6,912.4	90.0	89.6	88.99	-716.5	2,962.3	491.9	312.5	179.40	2.742	
10,100.0	6,920.5	10,135.2	6,911.7	91.6	91.3	88.97	-716.5	3,023.0	491.9	309.2	182.75	2.692	
10,137.8	6,920.2	10,173.0	6,911.2	92.7	92.4	88.95	-716.5	3,060.7	491.9	307.1	184.84	2.661	
10,200.0	6,919.6	10,235.2	6,910.4	94.4	94.1	88.93	-716.5	3,122.9	491.9	303.6	188.28	2.613	
10,236.2	6,919.3	10,271.4	6,910.0	95.4	95.1	88.92	-716.5	3,159.1	491.9	301.6	190.29	2.585	
10,300.0	6,918.7	10,335.2	6,909.2	97.2	96.8	88.89	-716.5	3,222.9	491.9	298.1	193.82	2.538	
10,334.6	6,918.4	10,369.8	6,908.8	98.1	97.8	88.88	-716.5	3,257.6	491.9	296.2	195.73	2.513	
10,400.0	6,917.8	10,435.2	6,907.9	99.9	99.6	88.85	-716.5	3,322.9	491.9	292.6	199.35	2.468	
10,433.0	6,917.5	10,468.3	6,907.5	100.9	100.5	88.84	-716.5	3,356.0	491.9	290.8	201.19	2.445	
10,500.0	6,916.9	10,535.2	6,906.7	102.7	102.4	88.81	-716.5	3,422.9	491.9	287.1	204.90	2.401	
10,531.5	6,916.6	10,566.7	6,906.3	103.6	103.2	88.80	-716.5	3,454.4	491.9	285.3	206.64	2.381	
10,600.0	6,916.0	10,635.2	6,905.5	105.5	105.1	88.77	-716.5	3,522.9	492.0	281.5	210.44	2.338	
10,629.9	6,915.7	10,665.1	6,905.1	106.3	106.0	88.76	-716.5	3,552.8	492.0	279.9	212.10	2.319	
10,700.0	6,915.1	10,735.2	6,904.2	108.3	107.9	88.73	-716.5	3,622.9	492.0	276.0	215.99	2.278	
10,728.3	6,914.8	10,763.5	6,903.9	109.1	108.7	88.72	-716.5	3,651.2	492.0	274.4	217.56	2.261	
10,800.0	6,914.2	10,835.2	6,903.0	111.0	110.7	88.70	-716.5	3,722.9	492.0	270.4	221.54	2.221	
10,826.7	6,913.9	10,862.0	6,902.7	111.8	111.4	88.69	-716.5	3,749.6	492.0	268.9	223.03	2.206	
10,900.0	6,913.3	10,935.2	6,901.8	113.8	113.5	88.66	-716.5	3,822.9	492.0	264.9	227.10	2.166	
10,925.2	6,913.1	10,960.4	6,901.4	114.5	114.2	88.65	-716.5	3,848.1	492.0	263.5	228.50	2.153	
11,000.0	6,912.4	11,035.2	6,900.5	116.6	116.2	88.62	-716.5	3,922.9	492.0	259.3	232.66	2.115	
11,023.6	6,912.2	11,058.8	6,900.2	117.3	116.9	88.61	-716.5	3,946.5	492.0	258.0	233.97	2.103	
11,100.0	6,911.5	11,135.2	6,899.3	119.4	119.0	88.58	-716.5	4,022.9	492.0	253.8	238.22	2.065	
11,122.0	6,911.3	11,157.2	6,899.0	120.0	119.6	88.57	-716.5	4,044.9	492.0	252.6	239.44	2.055	
11,200.0	6,910.6	11,235.2	6,898.0	122.2	121.8	88.54	-716.5	4,122.9	492.0	248.2	243.78	2.018	
11,220.4	6,910.4	11,255.7	6,897.8	122.7	122.4	88.53	-716.5	4,143.3	492.0	247.1	244.92	2.009	
11,300.0	6,909.7	11,335.2	6,896.8	125.0	124.6	88.50	-716.5	4,222.9	492.0	242.7	249.34	1.973	
11,318.9	6,909.5	11,354.1	6,896.6	125.5	125.1	88.49	-716.5	4,241.7	492.0	241.6	250.39	1.965	
11,400.0	6,908.8	11,435.2	6,895.6	127.7	127.4	88.46	-716.5	4,322.8	492.0	237.1	254.91	1.930	
11,417.3	6,908.6	11,452.5	6,895.3	128.2	127.9	88.46	-716.5	4,340.1	492.0	236.1	255.87	1.923	
11,500.0	6,907.9	11,535.2	6,894.3	130.5	130.2	88.42	-716.5	4,422.8	492.0	231.5	260.48	1.889	
11,515.7	6,907.7	11,550.9	6,894.1	131.0	130.6	88.42	-716.5	4,438.6	492.0	230.7	261.35	1.883	
11,600.0	6,907.0	11,635.2	6,893.1	133.3	132.9	88.38	-716.5	4,522.8	492.0	226.0	266.05	1.849	
11,614.1	6,906.8	11,649.3	6,892.9	133.7	133.3	88.38	-716.5	4,537.0	492.0	225.2	266.84	1.844	
11,700.0	6,906.0	11,735.2	6,891.8	136.1	135.7	88.35	-716.5	4,622.8	492.0	220.4	271.62	1.812	
11,712.6	6,905.9	11,747.8	6,891.7	136.5	136.1	88.34	-716.5	4,635.4	492.0	219.7	272.32	1.807	
11,800.0	6,905.1	11,835.2	6,890.6	138.9	138.5	88.31	-716.5	4,722.8	492.1	214.9	277.19	1.775	
11,811.0	6,905.0	11,846.2	6,890.5	139.2	138.8	88.30	-716.5	4,733.8	492.1	214.2	277.80	1.771	
11,900.0	6,904.2	11,935.2	6,889.4	141.7	141.3	88.27	-716.5	4,822.8	492.1	209.3	282.76	1.740	
11,909.4	6,904.2	11,944.6	6,889.2	141.9	141.6	88.26	-716.5	4,832.2	492.1	208.8	283.29	1.737	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	12,035.2	6,888.1	144.5	144.1	88.23	-716.5	4,922.8	492.1	203.7	288.34	1.707	
12,007.8	6,903.3	12,043.0	6,888.0	144.7	144.3	88.23	-716.5	4,930.6	492.1	203.3	288.78	1.704	
12,100.0	6,902.4	12,135.2	6,886.9	147.3	146.9	88.19	-716.5	5,022.8	492.1	198.2	293.91	1.674	
12,106.3	6,902.4	12,141.5	6,886.8	147.4	147.1	88.19	-716.5	5,029.1	492.1	197.8	294.26	1.672	
12,200.0	6,901.5	12,235.2	6,885.6	150.1	149.7	88.15	-716.5	5,122.8	492.1	192.6	299.49	1.643	
12,204.7	6,901.5	12,239.9	6,885.6	150.2	149.8	88.15	-716.5	5,127.5	492.1	192.3	299.75	1.642	
12,300.0	6,900.6	12,335.2	6,884.4	152.9	152.5	88.11	-716.5	5,222.8	492.1	187.0	305.07	1.613	
12,303.1	6,900.6	12,338.3	6,884.4	152.9	152.5	88.11	-716.5	5,225.9	492.1	186.9	305.24	1.612	
12,400.0	6,899.7	12,435.2	6,883.2	155.6	155.3	88.07	-716.5	5,322.8	492.1	181.5	310.65	1.584	
12,401.5	6,899.7	12,436.7	6,883.1	155.7	155.3	88.07	-716.5	5,324.3	492.1	181.4	310.73	1.584	
12,500.0	6,898.8	12,535.2	6,881.9	158.4	158.0	88.03	-716.5	5,422.8	492.1	175.9	316.23	1.556	
12,598.4	6,897.9	12,633.6	6,880.7	161.2	160.8	87.99	-716.5	5,521.1	492.1	170.4	321.72	1.530	
12,600.0	6,897.9	12,635.2	6,880.7	161.2	160.8	87.99	-716.5	5,522.7	492.1	170.3	321.81	1.529	
12,696.8	6,897.0	12,732.0	6,879.5	163.9	163.5	87.96	-716.5	5,619.6	492.1	164.9	327.21	1.504	
12,700.0	6,897.0	12,735.2	6,879.4	164.0	163.6	87.95	-716.5	5,622.7	492.1	164.8	327.39	1.503	
12,795.2	6,896.1	12,830.4	6,878.3	166.7	166.3	87.92	-716.5	5,718.0	492.2	159.5	332.70	1.479 Level 3	
12,800.0	6,896.1	12,835.2	6,878.2	166.8	166.4	87.92	-716.5	5,722.7	492.2	159.2	332.97	1.478 Level 3	
12,893.7	6,895.3	12,928.9	6,877.0	169.4	169.0	87.88	-716.5	5,816.4	492.2	154.0	338.20	1.455 Level 3	
12,900.0	6,895.2	12,935.2	6,877.0	169.6	169.2	87.88	-716.5	5,822.7	492.2	153.6	338.55	1.454 Level 3	
12,992.1	6,894.4	13,027.3	6,875.8	172.2	171.8	87.84	-716.5	5,914.8	492.2	148.5	343.69	1.432 Level 3	
13,000.0	6,894.3	13,035.2	6,875.7	172.4	172.0	87.84	-716.5	5,922.7	492.2	148.0	344.13	1.430 Level 3	
13,090.5	6,893.5	13,125.7	6,874.6	175.0	174.5	87.80	-716.5	6,013.2	492.2	143.0	349.19	1.410 Level 3	
13,100.0	6,893.4	13,135.2	6,874.5	175.2	174.8	87.80	-716.5	6,022.7	492.2	142.5	349.72	1.407 Level 3	
13,188.9	6,892.6	13,224.1	6,873.4	177.7	177.3	87.76	-716.5	6,111.6	492.2	137.5	354.68	1.388 Level 3	
13,200.0	6,892.5	13,235.2	6,873.3	178.0	177.6	87.76	-716.5	6,122.7	492.2	136.9	355.30	1.385 Level 3	
13,287.4	6,891.7	13,322.6	6,872.2	180.5	180.0	87.73	-716.5	6,210.1	492.2	132.0	360.18	1.367 Level 3	
13,300.0	6,891.6	13,335.2	6,872.0	180.8	180.4	87.72	-716.5	6,222.7	492.2	131.3	360.88	1.364 Level 3	
13,385.8	6,890.8	13,421.0	6,870.9	183.2	182.8	87.69	-716.5	6,308.5	492.2	126.6	365.67	1.346 Level 3	
13,400.0	6,890.7	13,435.2	6,870.8	183.6	183.2	87.68	-716.5	6,322.7	492.2	125.8	366.47	1.343 Level 3	
13,484.2	6,889.9	13,519.4	6,869.7	186.0	185.6	87.65	-716.5	6,406.9	492.2	121.1	371.17	1.326 Level 3	
13,500.0	6,889.8	13,535.2	6,869.5	186.4	186.0	87.64	-716.5	6,422.7	492.2	120.2	372.05	1.323 Level 3	
13,582.6	6,889.0	13,617.8	6,868.5	188.7	188.3	87.61	-716.5	6,505.3	492.3	115.6	376.66	1.307 Level 3	
13,600.0	6,888.9	13,635.2	6,868.3	189.2	188.8	87.60	-716.5	6,522.7	492.3	114.6	377.63	1.304 Level 3	
13,681.1	6,888.1	13,716.3	6,867.3	191.5	191.1	87.57	-716.5	6,603.7	492.3	110.1	382.16	1.288 Level 3	
13,700.0	6,888.0	13,735.2	6,867.1	192.0	191.6	87.56	-716.5	6,622.7	492.3	109.1	383.22	1.285 Level 3	
13,779.5	6,887.3	13,814.7	6,866.1	194.2	193.8	87.53	-716.5	6,702.2	492.3	104.6	387.66	1.270 Level 3	
13,800.0	6,887.1	13,835.2	6,865.8	194.8	194.4	87.52	-716.5	6,722.6	492.3	103.5	388.80	1.266 Level 3	
13,877.9	6,886.4	13,913.1	6,864.9	197.0	196.6	87.49	-716.5	6,800.6	492.3	99.1	393.15	1.252 Level 3	
13,900.0	6,886.2	13,935.2	6,864.6	197.6	197.2	87.49	-716.5	6,822.6	492.3	97.9	394.39	1.248 Level 2	
13,976.3	6,885.5	14,011.5	6,863.6	199.7	199.3	87.46	-716.5	6,899.0	492.3	93.7	398.65	1.235 Level 2	
14,000.0	6,885.3	14,035.2	6,863.3	200.4	200.0	87.45	-716.5	6,922.6	492.3	92.3	399.97	1.231 Level 2	
14,074.8	6,884.6	14,110.0	6,862.4	202.5	202.1	87.42	-716.5	6,997.4	492.3	88.2	404.15	1.218 Level 2	
14,100.0	6,884.4	14,135.2	6,862.1	203.2	202.8	87.41	-716.5	7,022.6	492.3	86.8	405.55	1.214 Level 2	
14,173.2	6,883.7	14,208.4	6,861.2	205.3	204.8	87.38	-716.5	7,095.8	492.3	82.7	409.64	1.202 Level 2	
14,200.0	6,883.5	14,235.2	6,860.9	206.0	205.6	87.37	-716.5	7,122.6	492.3	81.2	411.14	1.198 Level 2	
14,271.6	6,882.8	14,306.8	6,860.0	208.0	207.6	87.34	-716.5	7,194.2	492.4	77.2	415.14	1.186 Level 2	
14,300.0	6,882.6	14,335.2	6,859.6	208.8	208.4	87.33	-716.5	7,222.6	492.4	75.6	416.72	1.181 Level 2	
14,370.0	6,881.9	14,405.2	6,858.8	210.8	210.3	87.30	-716.5	7,292.7	492.4	71.7	420.64	1.171 Level 2	
14,400.0	6,881.7	14,435.2	6,858.4	211.6	211.2	87.29	-716.5	7,322.6	492.4	70.1	422.31	1.166 Level 2	
14,468.5	6,881.0	14,503.7	6,857.5	213.5	213.1	87.26	-716.5	7,391.1	492.4	66.3	426.13	1.155 Level 2	
14,500.0	6,880.8	14,535.2	6,857.1	214.4	214.0	87.25	-716.5	7,422.6	492.4	64.5	427.89	1.151 Level 2	
14,566.9	6,880.2	14,602.1	6,856.3	216.3	215.9	87.22	-716.5	7,489.5	492.4	60.8	431.63	1.141 Level 2	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
14,584.2	6,880.0	14,619.3	6,856.0	216.8	216.3	87.21	-716.5	7,506.7	492.4	59.8	432.59	1.138	Level 2, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-72.9	0.0	72.9				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-72.9	0.0	72.9	72.7	0.17	428.758	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-72.9	0.0	72.9	72.7	0.17	420.996	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-72.9	0.0	72.9	72.3	0.61	119.752	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-72.9	0.0	72.9	72.2	0.62	117.028	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-72.9	0.0	72.9	71.8	1.05	69.333	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-72.9	0.0	72.9	71.8	1.07	67.960	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-72.9	0.0	72.9	71.4	1.49	48.791	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-72.9	0.0	72.9	71.3	1.52	47.883	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-72.9	0.0	72.9	70.9	1.94	37.639	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-72.9	0.0	72.9	70.9	1.97	36.963	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-72.9	0.0	72.9	70.5	2.38	30.637	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-72.9	0.0	72.9	70.4	2.42	30.099	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-72.9	0.0	72.9	70.0	2.82	25.831	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-72.9	0.0	72.9	70.0	2.87	25.385	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-72.9	0.0	72.9	69.6	3.26	22.329	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-72.9	0.0	72.9	69.5	3.32	21.948	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-72.9	0.0	72.9	69.2	3.71	19.663	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-72.9	0.0	72.9	69.1	3.77	19.330	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-72.9	0.0	72.9	68.7	4.15	17.565	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-72.9	0.0	72.9	68.6	4.22	17.271	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	180.00	-72.9	0.0	72.9	68.3	4.59	15.872	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-72.9	0.0	72.9	68.2	4.67	15.607	
1,137.3	1,137.3	1,137.3	1,137.3	2.4	2.4	180.00	-72.9	0.0	72.9	68.0	4.84	15.067 CC	
1,181.1	1,181.1	1,180.4	1,180.4	2.5	2.5	-179.96	-73.0	0.0	73.0	68.0	5.02	14.538 ES	
1,200.0	1,200.0	1,198.8	1,198.8	2.6	2.5	-179.91	-73.3	-0.1	73.3	68.2	5.10	14.363	
1,279.5	1,279.5	1,276.4	1,276.3	2.7	2.7	-179.39	-75.5	-0.8	75.6	70.2	5.41	13.964	
1,300.0	1,300.0	1,296.3	1,296.2	2.8	2.7	-179.20	-76.4	-1.1	76.5	71.0	5.49	13.930	
1,377.9	1,377.9	1,372.1	1,371.9	3.0	2.9	-178.25	-81.1	-2.5	81.4	75.6	5.81	14.008	
1,400.0	1,400.0	1,393.5	1,393.2	3.0	2.9	-177.94	-82.8	-3.0	83.1	77.2	5.90	14.091	
1,476.4	1,476.4	1,467.3	1,466.7	3.2	3.0	-176.78	-89.7	-5.0	90.3	84.1	6.22	14.534	
1,500.0	1,500.0	1,490.1	1,489.3	3.2	3.1	-176.40	-92.2	-5.8	93.0	86.7	6.32	14.722	
1,574.8	1,574.8	1,561.8	1,560.4	3.4	3.2	-175.20	-101.2	-8.5	102.5	95.9	6.64	15.435	
1,600.0	1,600.0	1,585.9	1,584.2	3.5	3.3	-174.80	-104.6	-9.5	106.2	99.4	6.75	15.720	
1,650.0	1,650.0	1,633.5	1,631.2	3.6	3.4	-174.03	-111.8	-11.7	114.0	107.0	6.98	16.325	
1,673.2	1,673.2	1,655.5	1,652.9	3.6	3.5	-54.07	-115.5	-12.8	117.9	110.9	7.03	16.762	
1,700.0	1,700.0	1,680.8	1,677.8	3.7	3.5	-53.73	-119.8	-14.1	122.4	115.3	7.14	17.148	
1,771.6	1,771.6	1,748.4	1,744.0	3.8	3.7	-53.24	-132.5	-17.9	135.0	127.6	7.42	18.205	
1,800.0	1,799.9	1,775.0	1,770.0	3.9	3.8	-53.18	-137.9	-19.5	140.1	132.6	7.52	18.623	
1,870.1	1,869.9	1,840.5	1,833.8	4.0	4.0	-53.30	-152.2	-23.8	153.2	145.4	7.80	19.633	
1,900.0	1,899.7	1,868.4	1,860.9	4.1	4.1	-53.45	-158.7	-25.7	159.0	151.0	7.92	20.062	
1,968.5	1,967.8	1,931.9	1,922.2	4.2	4.4	-53.97	-174.4	-30.5	172.5	164.3	8.21	21.014	
2,000.0	1,999.1	1,960.9	1,950.2	4.3	4.5	-54.27	-182.1	-32.8	178.9	170.6	8.34	21.448	
2,066.9	2,065.5	2,022.4	2,009.0	4.4	4.8	-55.02	-199.1	-37.9	193.0	184.3	8.64	22.333	
2,100.0	2,098.2	2,052.6	2,037.8	4.5	4.9	-55.44	-207.9	-40.5	200.1	191.3	8.79	22.764	
2,165.3	2,162.6	2,113.7	2,095.6	4.7	5.2	-56.35	-226.6	-46.1	214.5	205.4	9.11	23.543	
2,200.0	2,196.6	2,147.4	2,127.6	4.7	5.4	-56.93	-237.0	-49.2	222.0	212.7	9.29	23.909	
2,249.9	2,245.5	2,196.0	2,173.5	4.9	5.7	-57.84	-251.9	-53.7	232.5	222.9	9.56	24.328	
2,263.8	2,259.1	2,209.5	2,186.4	4.9	5.8	-58.15	-256.1	-55.0	235.3	225.7	9.64	24.420	
2,300.0	2,294.5	2,244.8	2,219.8	5.0	5.9	-58.93	-267.0	-58.2	242.8	233.0	9.85	24.654	
2,362.2	2,355.4	2,305.4	2,277.2	5.2	6.3	-60.15	-285.7	-63.8	255.8	245.5	10.23	25.007	
2,400.0	2,392.3	2,342.3	2,312.0	5.4	6.5	-60.84	-297.1	-67.2	263.7	253.2	10.46	25.202	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,401.3	2,368.0	5.6	6.8	-61.86	-315.3	-72.7	276.5	265.6	10.86	25.469	
2,500.0	2,490.2	2,439.7	2,404.3	5.7	7.1	-62.48	-327.1	-76.3	284.8	273.7	11.11	25.625	
2,559.0	2,547.9	2,497.2	2,458.8	5.9	7.4	-63.33	-344.9	-81.6	297.4	285.9	11.52	25.825	
2,600.0	2,588.0	2,537.1	2,496.5	6.1	7.6	-63.89	-357.2	-85.3	306.1	294.3	11.80	25.947	
2,657.5	2,644.2	2,593.1	2,549.6	6.3	8.0	-64.61	-374.5	-90.5	318.5	306.3	12.21	26.092	
2,700.0	2,685.8	2,634.6	2,588.8	6.4	8.2	-65.11	-387.2	-94.3	327.6	315.1	12.51	26.187	
2,755.9	2,740.5	2,689.1	2,640.4	6.6	8.5	-65.73	-404.0	-99.3	339.7	326.7	12.92	26.290	
2,800.0	2,783.6	2,732.0	2,681.1	6.8	8.8	-66.19	-417.3	-103.3	349.2	335.9	13.25	26.362	
2,854.3	2,836.7	2,785.0	2,731.2	7.0	9.1	-66.72	-433.6	-108.2	361.0	347.3	13.66	26.433	
2,900.0	2,881.4	2,829.5	2,773.3	7.2	9.4	-67.14	-447.3	-112.3	370.9	356.9	14.00	26.486	
2,952.7	2,933.0	2,880.9	2,822.0	7.4	9.7	-67.60	-463.2	-117.1	382.4	368.0	14.41	26.534	
3,000.0	2,979.2	2,926.9	2,865.6	7.6	10.0	-67.98	-477.4	-121.3	392.7	377.9	14.78	26.571	
3,051.2	3,029.3	2,976.8	2,912.8	7.8	10.3	-68.38	-492.8	-125.9	403.9	388.7	15.18	26.601	
3,100.0	3,077.1	3,024.4	2,957.8	8.0	10.6	-68.74	-507.5	-130.3	414.5	399.0	15.57	26.626	
3,149.6	3,125.6	3,072.7	3,003.6	8.2	10.9	-69.09	-522.4	-134.8	425.4	409.4	15.97	26.643	
3,200.0	3,174.9	3,121.8	3,050.1	8.4	11.2	-69.42	-537.5	-139.4	436.5	420.1	16.37	26.657	
3,248.0	3,221.8	3,168.6	3,094.4	8.6	11.5	-69.73	-552.0	-143.7	447.0	430.2	16.76	26.665	
3,300.0	3,272.7	3,219.2	3,142.3	8.9	11.8	-70.04	-567.6	-148.4	458.4	441.2	17.19	26.671	
3,346.4	3,318.1	3,264.5	3,185.2	9.0	12.1	-70.30	-581.5	-152.6	468.7	451.1	17.57	26.671	
3,400.0	3,370.5	3,316.7	3,234.6	9.3	12.5	-70.60	-597.6	-157.4	480.4	462.4	18.01	26.671	
3,444.9	3,414.4	3,360.4	3,276.0	9.5	12.7	-70.83	-611.1	-161.4	490.3	472.0	18.39	26.666	
3,500.0	3,468.3	3,414.1	3,326.8	9.7	13.1	-71.11	-627.7	-166.4	502.5	483.7	18.85	26.660	
3,543.3	3,510.7	3,456.3	3,366.8	9.9	13.3	-71.32	-640.7	-170.3	512.1	492.9	19.21	26.652	
3,600.0	3,566.1	3,511.6	3,419.1	10.1	13.7	-71.58	-657.7	-175.4	524.6	504.9	19.69	26.641	
3,641.7	3,606.9	3,552.2	3,457.6	10.3	14.0	-71.76	-670.3	-179.2	533.8	513.8	20.05	26.631	
3,700.0	3,664.0	3,609.0	3,511.3	10.6	14.3	-72.01	-687.8	-184.4	546.7	526.2	20.54	26.616	
3,740.1	3,703.2	3,648.1	3,548.4	10.7	14.6	-72.17	-699.9	-188.0	555.6	534.7	20.88	26.605	
3,800.0	3,761.8	3,706.5	3,603.6	11.0	14.9	-72.40	-717.9	-193.4	568.9	547.5	21.40	26.588	
3,837.4	3,798.3	3,742.9	3,638.0	11.2	15.2	-72.54	-729.1	-196.8	577.2	555.4	21.72	26.576	
3,838.6	3,799.5	3,744.0	3,639.2	11.2	15.2	-72.55	-729.5	-196.9	577.4	555.7	21.73	26.576	
3,900.0	3,859.7	3,803.9	3,695.8	11.4	15.6	-72.98	-747.9	-202.5	591.2	569.0	22.24	26.588	
3,937.0	3,896.1	3,839.9	3,729.9	11.5	15.8	-73.18	-759.0	-205.8	599.8	577.2	22.51	26.640	
4,000.0	3,958.3	3,901.1	3,787.9	11.7	16.2	-73.42	-777.9	-211.4	614.6	591.6	22.97	26.754	
4,035.4	3,993.3	3,935.5	3,820.4	11.8	16.4	-73.51	-788.5	-214.6	623.0	599.8	23.21	26.842	
4,100.0	4,057.4	3,998.1	3,879.6	12.0	16.8	-73.58	-807.8	-220.4	638.8	615.2	23.64	27.026	
4,133.8	4,091.0	4,030.8	3,910.6	12.1	17.0	-73.57	-817.9	-223.4	647.3	623.4	23.85	27.145	
4,200.0	4,156.8	4,094.6	3,971.0	12.2	17.4	-73.48	-837.6	-229.3	664.1	639.9	24.24	27.401	
4,232.3	4,189.0	4,125.6	4,000.4	12.3	17.6	-73.40	-847.1	-232.2	672.5	648.1	24.41	27.547	
4,300.0	4,256.6	4,190.6	4,061.9	12.4	18.0	-73.17	-867.2	-238.2	690.5	665.7	24.77	27.878	
4,330.7	4,287.3	4,219.9	4,089.7	12.5	18.2	-73.03	-876.2	-240.9	698.8	673.9	24.91	28.049	
4,400.0	4,356.6	4,285.9	4,152.1	12.6	18.7	-72.67	-896.6	-247.0	717.9	692.7	25.23	28.458	
4,429.1	4,385.7	4,313.5	4,178.3	12.6	18.8	-72.50	-905.1	-249.6	726.2	700.8	25.35	28.647	
4,437.2	4,393.8	4,321.2	4,185.6	12.7	18.9	-72.97	-907.5	-250.3	728.5	701.2	27.32	26.664	
4,500.0	4,456.6	4,380.6	4,241.8	12.7	19.3	-72.71	-925.8	-255.8	746.5	718.6	27.89	26.767	
4,527.5	4,484.1	4,406.7	4,266.5	12.8	19.4	-72.02	-933.8	-258.2	754.4	726.3	28.14	26.811	
4,600.0	4,556.6	4,475.3	4,331.5	12.9	19.9	-71.81	-955.0	-264.6	775.4	746.6	28.79	26.929	
4,626.0	4,582.6	4,499.9	4,354.7	12.9	20.0	-72.09	-962.6	-266.8	783.0	753.9	29.03	26.972	
4,700.0	4,656.6	4,570.0	4,421.1	13.1	20.5	-72.84	-984.2	-273.3	804.6	774.9	29.69	27.095	
4,724.4	4,681.0	4,593.1	4,443.0	13.1	20.7	-71.08	-991.3	-275.5	811.7	781.8	29.91	27.135	
4,800.0	4,756.6	4,664.6	4,510.7	13.2	21.1	-71.80	-1,013.4	-282.1	833.9	803.3	30.59	27.262	
4,822.8	4,779.4	4,686.3	4,531.2	13.3	21.3	-72.00	-1,020.1	-284.1	840.7	809.9	30.79	27.300	
4,900.0	4,856.6	4,759.3	4,600.4	13.4	21.7	-72.69	-1,042.6	-290.8	863.5	832.0	31.48	27.429	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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	4,877.8	4,779.4	4,619.4	13.4	21.9	172.87	-1,048.8	-292.7	869.8	838.1	31.67	27.465	
5,000.0	4,956.6	4,854.0	4,690.0	13.6	22.3	173.52	-1,071.8	-299.6	893.3	860.9	32.37	27.597	
5,019.7	4,976.3	4,872.6	4,707.6	13.6	22.5	173.68	-1,077.6	-301.3	899.1	866.6	32.54	27.630	
5,100.0	5,056.6	4,948.7	4,779.6	13.7	23.0	174.30	-1,101.0	-308.4	923.2	889.9	33.25	27.763	
5,118.1	5,074.7	4,965.8	4,795.8	13.8	23.1	174.44	-1,106.3	-309.9	928.6	895.2	33.41	27.793	
5,200.0	5,156.6	5,043.3	4,869.2	13.9	23.6	175.03	-1,130.2	-317.1	953.3	919.1	34.13	27.928	
5,216.5	5,173.1	5,059.0	4,884.1	13.9	23.7	175.15	-1,135.0	-318.6	958.2	924.0	34.28	27.955	
5,300.0	5,256.6	5,138.0	4,958.9	14.1	24.2	175.72	-1,159.4	-325.9	983.5	948.5	35.01	28.091	
5,314.9	5,271.5	5,152.2	4,972.3	14.1	24.3	175.82	-1,163.8	-327.2	988.0	952.9	35.14	28.116	
5,400.0	5,356.6	5,232.7	5,048.5	14.2	24.8	176.37	-1,188.6	-334.6	1,013.8	977.9	35.88	28.252	
5,413.4	5,370.0	5,245.3	5,060.5	14.3	24.9	176.45	-1,192.5	-335.8	1,017.9	981.9	36.00	28.274	
5,500.0	5,456.6	5,327.4	5,138.1	14.4	25.4	176.98	-1,217.8	-343.4	1,044.2	1,007.5	36.76	28.411	
5,511.8	5,468.4	5,338.5	5,148.7	14.4	25.5	177.05	-1,221.3	-344.4	1,047.8	1,011.0	36.86	28.429	
5,600.0	5,556.6	5,439.9	5,244.8	14.6	26.1	177.65	-1,252.1	-353.7	1,074.5	1,036.9	37.66	28.532	
5,610.2	5,566.8	5,455.0	5,259.2	14.6	26.1	177.74	-1,256.5	-355.0	1,077.5	1,039.7	37.76	28.537	
5,700.0	5,656.6	5,590.2	5,389.0	14.8	26.7	178.39	-1,292.5	-365.8	1,101.2	1,062.6	38.57	28.548	
5,708.6	5,665.2	5,603.4	5,401.8	14.8	26.7	178.45	-1,295.7	-366.7	1,103.3	1,064.6	38.65	28.546	
5,800.0	5,756.6	5,744.7	5,539.5	14.9	27.2	178.97	-1,326.4	-375.9	1,123.0	1,083.6	39.39	28.507	
5,807.1	5,763.7	5,755.8	5,550.3	14.9	27.3	179.00	-1,328.5	-376.6	1,124.4	1,084.9	39.45	28.502	
5,900.0	5,856.6	5,902.8	5,695.1	15.1	27.7	179.40	-1,352.9	-383.9	1,139.8	1,099.7	40.12	28.409	
5,905.5	5,862.1	5,911.6	5,703.8	15.1	27.7	179.42	-1,354.2	-384.3	1,140.6	1,100.4	40.16	28.403	
6,000.0	5,956.6	6,063.5	5,854.6	15.3	28.1	179.68	-1,371.5	-389.5	1,151.3	1,110.6	40.73	28.270	
6,003.9	5,960.5	6,069.9	5,861.0	15.3	28.1	179.69	-1,372.0	-389.6	1,151.7	1,110.9	40.75	28.263	
6,100.0	6,056.6	6,226.0	6,016.7	15.5	28.4	179.83	-1,381.5	-392.5	1,157.5	1,116.3	41.21	28.085	
6,102.3	6,058.9	6,229.8	6,020.5	15.5	28.4	179.84	-1,381.6	-392.5	1,157.6	1,116.3	41.22	28.081	
6,200.0	6,156.6	6,365.8	6,156.6	15.7	28.5	179.86	-1,383.3	-393.0	1,158.6	1,117.0	41.57	27.870	
6,200.8	6,157.4	6,366.6	6,157.3	15.7	28.5	179.86	-1,383.3	-393.0	1,158.6	1,117.0	41.57	27.869	
6,272.2	6,228.8	6,437.5	6,228.0	15.8	28.6	179.65	-1,383.3	-388.7	1,158.6	1,116.8	41.75	27.749	
6,299.2	6,255.8	6,464.0	6,254.3	15.8	28.6	89.51	-1,383.3	-385.3	1,158.6	1,125.8	32.76	35.363	
6,300.0	6,256.6	6,464.8	6,255.1	15.8	28.6	89.50	-1,383.3	-385.2	1,158.6	1,125.8	32.77	35.360	
6,350.0	6,306.4	6,513.6	6,303.1	15.9	28.6	89.24	-1,383.3	-376.4	1,158.7	1,125.8	32.89	35.230	
6,397.6	6,353.6	6,559.8	6,347.9	15.9	28.6	88.99	-1,383.3	-365.1	1,158.7	1,125.8	32.97	35.149	
6,400.0	6,355.9	6,562.1	6,350.1	15.9	28.6	88.98	-1,383.3	-364.4	1,158.7	1,125.8	32.97	35.146	
6,450.0	6,404.8	6,610.2	6,395.8	15.9	28.6	88.72	-1,383.3	-349.4	1,158.9	1,125.8	33.01	35.103	
6,496.0	6,449.0	6,654.3	6,436.7	16.0	28.5	88.49	-1,383.3	-333.0	1,159.0	1,125.9	33.02	35.094	
6,500.0	6,452.8	6,658.1	6,440.2	16.0	28.5	88.47	-1,383.3	-331.5	1,159.0	1,126.0	33.02	35.094	
6,550.0	6,499.7	6,705.6	6,483.0	15.9	28.5	88.23	-1,383.3	-310.8	1,159.1	1,126.1	33.01	35.109	
6,594.5	6,540.3	6,747.6	6,519.6	15.9	28.5	88.03	-1,383.3	-290.2	1,159.3	1,126.3	33.00	35.133	
6,600.0	6,545.3	6,752.9	6,524.0	15.9	28.5	88.00	-1,383.3	-287.5	1,159.3	1,126.3	32.99	35.136	
6,650.0	6,589.3	6,800.0	6,563.4	15.9	28.4	87.78	-1,383.3	-261.5	1,159.4	1,126.5	32.98	35.161	
6,692.9	6,625.7	6,839.9	6,595.3	15.9	28.4	87.60	-1,383.3	-237.5	1,159.6	1,126.6	32.98	35.164	
6,700.0	6,631.6	6,846.6	6,600.5	15.9	28.4	87.57	-1,383.3	-233.4	1,159.6	1,126.6	32.98	35.165	
6,750.0	6,671.9	6,893.1	6,635.7	15.9	28.4	87.37	-1,383.3	-203.0	1,159.8	1,126.8	33.02	35.127	
6,791.3	6,703.6	6,931.3	6,663.1	15.9	28.3	87.21	-1,383.3	-176.3	1,159.9	1,126.8	33.10	35.045	
6,800.0	6,710.1	6,939.3	6,668.6	15.9	28.3	87.18	-1,383.3	-170.5	1,160.0	1,126.9	33.12	35.027	
6,850.0	6,745.9	6,985.4	6,699.3	16.0	28.3	87.00	-1,383.3	-136.1	1,160.2	1,126.9	33.30	34.843	
6,889.7	6,772.6	7,021.9	6,722.0	16.1	28.2	86.88	-1,383.3	-107.6	1,160.3	1,126.8	33.52	34.618	
6,900.0	6,779.2	7,031.3	6,727.6	16.1	28.2	86.84	-1,383.3	-100.0	1,160.3	1,126.8	33.58	34.556	
6,950.0	6,809.8	7,077.0	6,753.4	16.3	28.2	86.70	-1,383.3	-62.3	1,160.5	1,126.5	33.98	34.152	
6,988.2	6,831.3	7,111.9	6,771.4	16.4	28.2	86.60	-1,383.3	-32.5	1,160.6	1,126.2	34.38	33.754	
7,000.0	6,837.6	7,122.6	6,776.7	16.5	28.2	86.57	-1,383.3	-23.1	1,160.7	1,126.1	34.52	33.622	
7,050.0	6,862.5	7,168.1	6,797.4	16.9	28.2	86.45	-1,383.3	17.3	1,160.8	1,125.6	35.21	32.968	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,086.6	6,878.7	7,200.0	6,810.4	17.2	28.2	86.38	-1,383.3	46.5	1,160.9	1,125.1	35.80	32.424	
7,100.0	6,884.2	7,213.4	6,815.5	17.3	28.2	86.35	-1,383.3	58.9	1,160.9	1,124.9	36.05	32.201	
7,150.0	6,902.7	7,258.7	6,830.8	17.8	28.2	86.27	-1,383.3	101.5	1,161.0	1,124.0	37.07	31.324	
7,185.0	6,913.8	7,290.3	6,839.9	18.3	28.2	86.22	-1,383.3	131.8	1,161.1	1,123.2	37.88	30.656	
7,200.0	6,918.0	7,303.8	6,843.4	18.5	28.2	86.20	-1,383.3	144.8	1,161.1	1,122.9	38.23	30.374	
7,250.0	6,929.9	7,350.0	6,853.5	19.2	28.2	86.15	-1,383.3	189.9	1,161.2	1,121.6	39.55	29.358	
7,283.4	6,936.0	7,379.1	6,858.3	19.7	28.3	86.12	-1,383.3	218.6	1,161.2	1,120.7	40.51	28.666	
7,300.0	6,938.4	7,394.0	6,860.3	20.0	28.3	86.11	-1,383.3	233.3	1,161.2	1,120.2	40.99	28.329	
7,350.0	6,943.4	7,439.0	6,864.6	20.9	28.4	86.10	-1,383.3	278.2	1,161.3	1,118.7	42.56	27.287	
7,381.9	6,944.8	7,467.7	6,865.8	21.4	28.5	86.10	-1,383.3	306.9	1,161.3	1,117.6	43.61	26.627	
7,403.7	6,945.0	7,487.6	6,866.0	21.8	28.6	86.10	-1,383.3	326.7	1,161.3	1,116.9	44.35	26.186	
7,480.3	6,944.3	7,564.1	6,865.8	23.3	29.0	86.12	-1,383.3	403.3	1,161.2	1,114.0	47.22	24.591	
7,500.0	6,944.1	7,583.8	6,865.7	23.7	29.2	86.13	-1,383.3	423.0	1,161.2	1,113.2	47.97	24.209	
7,578.7	6,943.4	7,662.6	6,865.5	25.4	29.9	86.15	-1,383.3	501.7	1,161.2	1,110.0	51.16	22.697	
7,600.0	6,943.2	7,683.8	6,865.4	25.8	30.1	86.16	-1,383.3	522.9	1,161.2	1,109.1	52.03	22.317	
7,677.1	6,942.5	7,761.0	6,865.2	27.5	31.1	86.18	-1,383.3	600.1	1,161.1	1,105.8	55.37	20.972	
7,700.0	6,942.3	7,783.8	6,865.2	28.0	31.5	86.19	-1,383.3	622.9	1,161.1	1,104.8	56.36	20.602	
7,775.6	6,941.6	7,859.4	6,865.0	29.8	32.7	86.22	-1,383.3	698.5	1,161.1	1,101.3	59.79	19.419	
7,800.0	6,941.4	7,883.8	6,864.9	30.3	33.2	86.22	-1,383.3	722.9	1,161.1	1,100.2	60.91	19.064	
7,874.0	6,940.7	7,957.8	6,864.7	32.1	34.6	86.25	-1,383.3	796.9	1,161.1	1,096.7	64.39	18.032	
7,900.0	6,940.5	7,983.8	6,864.6	32.7	35.2	86.25	-1,383.3	822.9	1,161.0	1,095.4	65.62	17.695	
7,972.4	6,939.8	8,056.3	6,864.4	34.5	36.7	86.28	-1,383.3	895.4	1,161.0	1,091.9	69.12	16.797	
8,000.0	6,939.6	8,083.8	6,864.3	35.2	37.3	86.28	-1,383.3	922.9	1,161.0	1,090.5	70.46	16.478	
8,070.8	6,938.9	8,154.7	6,864.1	37.0	38.9	86.31	-1,383.3	993.8	1,161.0	1,087.0	73.96	15.697	
8,100.0	6,938.7	8,183.8	6,864.0	37.7	39.6	86.32	-1,383.3	1,022.9	1,161.0	1,085.6	75.41	15.396	
8,169.3	6,938.0	8,253.1	6,863.9	39.5	41.2	86.34	-1,383.3	1,092.2	1,160.9	1,082.0	78.89	14.715	
8,200.0	6,937.7	8,283.8	6,863.8	40.3	41.9	86.35	-1,383.3	1,122.9	1,160.9	1,080.5	80.44	14.432	
8,267.7	6,937.1	8,351.5	6,863.6	42.0	43.6	86.37	-1,383.3	1,190.6	1,160.9	1,077.0	83.90	13.837	
8,300.0	6,936.8	8,383.8	6,863.5	42.8	44.3	86.38	-1,383.3	1,222.9	1,160.9	1,075.3	85.55	13.570	
8,366.1	6,936.2	8,450.0	6,863.3	44.6	46.0	86.40	-1,383.3	1,289.1	1,160.9	1,071.9	88.97	13.048	
8,400.0	6,935.9	8,483.8	6,863.2	45.5	46.8	86.41	-1,383.3	1,322.9	1,160.8	1,070.1	90.72	12.796	
8,464.5	6,935.3	8,548.4	6,863.0	47.2	48.4	86.43	-1,383.3	1,387.5	1,160.8	1,066.7	94.08	12.338	
8,500.0	6,935.0	8,583.8	6,862.9	48.1	49.3	86.44	-1,383.3	1,422.9	1,160.8	1,064.9	95.94	12.100	
8,563.0	6,934.5	8,646.8	6,862.8	49.8	50.9	86.46	-1,383.3	1,485.9	1,160.8	1,061.5	99.25	11.696	
8,600.0	6,934.1	8,683.8	6,862.6	50.7	51.9	86.47	-1,383.3	1,522.9	1,160.8	1,059.6	101.19	11.471	
8,661.4	6,933.6	8,745.2	6,862.5	52.4	53.4	86.49	-1,383.3	1,584.3	1,160.7	1,056.3	104.45	11.113	
8,700.0	6,933.2	8,783.8	6,862.4	53.4	54.4	86.50	-1,383.3	1,622.9	1,160.7	1,054.2	106.49	10.900	
8,759.8	6,932.7	8,843.6	6,862.2	55.0	56.0	86.52	-1,383.3	1,682.7	1,160.7	1,051.0	109.68	10.583	
8,800.0	6,932.3	8,883.8	6,862.1	56.1	57.0	86.53	-1,383.3	1,722.9	1,160.7	1,048.9	111.82	10.380	
8,858.2	6,931.8	8,942.1	6,861.9	57.7	58.5	86.55	-1,383.3	1,781.2	1,160.7	1,045.7	114.94	10.098	
8,900.0	6,931.4	8,983.8	6,861.8	58.8	59.6	86.56	-1,383.3	1,822.9	1,160.6	1,043.5	117.17	9.906	
8,956.7	6,930.9	9,040.5	6,861.7	60.3	61.1	86.58	-1,383.3	1,879.6	1,160.6	1,040.4	120.22	9.654	
9,000.0	6,930.5	9,083.8	6,861.5	61.5	62.3	86.59	-1,383.3	1,922.9	1,160.6	1,038.1	122.55	9.471	
9,055.1	6,930.0	9,138.9	6,861.4	63.0	63.7	86.61	-1,383.3	1,978.0	1,160.6	1,035.1	125.52	9.246	
9,100.0	6,929.6	9,183.8	6,861.3	64.2	64.9	86.62	-1,383.3	2,022.9	1,160.6	1,032.6	127.95	9.071	
9,153.5	6,929.1	9,237.3	6,861.1	65.6	66.3	86.64	-1,383.3	2,076.4	1,160.6	1,029.7	130.84	8.870	
9,200.0	6,928.7	9,283.8	6,861.0	66.9	67.6	86.66	-1,383.3	2,122.9	1,160.5	1,027.2	133.36	8.702	
9,251.9	6,928.2	9,335.8	6,860.8	68.3	69.0	86.67	-1,383.3	2,174.9	1,160.5	1,024.3	136.18	8.522	
9,300.0	6,927.8	9,383.8	6,860.7	69.6	70.3	86.69	-1,383.3	2,222.9	1,160.5	1,021.7	138.79	8.361	
9,350.4	6,927.3	9,434.2	6,860.6	71.0	71.6	86.70	-1,383.3	2,273.3	1,160.5	1,018.9	141.54	8.199	
9,400.0	6,926.9	9,483.8	6,860.4	72.4	72.9	86.72	-1,383.3	2,322.9	1,160.5	1,016.2	144.24	8.045	
9,448.8	6,926.4	9,532.6	6,860.3	73.7	74.3	86.73	-1,383.3	2,371.7	1,160.4	1,013.5	146.90	7.899	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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	
9,500.0	6,926.0	9,583.8	6,860.1	75.1	75.6	86.75	-1,383.3	2,422.9	1,160.4	1,010.7	149.70	7.752	
9,547.2	6,925.5	9,631.0	6,860.0	76.4	76.9	86.76	-1,383.3	2,470.1	1,160.4	1,008.1	152.28	7.620	
9,600.0	6,925.1	9,683.8	6,859.9	77.9	78.3	86.78	-1,383.3	2,522.9	1,160.4	1,005.2	155.17	7.478	
9,645.6	6,924.6	9,729.5	6,859.7	79.1	79.6	86.79	-1,383.3	2,568.6	1,160.4	1,002.7	157.67	7.360	
9,700.0	6,924.1	9,783.8	6,859.6	80.6	81.0	86.81	-1,383.3	2,622.9	1,160.4	999.7	160.65	7.223	
9,744.1	6,923.7	9,827.9	6,859.5	81.8	82.2	86.82	-1,383.3	2,667.0	1,160.3	997.3	163.07	7.116	
9,800.0	6,923.2	9,883.8	6,859.3	83.4	83.8	86.84	-1,383.3	2,722.9	1,160.3	994.2	166.14	6.984	
9,842.5	6,922.9	9,926.3	6,859.2	84.5	84.9	86.85	-1,383.3	2,765.4	1,160.3	991.8	168.47	6.887	
9,900.0	6,922.3	9,983.8	6,859.0	86.1	86.5	86.87	-1,383.3	2,822.9	1,160.3	988.7	171.63	6.760	
9,940.9	6,922.0	10,024.7	6,858.9	87.2	87.6	86.88	-1,383.3	2,863.8	1,160.3	986.4	173.89	6.673	
10,000.0	6,921.4	10,083.8	6,858.7	88.9	89.2	86.90	-1,383.3	2,922.9	1,160.3	983.1	177.14	6.550	
10,039.3	6,921.1	10,123.1	6,858.6	90.0	90.3	86.91	-1,383.3	2,962.2	1,160.2	980.9	179.31	6.471	
10,100.0	6,920.5	10,183.8	6,858.5	91.6	91.9	86.93	-1,383.3	3,022.9	1,160.2	977.6	182.65	6.352	
10,137.8	6,920.2	10,221.6	6,858.4	92.7	93.0	86.95	-1,383.3	3,060.7	1,160.2	975.5	184.74	6.280	
10,200.0	6,919.6	10,283.8	6,858.2	94.4	94.7	86.96	-1,383.3	3,122.9	1,160.2	972.0	188.17	6.166	
10,236.2	6,919.3	10,320.0	6,858.1	95.4	95.7	86.98	-1,383.3	3,159.1	1,160.2	970.0	190.17	6.101	
10,300.0	6,918.7	10,383.8	6,857.9	97.2	97.4	87.00	-1,383.3	3,222.9	1,160.2	966.5	193.69	5.990	
10,334.6	6,918.4	10,418.4	6,857.8	98.1	98.4	87.01	-1,383.3	3,257.5	1,160.1	964.5	195.61	5.931	
10,400.0	6,917.8	10,483.8	6,857.6	99.9	100.2	87.03	-1,383.3	3,322.9	1,160.1	960.9	199.22	5.823	
10,433.0	6,917.5	10,516.8	6,857.5	100.9	101.1	87.04	-1,383.3	3,355.9	1,160.1	959.1	201.05	5.770	
10,500.0	6,916.9	10,583.8	6,857.3	102.7	102.9	87.06	-1,383.3	3,422.9	1,160.1	955.3	204.76	5.666	
10,531.5	6,916.6	10,615.3	6,857.3	103.6	103.8	87.07	-1,383.3	3,454.4	1,160.1	953.6	206.50	5.618	
10,600.0	6,916.0	10,683.8	6,857.1	105.5	105.7	87.09	-1,383.3	3,522.9	1,160.1	949.8	210.30	5.516	
10,629.9	6,915.7	10,713.7	6,857.0	106.3	106.5	87.10	-1,383.3	3,552.8	1,160.0	948.1	211.95	5.473	
10,700.0	6,915.1	10,783.8	6,856.8	108.3	108.4	87.12	-1,383.3	3,622.9	1,160.0	944.2	215.84	5.374	
10,728.3	6,914.8	10,812.1	6,856.7	109.1	109.2	87.13	-1,383.3	3,651.2	1,160.0	942.6	217.41	5.336	
10,800.0	6,914.2	10,883.8	6,856.5	111.0	111.2	87.15	-1,383.3	3,722.9	1,160.0	938.6	221.39	5.240	
10,826.7	6,913.9	10,910.5	6,856.4	111.8	111.9	87.16	-1,383.3	3,749.6	1,160.0	937.1	222.87	5.205	
10,900.0	6,913.3	10,983.8	6,856.2	113.8	113.9	87.18	-1,383.3	3,822.9	1,160.0	933.0	226.94	5.111	
10,925.2	6,913.1	11,009.0	6,856.2	114.5	114.6	87.19	-1,383.3	3,848.0	1,160.0	931.6	228.34	5.080	
11,000.0	6,912.4	11,083.8	6,855.9	116.6	116.7	87.21	-1,383.3	3,922.9	1,159.9	927.4	232.49	4.989	
11,023.6	6,912.2	11,107.4	6,855.9	117.3	117.3	87.22	-1,383.3	3,946.5	1,159.9	926.1	233.80	4.961	
11,100.0	6,911.5	11,183.8	6,855.7	119.4	119.4	87.24	-1,383.3	4,022.9	1,159.9	921.8	238.05	4.872	
11,122.0	6,911.3	11,205.8	6,855.6	120.0	120.1	87.25	-1,383.3	4,044.9	1,159.9	920.6	239.28	4.848	
11,200.0	6,910.6	11,283.8	6,855.4	122.2	122.2	87.27	-1,383.3	4,122.9	1,159.9	916.3	243.61	4.761	
11,220.4	6,910.4	11,304.2	6,855.3	122.7	122.8	87.28	-1,383.3	4,143.3	1,159.9	915.1	244.75	4.739	
11,300.0	6,909.7	11,383.8	6,855.1	125.0	125.0	87.30	-1,383.3	4,222.9	1,159.8	910.7	249.18	4.655	
11,318.9	6,909.5	11,402.6	6,855.1	125.5	125.5	87.31	-1,383.3	4,241.7	1,159.8	909.6	250.23	4.635	
11,400.0	6,908.8	11,483.8	6,854.8	127.7	127.7	87.33	-1,383.3	4,322.9	1,159.8	905.1	254.74	4.553	
11,417.3	6,908.6	11,501.1	6,854.8	128.2	128.2	87.34	-1,383.3	4,340.2	1,159.8	904.1	255.70	4.536	
11,500.0	6,907.9	11,583.8	6,854.6	130.5	130.5	87.37	-1,383.3	4,422.9	1,159.8	899.5	260.31	4.455	
11,515.7	6,907.7	11,599.5	6,854.5	131.0	131.0	87.37	-1,383.3	4,438.6	1,159.8	898.6	261.19	4.440	
11,600.0	6,907.0	11,683.8	6,854.3	133.3	133.3	87.40	-1,383.3	4,522.9	1,159.8	893.9	265.88	4.362	
11,614.1	6,906.8	11,697.9	6,854.2	133.7	133.7	87.40	-1,383.3	4,537.0	1,159.7	893.1	266.67	4.349	
11,700.0	6,906.0	11,783.8	6,854.0	136.1	136.1	87.43	-1,383.3	4,622.9	1,159.7	888.3	271.45	4.272	
11,712.6	6,905.9	11,796.3	6,854.0	136.5	136.4	87.43	-1,383.3	4,635.4	1,159.7	887.6	272.15	4.261	
11,800.0	6,905.1	11,883.8	6,853.7	138.9	138.8	87.46	-1,383.3	4,722.9	1,159.7	882.7	277.03	4.186	
11,811.0	6,905.0	11,894.8	6,853.7	139.2	139.1	87.46	-1,383.3	4,733.8	1,159.7	882.0	277.64	4.177	
11,900.0	6,904.2	11,983.8	6,853.4	141.7	141.6	87.49	-1,383.3	4,822.8	1,159.7	877.1	282.60	4.103	
11,909.4	6,904.2	11,993.2	6,853.4	141.9	141.9	87.49	-1,383.3	4,832.3	1,159.7	876.5	283.13	4.096	
12,000.0	6,903.3	12,083.8	6,853.2	144.5	144.4	87.52	-1,383.3	4,922.8	1,159.6	871.5	288.18	4.024	
12,007.8	6,903.3	12,091.6	6,853.1	144.7	144.6	87.52	-1,383.3	4,930.7	1,159.6	871.0	288.62	4.018	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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-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	
12,100.0	6,902.4	12,183.8	6,852.9	147.3	147.2	87.55	-1,383.3	5,022.8	1,159.6	865.8	293.76	3.947	
12,106.3	6,902.4	12,190.0	6,852.9	147.4	147.4	87.55	-1,383.3	5,029.1	1,159.6	865.5	294.11	3.943	
12,200.0	6,901.5	12,283.8	6,852.6	150.1	150.0	87.58	-1,383.3	5,122.8	1,159.6	860.2	299.35	3.874	
12,204.7	6,901.5	12,288.5	6,852.6	150.2	150.1	87.58	-1,383.3	5,127.5	1,159.6	860.0	299.61	3.870	
12,300.0	6,900.6	12,383.8	6,852.3	152.9	152.7	87.61	-1,383.3	5,222.8	1,159.6	854.6	304.93	3.803	
12,303.1	6,900.6	12,386.9	6,852.3	152.9	152.8	87.61	-1,383.3	5,226.0	1,159.6	854.5	305.10	3.801	
12,400.0	6,899.7	12,483.7	6,852.0	155.6	155.5	87.64	-1,383.3	5,322.8	1,159.5	849.0	310.51	3.734	
12,401.5	6,899.7	12,485.3	6,852.0	155.7	155.6	87.64	-1,383.3	5,324.4	1,159.5	848.9	310.60	3.733	
12,500.0	6,898.8	12,583.7	6,851.8	158.4	158.3	87.67	-1,383.3	5,422.8	1,159.5	843.4	316.10	3.668	
12,598.4	6,897.9	12,682.1	6,851.5	161.2	161.0	87.70	-1,383.3	5,521.2	1,159.5	837.9	321.60	3.605	
12,600.0	6,897.9	12,683.7	6,851.5	161.2	161.1	87.70	-1,383.3	5,522.8	1,159.5	837.8	321.69	3.604	
12,696.8	6,897.0	12,780.6	6,851.2	163.9	163.8	87.73	-1,383.3	5,619.7	1,159.5	832.4	327.10	3.545	
12,700.0	6,897.0	12,783.7	6,851.2	164.0	163.9	87.74	-1,383.3	5,622.8	1,159.5	832.2	327.28	3.543	
12,795.2	6,896.1	12,879.0	6,850.9	166.7	166.5	87.77	-1,383.3	5,718.1	1,159.4	826.8	332.60	3.486	
12,800.0	6,896.1	12,883.7	6,850.9	166.8	166.7	87.77	-1,383.3	5,722.8	1,159.4	826.6	332.87	3.483	
12,893.7	6,895.3	12,977.4	6,850.7	169.4	169.3	87.80	-1,383.3	5,816.5	1,159.4	821.3	338.11	3.429	
12,900.0	6,895.2	12,983.7	6,850.6	169.6	169.4	87.80	-1,383.3	5,822.8	1,159.4	820.9	338.46	3.426	
12,992.1	6,894.4	13,075.8	6,850.4	172.2	172.0	87.83	-1,383.3	5,914.9	1,159.4	815.8	343.61	3.374	
13,000.0	6,894.3	13,083.7	6,850.4	172.4	172.2	87.83	-1,383.3	5,922.8	1,159.4	815.3	344.05	3.370	
13,090.5	6,893.5	13,174.3	6,850.1	175.0	174.8	87.86	-1,383.3	6,013.3	1,159.4	810.2	349.11	3.321	
13,100.0	6,893.4	13,183.7	6,850.1	175.2	175.0	87.86	-1,383.3	6,022.8	1,159.4	809.7	349.64	3.316	
13,188.9	6,892.6	13,272.7	6,849.8	177.7	177.5	87.89	-1,383.3	6,111.8	1,159.3	804.7	354.62	3.269	
13,200.0	6,892.5	13,283.7	6,849.8	178.0	177.8	87.89	-1,383.3	6,122.8	1,159.3	804.1	355.24	3.264	
13,287.4	6,891.7	13,371.1	6,849.6	180.5	180.3	87.92	-1,383.3	6,210.2	1,159.3	799.2	360.13	3.219	
13,300.0	6,891.6	13,383.7	6,849.5	180.8	180.6	87.92	-1,383.3	6,222.8	1,159.3	798.5	360.83	3.213	
13,385.8	6,890.8	13,469.5	6,849.3	183.2	183.0	87.95	-1,383.3	6,308.6	1,159.3	793.7	365.64	3.171	
13,400.0	6,890.7	13,483.7	6,849.2	183.6	183.4	87.95	-1,383.3	6,322.8	1,159.3	792.9	366.43	3.164	
13,484.2	6,889.9	13,568.0	6,849.0	186.0	185.7	87.98	-1,383.3	6,407.0	1,159.3	788.1	371.15	3.123	
13,500.0	6,889.8	13,583.7	6,849.0	186.4	186.2	87.98	-1,383.3	6,422.8	1,159.3	787.2	372.03	3.116	
13,582.6	6,889.0	13,664.4	6,848.7	188.7	188.5	88.01	-1,383.3	6,505.5	1,159.2	782.6	376.66	3.078	
13,600.0	6,888.9	13,683.7	6,848.7	189.2	189.0	88.01	-1,383.3	6,522.8	1,159.2	781.6	377.63	3.070	
13,681.1	6,888.1	13,764.8	6,848.5	191.5	191.2	88.04	-1,383.3	6,603.9	1,159.2	777.1	382.17	3.033	
13,700.0	6,888.0	13,783.7	6,848.4	192.0	191.8	88.04	-1,383.3	6,622.8	1,159.2	776.0	383.23	3.025	
13,779.5	6,887.3	13,863.2	6,848.2	194.2	194.0	88.07	-1,383.3	6,702.3	1,159.2	771.5	387.68	2.990	
13,800.0	6,887.1	13,883.7	6,848.1	194.8	194.6	88.07	-1,383.3	6,722.8	1,159.2	770.4	388.83	2.981	
13,877.9	6,886.4	13,961.6	6,847.9	197.0	196.7	88.10	-1,383.3	6,800.7	1,159.2	766.0	393.19	2.948	
13,900.0	6,886.2	13,983.7	6,847.8	197.6	197.4	88.11	-1,383.3	6,822.8	1,159.2	764.8	394.43	2.939	
13,976.3	6,885.5	14,060.1	6,847.6	199.7	199.5	88.13	-1,383.3	6,899.1	1,159.2	760.5	398.70	2.907	
14,000.0	6,885.3	14,083.7	6,847.6	200.4	200.1	88.14	-1,383.3	6,922.8	1,159.2	759.1	400.03	2.898	
14,074.8	6,884.6	14,158.5	6,847.4	202.5	202.2	88.16	-1,383.3	6,997.6	1,159.1	754.9	404.22	2.868	
14,100.0	6,884.4	14,183.7	6,847.3	203.2	202.9	88.17	-1,383.3	7,022.8	1,159.1	753.5	405.63	2.858	
14,173.2	6,883.7	14,256.9	6,847.1	205.3	205.0	88.19	-1,383.3	7,096.0	1,159.1	749.4	409.73	2.829	
14,200.0	6,883.5	14,283.7	6,847.0	206.0	205.7	88.20	-1,383.3	7,122.8	1,159.1	747.9	411.23	2.819	
14,271.6	6,882.8	14,355.3	6,846.8	208.0	207.7	88.22	-1,383.3	7,194.4	1,159.1	743.9	415.24	2.791	
14,300.0	6,882.6	14,383.7	6,846.7	208.8	208.5	88.23	-1,383.3	7,222.8	1,159.1	742.3	416.83	2.781	
14,370.0	6,881.9	14,453.8	6,846.5	210.8	210.5	88.25	-1,383.3	7,292.8	1,159.1	738.3	420.76	2.755	
14,400.0	6,881.7	14,483.7	6,846.5	211.6	211.3	88.26	-1,383.3	7,322.8	1,159.1	736.6	422.44	2.744	
14,468.5	6,881.0	14,552.2	6,846.3	213.5	213.2	88.28	-1,383.3	7,391.3	1,159.1	732.8	426.27	2.719	
14,500.0	6,880.8	14,583.7	6,846.2	214.4	214.1	88.29	-1,383.3	7,422.8	1,159.1	731.0	428.04	2.708	
14,566.9	6,880.2	14,651.2	6,846.0	216.3	216.0	88.31	-1,383.2	7,490.3	1,159.0	727.2	431.81	2.684	
14,584.2	6,880.0	14,668.5	6,846.0	216.8	216.5	88.32	-1,383.2	7,507.6	1,159.0	726.2	432.78	2.678 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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	180.00	-91.1	0.0	91.1				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-91.1	0.0	91.1	90.9	0.17	535.947	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-91.1	0.0	91.1	90.9	0.17	526.245	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-91.1	0.0	91.1	90.5	0.61	149.689	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-91.1	0.0	91.1	90.5	0.62	146.285	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-91.1	0.0	91.1	90.0	1.05	86.667	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-91.1	0.0	91.1	90.0	1.07	84.950	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-91.1	0.0	91.1	89.6	1.49	60.989	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-91.1	0.0	91.1	89.6	1.52	59.854	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-91.1	0.0	91.1	89.1	1.94	47.049	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-91.1	0.0	91.1	89.1	1.97	46.204	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-91.1	0.0	91.1	88.7	2.38	38.296	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-91.1	0.0	91.1	88.7	2.42	37.624	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-91.1	0.0	91.1	88.3	2.82	32.289	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-91.1	0.0	91.1	88.2	2.87	31.731	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-91.1	0.0	91.1	87.8	3.26	27.911	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-91.1	0.0	91.1	87.8	3.32	27.435	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-91.1	0.0	91.1	87.4	3.71	24.578	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-91.1	0.0	91.1	87.3	3.77	24.163	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-91.1	0.0	91.1	86.9	4.15	21.957	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-91.1	0.0	91.1	86.9	4.22	21.588	
1,037.1	1,037.1	1,037.1	1,037.1	2.2	2.2	180.00	-91.1	0.0	91.1	86.7	4.39	20.767 CC	
1,082.7	1,082.7	1,081.7	1,081.7	2.3	2.3	-179.97	-91.2	0.0	91.3	86.7	4.58	19.928 ES	
1,100.0	1,100.0	1,098.5	1,098.5	2.3	2.3	-179.93	-91.5	-0.1	91.5	86.8	4.65	19.670	
1,181.1	1,181.1	1,177.1	1,177.1	2.5	2.5	-179.56	-93.8	-0.7	93.9	88.9	4.97	18.894	
1,200.0	1,200.0	1,195.4	1,195.3	2.6	2.5	-179.43	-94.6	-0.9	94.8	89.7	5.04	18.789	
1,279.5	1,279.5	1,272.2	1,272.0	2.7	2.6	-178.74	-99.4	-2.2	99.7	94.4	5.36	18.589	
1,300.0	1,300.0	1,292.0	1,291.7	2.8	2.7	-178.53	-101.0	-2.6	101.3	95.9	5.45	18.604	
1,377.9	1,377.9	1,366.9	1,366.2	3.0	2.8	-177.65	-108.0	-4.4	108.7	103.0	5.77	18.837	
1,400.0	1,400.0	1,388.0	1,387.2	3.0	2.9	-177.38	-110.3	-5.0	111.2	105.3	5.87	18.958	
1,476.4	1,476.4	1,460.8	1,459.4	3.2	3.0	-176.43	-119.5	-7.5	121.0	114.7	6.20	19.504	
1,500.0	1,500.0	1,483.2	1,481.6	3.2	3.1	-176.14	-122.7	-8.3	124.4	118.1	6.31	19.720	
1,574.8	1,574.8	1,553.9	1,551.3	3.4	3.3	-175.21	-133.8	-11.2	136.3	129.7	6.65	20.490	
1,600.0	1,600.0	1,577.5	1,574.6	3.5	3.3	-174.91	-137.9	-12.3	140.8	134.0	6.77	20.786	
1,650.0	1,650.0	1,624.3	1,620.4	3.6	3.5	-174.33	-146.6	-14.5	150.2	143.2	7.02	21.404	
1,673.2	1,673.2	1,645.9	1,641.6	3.6	3.5	-54.44	-150.8	-15.7	154.8	147.8	7.01	22.083	
1,700.0	1,700.0	1,670.8	1,665.9	3.7	3.6	-54.16	-155.9	-17.0	160.2	153.1	7.12	22.504	
1,771.6	1,771.6	1,737.0	1,730.5	3.8	3.8	-53.71	-170.4	-20.8	175.0	167.6	7.40	23.655	
1,800.0	1,799.9	1,763.1	1,755.8	3.9	3.9	-53.64	-176.5	-22.4	181.0	173.5	7.51	24.105	
1,870.1	1,869.9	1,827.3	1,817.8	4.0	4.2	-53.69	-192.5	-26.6	196.3	188.5	7.79	25.186	
1,900.0	1,899.7	1,854.6	1,844.1	4.1	4.3	-53.79	-199.7	-28.5	203.0	195.1	7.92	25.640	
1,968.5	1,967.8	1,916.7	1,903.6	4.2	4.6	-54.16	-216.9	-33.0	218.6	210.4	8.21	26.642	
2,000.0	1,999.1	1,945.2	1,930.7	4.3	4.7	-54.39	-225.3	-35.2	226.0	217.6	8.34	27.092	
2,066.9	2,065.5	2,005.2	1,987.6	4.4	5.0	-54.96	-243.7	-40.0	242.0	233.4	8.64	28.008	
2,100.0	2,098.2	2,034.7	2,015.4	4.5	5.2	-55.28	-253.2	-42.5	250.1	241.3	8.79	28.447	
2,165.3	2,162.6	2,093.2	2,070.3	4.7	5.5	-55.98	-272.8	-47.6	266.6	257.4	9.11	29.249	
2,200.0	2,196.6	2,126.7	2,101.6	4.7	5.7	-56.44	-284.2	-50.6	275.2	265.9	9.29	29.618	
2,249.9	2,245.5	2,174.8	2,146.6	4.9	6.0	-57.16	-300.7	-54.9	287.4	277.8	9.56	30.049	
2,263.8	2,259.1	2,188.3	2,159.2	4.9	6.1	-57.43	-305.3	-56.1	290.7	281.1	9.64	30.143	
2,300.0	2,294.5	2,223.3	2,191.9	5.0	6.3	-58.09	-317.3	-59.3	299.4	289.6	9.86	30.375	
2,362.2	2,355.4	2,283.3	2,248.1	5.2	6.7	-59.15	-337.9	-64.7	314.5	304.3	10.24	30.716	
2,400.0	2,392.3	2,319.9	2,282.3	5.4	6.9	-59.75	-350.4	-68.0	323.7	313.2	10.47	30.905	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,378.4	2,337.1	5.6	7.3	-60.63	-370.5	-73.2	338.5	327.7	10.87	31.151	
2,500.0	2,490.2	2,416.5	2,372.6	5.7	7.5	-61.17	-383.5	-76.6	348.2	337.1	11.13	31.296	
2,559.0	2,547.9	2,473.5	2,426.0	5.9	7.9	-61.92	-403.0	-81.7	362.7	351.2	11.53	31.469	
2,600.0	2,588.0	2,513.1	2,463.0	6.1	8.2	-62.41	-416.6	-85.3	372.8	361.0	11.81	31.575	
2,657.5	2,644.2	2,568.6	2,514.9	6.3	8.5	-63.05	-435.6	-90.3	387.1	374.9	12.21	31.690	
2,700.0	2,685.8	2,609.7	2,553.4	6.4	8.8	-63.49	-449.7	-94.0	397.6	385.1	12.52	31.766	
2,755.9	2,740.5	2,663.7	2,603.9	6.6	9.2	-64.04	-468.2	-98.8	411.6	398.6	12.93	31.838	
2,800.0	2,783.6	2,706.3	2,643.7	6.8	9.5	-64.45	-482.8	-102.6	422.6	409.3	13.25	31.889	
2,854.3	2,836.7	2,758.8	2,692.8	7.0	9.8	-64.93	-500.7	-107.3	436.1	422.5	13.66	31.930	
2,900.0	2,881.4	2,803.0	2,734.1	7.2	10.1	-65.30	-515.9	-111.3	447.6	433.6	14.00	31.959	
2,952.7	2,933.0	2,853.9	2,781.7	7.4	10.5	-65.72	-533.3	-115.9	460.8	446.4	14.41	31.977	
3,000.0	2,979.2	2,899.6	2,824.4	7.6	10.8	-66.07	-548.9	-120.0	472.7	457.9	14.78	31.990	
3,051.2	3,029.3	2,949.0	2,870.7	7.8	11.1	-66.42	-565.9	-124.4	485.5	470.4	15.18	31.991	
3,100.0	3,077.1	2,996.2	2,914.8	8.0	11.4	-66.75	-582.0	-128.6	497.8	482.3	15.56	31.991	
3,149.6	3,125.6	3,044.1	2,959.6	8.2	11.8	-67.06	-598.5	-132.9	510.3	494.4	15.96	31.981	
3,200.0	3,174.9	3,092.8	3,005.2	8.4	12.1	-67.37	-615.1	-137.3	523.1	506.7	16.36	31.969	
3,248.0	3,221.8	3,139.2	3,048.6	8.6	12.4	-67.65	-631.0	-141.5	535.2	518.5	16.75	31.951	
3,300.0	3,272.7	3,189.4	3,095.5	8.9	12.8	-67.93	-648.2	-146.0	548.4	531.2	17.17	31.931	
3,346.4	3,318.1	3,234.3	3,137.5	9.0	13.1	-68.18	-663.6	-150.0	560.1	542.6	17.55	31.908	
3,400.0	3,370.5	3,286.0	3,185.9	9.3	13.4	-68.44	-681.3	-154.7	573.7	555.7	17.99	31.881	
3,444.9	3,414.4	3,329.4	3,226.4	9.5	13.7	-68.66	-696.2	-158.6	585.1	566.7	18.37	31.855	
3,500.0	3,468.3	3,382.7	3,276.2	9.7	14.1	-68.91	-714.4	-163.3	599.0	580.2	18.82	31.823	
3,543.3	3,510.7	3,424.5	3,315.4	9.9	14.4	-69.10	-728.7	-167.1	610.0	590.9	19.19	31.795	
3,600.0	3,566.1	3,479.3	3,366.6	10.1	14.8	-69.34	-747.5	-172.0	624.5	604.8	19.66	31.758	
3,641.7	3,606.9	3,519.6	3,404.3	10.3	15.0	-69.51	-761.3	-175.6	635.1	615.0	20.01	31.729	
3,700.0	3,664.0	3,575.9	3,457.0	10.6	15.4	-69.74	-780.6	-180.7	649.9	629.4	20.51	31.690	
3,740.1	3,703.2	3,614.7	3,493.2	10.7	15.7	-69.89	-793.9	-184.2	660.1	639.3	20.85	31.661	
3,800.0	3,761.8	3,672.5	3,547.3	11.0	16.1	-70.11	-813.7	-189.3	675.3	654.0	21.36	31.619	
3,837.4	3,798.3	3,708.6	3,581.1	11.2	16.4	-70.24	-826.0	-192.6	684.9	663.2	21.68	31.592	
3,838.6	3,799.5	3,709.8	3,582.2	11.2	16.4	-70.25	-826.4	-192.7	685.2	663.5	21.69	31.591	
3,900.0	3,859.7	3,769.1	3,637.6	11.4	16.8	-70.71	-846.7	-198.0	701.0	678.8	22.20	31.575	
3,937.0	3,896.1	3,804.8	3,671.0	11.5	17.0	-70.94	-859.0	-201.2	710.8	688.3	22.48	31.618	
4,000.0	3,958.3	3,865.4	3,727.7	11.7	17.5	-71.25	-879.7	-206.7	727.8	704.8	22.95	31.716	
4,035.4	3,993.3	3,899.5	3,759.6	11.8	17.7	-71.39	-891.4	-209.7	737.5	714.3	23.19	31.799	
4,100.0	4,057.4	3,961.4	3,817.5	12.0	18.1	-71.56	-912.6	-215.3	755.6	732.0	23.63	31.975	
4,133.8	4,091.0	3,993.8	3,847.8	12.1	18.4	-71.61	-923.7	-218.2	765.3	741.4	23.85	32.093	
4,200.0	4,156.8	4,057.0	3,906.9	12.2	18.8	-71.65	-945.3	-223.8	784.5	760.3	24.25	32.348	
4,232.3	4,189.0	4,087.7	3,935.6	12.3	19.0	-71.64	-955.8	-226.6	794.1	769.7	24.44	32.497	
4,300.0	4,256.6	4,151.9	3,995.6	12.4	19.5	-71.57	-977.8	-232.4	814.6	789.8	24.81	32.832	
4,330.7	4,287.3	4,180.9	4,022.8	12.5	19.7	-71.51	-987.8	-235.0	824.1	799.1	24.97	33.007	
4,400.0	4,356.6	4,246.1	4,083.8	12.6	20.1	-71.32	-1,010.1	-240.8	845.8	820.5	25.30	33.426	
4,429.1	4,385.7	4,273.4	4,109.3	12.6	20.3	-71.23	-1,019.5	-243.3	855.2	829.7	25.44	33.621	
4,437.2	4,393.8	4,281.0	4,116.4	12.7	20.4	-71.22	-1,022.1	-243.9	857.8	828.8	29.01	29.567	
4,500.0	4,456.6	4,339.7	4,171.3	12.7	20.8	-71.83	-1,042.2	-249.2	878.1	848.5	29.60	29.668	
4,527.5	4,484.1	4,365.5	4,195.4	12.8	21.0	-72.10	-1,051.0	-251.5	887.1	857.2	29.86	29.711	
4,600.0	4,556.6	4,433.2	4,258.8	12.9	21.5	-72.76	-1,074.2	-257.6	910.7	880.2	30.53	29.826	
4,626.0	4,582.6	4,457.5	4,281.5	12.9	21.6	-72.99	-1,082.5	-259.8	919.2	888.5	30.78	29.867	
4,700.0	4,656.6	4,526.7	4,346.2	13.1	22.1	-72.62	-1,106.2	-266.0	943.5	912.1	31.47	29.985	
4,724.4	4,681.0	4,549.6	4,367.6	13.1	22.3	-71.83	-1,114.0	-268.1	951.6	919.9	31.69	30.023	
4,800.0	4,756.6	4,620.3	4,433.7	13.2	22.8	-72.43	-1,138.3	-274.4	976.5	944.1	32.40	30.143	
4,822.8	4,779.4	4,641.6	4,453.6	13.3	22.9	-72.61	-1,145.6	-276.3	984.1	951.5	32.61	30.179	
4,900.0	4,856.6	4,713.8	4,521.2	13.4	23.4	-73.18	-1,170.3	-282.8	1,009.7	976.3	33.32	30.301	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,733.7	4,539.7	13.4	23.6	173.34	-1,177.1	-284.6	1,016.7	983.2	33.52	30.334	
5,000.0	4,956.6	4,807.3	4,608.6	13.6	24.1	173.89	-1,202.3	-291.2	1,042.9	1,008.7	34.24	30.458	
5,019.7	4,976.3	4,825.7	4,625.8	13.6	24.2	174.03	-1,208.6	-292.8	1,049.5	1,015.1	34.42	30.488	
5,100.0	5,056.6	4,900.8	4,696.1	13.7	24.8	174.56	-1,234.3	-299.6	1,076.4	1,041.2	35.16	30.612	
5,118.1	5,074.7	4,917.8	4,711.9	13.8	24.9	174.67	-1,240.1	-301.1	1,082.4	1,047.1	35.33	30.640	
5,200.0	5,156.6	4,994.4	4,783.5	13.9	25.4	175.18	-1,266.4	-308.0	1,109.9	1,073.9	36.08	30.765	
5,216.5	5,173.1	5,009.8	4,798.0	13.9	25.5	175.28	-1,271.7	-309.4	1,115.5	1,079.3	36.23	30.790	
5,300.0	5,256.6	5,087.9	4,871.0	14.1	26.1	175.77	-1,298.4	-316.4	1,143.6	1,106.6	36.99	30.915	
5,314.9	5,271.5	5,101.9	4,884.1	14.1	26.2	175.85	-1,303.2	-317.6	1,148.6	1,111.5	37.13	30.937	
5,400.0	5,356.6	5,181.4	4,958.5	14.2	26.7	176.32	-1,330.4	-324.8	1,177.4	1,139.5	37.90	31.062	
5,413.4	5,370.0	5,193.9	4,970.2	14.3	26.8	176.40	-1,334.7	-325.9	1,181.9	1,143.9	38.02	31.082	
5,500.0	5,456.6	5,274.9	5,045.9	14.4	27.4	176.85	-1,362.5	-333.1	1,211.2	1,172.4	38.81	31.207	
5,511.8	5,468.4	5,286.0	5,056.3	14.4	27.5	176.91	-1,366.2	-334.1	1,215.2	1,176.3	38.92	31.224	
5,600.0	5,556.6	5,368.4	5,133.4	14.6	28.1	177.34	-1,394.5	-341.5	1,245.2	1,205.4	39.72	31.349	
5,610.2	5,566.8	5,378.0	5,142.4	14.6	28.1	177.39	-1,397.8	-342.4	1,248.6	1,208.8	39.81	31.363	
5,700.0	5,656.6	5,495.2	5,252.3	14.8	28.9	177.96	-1,437.0	-352.7	1,278.6	1,237.8	40.79	31.350	
5,708.6	5,665.2	5,509.6	5,265.9	14.8	28.9	178.03	-1,441.5	-353.9	1,281.3	1,240.4	40.88	31.343	
5,800.0	5,756.6	5,663.9	5,413.2	14.9	29.6	178.63	-1,486.0	-365.5	1,307.6	1,265.8	41.81	31.277	
5,807.1	5,763.7	5,676.1	5,424.9	14.9	29.7	178.67	-1,489.2	-366.4	1,309.4	1,267.5	41.88	31.269	
5,900.0	5,856.6	5,838.5	5,582.5	15.1	30.3	179.14	-1,527.0	-376.3	1,331.0	1,288.3	42.72	31.154	
5,905.5	5,862.1	5,848.2	5,592.0	15.1	30.3	179.17	-1,529.0	-376.8	1,332.1	1,289.4	42.77	31.146	
6,000.0	5,956.6	6,017.8	5,758.7	15.3	30.8	179.52	-1,558.7	-384.6	1,348.7	1,305.2	43.52	30.991	
6,003.9	5,960.5	6,024.9	5,765.8	15.3	30.8	179.53	-1,559.8	-384.8	1,349.2	1,305.7	43.55	30.985	
6,100.0	6,056.6	6,200.6	5,940.2	15.5	31.2	179.76	-1,580.0	-390.1	1,360.3	1,316.1	44.17	30.798	
6,102.3	6,058.9	6,204.9	5,944.5	15.5	31.2	179.77	-1,580.4	-390.2	1,360.5	1,316.3	44.18	30.794	
6,200.0	6,156.6	6,385.5	6,124.8	15.7	31.5	179.87	-1,590.1	-392.8	1,365.7	1,321.1	44.65	30.585	
6,200.8	6,157.4	6,386.9	6,126.2	15.7	31.5	179.87	-1,590.1	-392.8	1,365.8	1,321.1	44.66	30.583	
6,272.2	6,228.8	6,489.5	6,228.8	15.8	31.6	179.88	-1,590.9	-393.0	1,366.2	1,321.3	44.90	30.425	
6,299.2	6,255.8	6,516.4	6,255.6	15.8	31.6	89.87	-1,590.9	-392.3	1,366.2	1,332.8	33.39	40.911	
6,300.0	6,256.6	6,517.2	6,256.4	15.8	31.6	89.87	-1,590.9	-392.3	1,366.2	1,332.8	33.40	40.909	
6,350.0	6,306.4	6,566.9	6,306.0	15.9	31.7	89.86	-1,590.9	-388.3	1,366.2	1,332.7	33.50	40.779	
6,397.6	6,353.6	6,614.3	6,352.9	15.9	31.7	89.85	-1,590.9	-381.3	1,366.2	1,332.6	33.56	40.705	
6,400.0	6,355.9	6,616.7	6,355.2	15.9	31.7	89.85	-1,590.9	-380.8	1,366.2	1,332.6	33.56	40.703	
6,450.0	6,404.8	6,666.4	6,403.8	15.9	31.7	89.83	-1,590.9	-370.0	1,366.2	1,332.6	33.59	40.673	
6,496.0	6,449.0	6,712.2	6,447.7	16.0	31.7	89.82	-1,590.9	-357.1	1,366.2	1,332.6	33.58	40.681	
6,500.0	6,452.8	6,716.1	6,451.4	16.0	31.7	89.82	-1,590.9	-355.9	1,366.2	1,332.6	33.58	40.683	
6,550.0	6,499.7	6,765.8	6,497.9	15.9	31.7	89.81	-1,590.9	-338.5	1,366.2	1,332.6	33.55	40.722	
6,594.5	6,540.3	6,810.0	6,538.2	15.9	31.6	89.80	-1,590.9	-320.3	1,366.2	1,332.7	33.51	40.771	
6,600.0	6,545.3	6,815.5	6,543.1	15.9	31.6	89.80	-1,590.9	-317.9	1,366.2	1,332.7	33.50	40.778	
6,650.0	6,589.3	6,865.2	6,586.8	15.9	31.6	89.79	-1,590.9	-294.2	1,366.2	1,332.7	33.46	40.832	
6,692.9	6,625.7	6,907.8	6,622.9	15.9	31.6	89.79	-1,590.9	-271.5	1,366.2	1,332.8	33.43	40.863	
6,700.0	6,631.6	6,914.8	6,628.7	15.9	31.6	89.78	-1,590.9	-267.6	1,366.2	1,332.8	33.43	40.867	
6,750.0	6,671.9	6,964.5	6,668.6	15.9	31.5	89.78	-1,590.9	-238.1	1,366.2	1,332.8	33.44	40.858	
6,791.3	6,703.6	7,005.5	6,700.0	15.9	31.5	89.77	-1,590.9	-211.7	1,366.2	1,332.7	33.49	40.799	
6,800.0	6,710.1	7,014.1	6,706.4	15.9	31.5	89.77	-1,590.9	-206.0	1,366.2	1,332.7	33.50	40.781	
6,850.0	6,745.9	7,063.7	6,741.9	16.0	31.4	89.77	-1,590.9	-171.3	1,366.2	1,332.5	33.64	40.608	
6,889.7	6,772.6	7,103.2	6,768.3	16.1	31.4	89.76	-1,590.9	-142.0	1,366.2	1,332.4	33.83	40.384	
6,900.0	6,779.2	7,113.3	6,774.9	16.1	31.4	89.76	-1,590.9	-134.2	1,366.2	1,332.3	33.89	40.315	
6,950.0	6,809.8	7,162.9	6,805.2	16.3	31.4	89.76	-1,590.9	-95.0	1,366.2	1,331.9	34.26	39.882	
6,988.2	6,831.3	7,200.8	6,826.5	16.4	31.3	89.76	-1,590.9	-63.7	1,366.2	1,331.6	34.63	39.448	
7,000.0	6,837.6	7,212.5	6,832.8	16.5	31.3	89.76	-1,590.9	-53.8	1,366.2	1,331.4	34.77	39.297	
7,050.0	6,862.5	7,262.1	6,857.4	16.9	31.3	89.76	-1,590.9	-10.7	1,366.2	1,330.8	35.43	38.557	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,086.6	6,878.7	7,298.5	6,873.5	17.2	31.3	89.76	-1,590.9	21.8	1,366.2	1,330.2	36.03	37.919	
7,100.0	6,884.2	7,311.8	6,879.0	17.3	31.3	89.76	-1,590.9	33.9	1,366.2	1,329.9	36.27	37.670	
7,150.0	6,902.7	7,361.4	6,897.4	17.8	31.3	89.76	-1,590.9	80.0	1,366.2	1,328.9	37.27	36.655	
7,185.0	6,913.8	7,396.1	6,908.4	18.3	31.3	89.77	-1,590.9	112.9	1,366.2	1,328.1	38.08	35.878	
7,200.0	6,918.0	7,411.0	6,912.7	18.5	31.3	89.77	-1,590.9	127.2	1,366.2	1,327.7	38.44	35.539	
7,250.0	6,929.9	7,460.6	6,924.6	19.2	31.4	89.77	-1,590.9	175.3	1,366.2	1,326.4	39.77	34.352	
7,283.4	6,936.0	7,493.8	6,930.7	19.7	31.4	89.77	-1,590.9	208.0	1,366.2	1,325.4	40.75	33.530	
7,300.0	6,938.4	7,510.2	6,933.1	20.0	31.4	89.78	-1,590.9	224.2	1,366.2	1,324.9	41.24	33.126	
7,350.0	6,943.4	7,559.8	6,938.3	20.9	31.5	89.78	-1,590.9	273.6	1,366.2	1,323.3	42.84	31.891	
7,381.9	6,944.8	7,591.5	6,939.8	21.4	31.6	89.79	-1,590.9	305.2	1,366.2	1,322.3	43.92	31.107	
7,403.7	6,945.0	7,613.2	6,940.0	21.8	31.7	89.79	-1,590.9	326.9	1,366.2	1,321.5	44.67	30.586	
7,480.3	6,944.3	7,689.8	6,939.6	23.3	32.0	89.80	-1,590.9	403.4	1,366.2	1,318.7	47.50	28.761	
7,500.0	6,944.1	7,709.5	6,939.5	23.7	32.1	89.81	-1,590.9	423.1	1,366.2	1,317.9	48.25	28.316	
7,578.7	6,943.4	7,788.2	6,939.1	25.4	32.6	89.82	-1,590.9	501.9	1,366.2	1,314.8	51.41	26.573	
7,600.0	6,943.2	7,809.5	6,939.0	25.8	32.8	89.83	-1,590.9	523.1	1,366.2	1,313.9	52.28	26.132	
7,677.1	6,942.5	7,886.6	6,938.7	27.5	33.6	89.84	-1,590.9	600.3	1,366.2	1,310.6	55.59	24.578	
7,700.0	6,942.3	7,909.5	6,938.5	28.0	33.8	89.84	-1,590.9	623.1	1,366.2	1,309.6	56.58	24.148	
7,775.6	6,941.6	7,985.0	6,938.2	29.8	34.9	89.86	-1,590.9	698.7	1,366.2	1,306.2	59.98	22.777	
7,800.0	6,941.4	8,009.5	6,938.1	30.3	35.2	89.86	-1,590.9	723.1	1,366.2	1,305.1	61.09	22.363	
7,874.0	6,940.7	8,083.5	6,937.7	32.1	36.4	89.87	-1,590.9	797.1	1,366.2	1,301.6	64.56	21.161	
7,900.0	6,940.5	8,109.5	6,937.6	32.7	36.9	89.88	-1,590.9	823.1	1,366.2	1,300.4	65.79	20.767	
7,972.4	6,939.8	8,181.9	6,937.2	34.5	38.2	89.89	-1,590.9	895.6	1,366.2	1,296.9	69.28	19.720	
8,000.0	6,939.6	8,209.5	6,937.1	35.2	38.8	89.90	-1,590.9	923.1	1,366.2	1,295.6	70.62	19.347	
8,070.8	6,938.9	8,280.3	6,936.7	37.0	40.3	89.91	-1,590.9	994.0	1,366.2	1,292.1	74.11	18.434	
8,100.0	6,938.7	8,309.5	6,936.6	37.7	40.9	89.91	-1,590.9	1,023.1	1,366.2	1,290.6	75.55	18.082	
8,169.3	6,938.0	8,378.7	6,936.2	39.5	42.4	89.93	-1,590.9	1,092.4	1,366.2	1,287.1	79.03	17.286	
8,200.0	6,937.7	8,409.5	6,936.1	40.3	43.1	89.93	-1,590.9	1,123.1	1,366.2	1,285.6	80.58	16.954	
8,267.7	6,937.1	8,477.2	6,935.8	42.0	44.6	89.94	-1,590.9	1,190.8	1,366.2	1,282.1	84.03	16.257	
8,300.0	6,936.8	8,509.5	6,935.6	42.8	45.4	89.95	-1,590.9	1,223.1	1,366.2	1,280.5	85.68	15.944	
8,366.1	6,936.2	8,575.6	6,935.3	44.6	46.9	89.96	-1,590.9	1,289.3	1,366.2	1,277.1	89.10	15.334	
8,400.0	6,935.9	8,609.5	6,935.1	45.5	47.8	89.97	-1,590.9	1,323.1	1,366.2	1,275.3	90.85	15.038	
8,464.5	6,935.3	8,674.0	6,934.8	47.2	49.3	89.98	-1,590.9	1,387.7	1,366.2	1,272.0	94.21	14.501	
8,500.0	6,935.0	8,709.5	6,934.6	48.1	50.2	89.98	-1,590.9	1,423.1	1,366.2	1,270.1	96.06	14.222	
8,563.0	6,934.5	8,772.4	6,934.3	49.8	51.7	89.99	-1,590.9	1,486.1	1,366.2	1,266.8	99.37	13.748	
8,600.0	6,934.1	8,809.5	6,934.1	50.7	52.7	90.00	-1,590.9	1,523.1	1,366.2	1,264.9	101.32	13.484	
8,661.3	6,933.6	8,870.7	6,933.8	52.4	54.2	90.01	-1,590.9	1,584.4	1,366.2	1,261.6	104.56	13.066	
8,661.4	6,933.6	8,870.9	6,933.8	52.4	54.2	90.01	-1,590.9	1,584.5	1,366.2	1,261.6	104.57	13.065	
8,700.0	6,933.2	8,909.5	6,933.7	53.4	55.2	90.02	-1,590.9	1,623.1	1,366.2	1,259.6	106.61	12.815	
8,759.8	6,932.7	8,969.3	6,933.4	55.0	56.7	90.03	-1,590.9	1,682.9	1,366.2	1,256.4	109.80	12.443	
8,800.0	6,932.3	9,009.5	6,933.2	56.1	57.7	90.04	-1,590.9	1,723.1	1,366.2	1,254.2	111.94	12.205	
8,858.2	6,931.8	9,067.7	6,932.9	57.7	59.2	90.05	-1,590.9	1,781.4	1,366.2	1,251.1	115.05	11.874	
8,900.0	6,931.4	9,109.5	6,932.7	58.8	60.3	90.05	-1,590.9	1,823.1	1,366.2	1,248.9	117.29	11.648	
8,956.7	6,930.9	9,166.1	6,932.4	60.3	61.8	90.06	-1,590.9	1,879.8	1,366.2	1,245.8	120.34	11.353	
9,000.0	6,930.5	9,209.5	6,932.2	61.5	62.9	90.07	-1,590.9	1,923.1	1,366.2	1,243.5	122.67	11.137	
9,055.1	6,930.0	9,264.6	6,931.9	63.0	64.3	90.08	-1,590.9	1,978.2	1,366.2	1,240.5	125.64	10.874	
9,100.0	6,929.6	9,309.5	6,931.7	64.2	65.5	90.09	-1,590.9	2,023.1	1,366.2	1,238.1	128.06	10.668	
9,153.5	6,929.1	9,363.0	6,931.4	65.6	66.9	90.10	-1,590.9	2,076.6	1,366.2	1,235.2	130.96	10.432	
9,200.0	6,928.7	9,409.5	6,931.2	66.9	68.1	90.11	-1,590.9	2,123.1	1,366.2	1,232.7	133.48	10.235	
9,251.9	6,928.2	9,461.4	6,931.0	68.3	69.5	90.12	-1,590.9	2,175.1	1,366.2	1,229.9	136.30	10.023	
9,300.0	6,927.8	9,509.5	6,930.7	69.6	70.8	90.12	-1,590.9	2,223.1	1,366.2	1,227.3	138.91	9.835	
9,350.4	6,927.3	9,559.8	6,930.5	71.0	72.1	90.13	-1,590.9	2,273.5	1,366.2	1,224.5	141.65	9.644	
9,400.0	6,926.9	9,609.5	6,930.2	72.4	73.5	90.14	-1,590.9	2,323.1	1,366.2	1,221.8	144.36	9.464	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,448.8	6,926.4	9,658.2	6,930.0	73.7	74.8	90.15	-1,590.9	2,371.9	1,366.2	1,219.2	147.02	9.292	
9,500.0	6,926.0	9,709.4	6,929.8	75.1	76.1	90.16	-1,590.9	2,423.1	1,366.2	1,216.4	149.82	9.119	
9,547.2	6,925.5	9,756.7	6,929.5	76.4	77.4	90.17	-1,590.9	2,470.3	1,366.2	1,213.8	152.40	8.964	
9,600.0	6,925.1	9,809.4	6,929.3	77.9	78.8	90.18	-1,590.9	2,523.1	1,366.2	1,210.9	155.29	8.798	
9,645.6	6,924.6	9,855.1	6,929.0	79.1	80.0	90.18	-1,590.9	2,568.8	1,366.2	1,208.4	157.79	8.658	
9,700.0	6,924.1	9,909.4	6,928.8	80.6	81.5	90.19	-1,590.9	2,623.1	1,366.2	1,205.4	160.77	8.498	
9,744.1	6,923.7	9,953.5	6,928.6	81.8	82.7	90.20	-1,590.9	2,667.2	1,366.2	1,203.0	163.19	8.372	
9,800.0	6,923.2	10,009.4	6,928.3	83.4	84.2	90.21	-1,590.9	2,723.1	1,366.2	1,199.9	166.26	8.217	
9,842.5	6,922.9	10,051.9	6,928.1	84.5	85.3	90.22	-1,590.9	2,765.6	1,366.2	1,197.6	168.59	8.103	
9,900.0	6,922.3	10,109.4	6,927.8	86.1	86.9	90.23	-1,590.9	2,823.1	1,366.2	1,194.4	171.76	7.954	
9,940.9	6,922.0	10,150.4	6,927.6	87.2	88.0	90.24	-1,590.9	2,864.0	1,366.2	1,192.2	174.01	7.851	
10,000.0	6,921.4	10,209.4	6,927.3	88.9	89.6	90.25	-1,590.9	2,923.1	1,366.2	1,188.9	177.26	7.707	
10,039.3	6,921.1	10,248.8	6,927.1	90.0	90.7	90.25	-1,590.9	2,962.4	1,366.2	1,186.8	179.43	7.614	
10,100.0	6,920.5	10,309.4	6,926.8	91.6	92.3	90.26	-1,590.9	3,023.1	1,366.2	1,183.4	182.77	7.475	
10,137.8	6,920.2	10,347.2	6,926.6	92.7	93.3	90.27	-1,590.9	3,060.9	1,366.2	1,181.3	184.86	7.390	
10,200.0	6,919.6	10,409.4	6,926.3	94.4	95.0	90.28	-1,590.9	3,123.1	1,366.2	1,177.9	188.29	7.256	
10,236.2	6,919.3	10,445.6	6,926.2	95.4	96.0	90.29	-1,590.9	3,159.3	1,366.2	1,175.9	190.29	7.179	
10,300.0	6,918.7	10,509.4	6,925.9	97.2	97.8	90.30	-1,590.9	3,223.1	1,366.2	1,172.4	193.82	7.049	
10,334.6	6,918.4	10,544.1	6,925.7	98.1	98.7	90.31	-1,590.9	3,257.7	1,366.2	1,170.5	195.73	6.980	
10,400.0	6,917.8	10,609.4	6,925.4	99.9	100.5	90.32	-1,590.9	3,323.1	1,366.2	1,166.8	199.35	6.853	
10,433.0	6,917.5	10,642.5	6,925.2	100.9	101.4	90.32	-1,590.9	3,356.1	1,366.2	1,165.0	201.18	6.791	
10,500.0	6,916.9	10,709.4	6,924.9	102.7	103.2	90.33	-1,590.9	3,423.1	1,366.2	1,161.3	204.88	6.668	
10,531.5	6,916.6	10,740.9	6,924.7	103.6	104.1	90.34	-1,590.9	3,454.6	1,366.2	1,159.6	206.63	6.612	
10,600.0	6,916.0	10,809.4	6,924.4	105.5	106.0	90.35	-1,590.9	3,523.1	1,366.2	1,155.8	210.42	6.493	
10,629.9	6,915.7	10,839.3	6,924.2	106.3	106.8	90.36	-1,590.9	3,553.0	1,366.2	1,154.1	212.08	6.442	
10,700.0	6,915.1	10,909.4	6,923.9	108.3	108.7	90.37	-1,590.9	3,623.1	1,366.2	1,150.2	215.96	6.326	
10,728.3	6,914.8	10,937.8	6,923.8	109.1	109.5	90.37	-1,590.9	3,651.4	1,366.2	1,148.7	217.54	6.280	
10,800.0	6,914.2	11,009.4	6,923.4	111.0	111.5	90.39	-1,590.9	3,723.1	1,366.2	1,144.7	221.51	6.168	
10,826.7	6,913.9	11,036.2	6,923.3	111.8	112.2	90.39	-1,590.9	3,749.8	1,366.2	1,143.2	223.00	6.127	
10,900.0	6,913.3	11,109.4	6,922.9	113.8	114.2	90.40	-1,590.9	3,823.1	1,366.2	1,139.1	227.06	6.017	
10,925.2	6,913.1	11,134.6	6,922.8	114.5	114.9	90.41	-1,590.9	3,848.3	1,366.2	1,137.7	228.46	5.980	
11,000.0	6,912.4	11,209.4	6,922.4	116.6	117.0	90.42	-1,590.9	3,923.1	1,366.2	1,133.6	232.62	5.873	
11,023.6	6,912.2	11,233.0	6,922.3	117.3	117.6	90.43	-1,590.9	3,946.7	1,366.2	1,132.3	233.93	5.840	
11,100.0	6,911.5	11,309.4	6,922.0	119.4	119.7	90.44	-1,590.9	4,023.1	1,366.2	1,128.0	238.17	5.736	
11,122.0	6,911.3	11,331.5	6,921.8	120.0	120.3	90.44	-1,590.9	4,045.1	1,366.2	1,126.8	239.40	5.707	
11,200.0	6,910.6	11,409.4	6,921.5	122.2	122.5	90.46	-1,590.9	4,123.1	1,366.2	1,122.5	243.73	5.605	
11,220.4	6,910.4	11,429.9	6,921.4	122.7	123.0	90.46	-1,590.9	4,143.5	1,366.2	1,121.3	244.87	5.579	
11,300.0	6,909.7	11,509.4	6,921.0	125.0	125.2	90.47	-1,590.9	4,223.1	1,366.2	1,116.9	249.29	5.480	
11,318.9	6,909.5	11,528.3	6,920.9	125.5	125.8	90.48	-1,590.9	4,241.9	1,366.2	1,115.9	250.34	5.457	
11,400.0	6,908.8	11,609.4	6,920.5	127.7	128.0	90.49	-1,590.9	4,323.1	1,366.2	1,111.4	254.86	5.361	
11,417.3	6,908.6	11,626.7	6,920.4	128.2	128.5	90.50	-1,590.9	4,340.4	1,366.2	1,110.4	255.82	5.341	
11,500.0	6,907.9	11,709.4	6,920.0	130.5	130.8	90.51	-1,590.9	4,423.1	1,366.2	1,105.8	260.42	5.246	
11,515.7	6,907.7	11,725.2	6,919.9	131.0	131.2	90.51	-1,590.9	4,438.8	1,366.2	1,104.9	261.30	5.229	
11,600.0	6,907.0	11,809.4	6,919.5	133.3	133.5	90.53	-1,590.9	4,523.1	1,366.2	1,100.2	265.99	5.136	
11,614.1	6,906.8	11,823.6	6,919.5	133.7	133.9	90.53	-1,590.9	4,537.2	1,366.2	1,099.4	266.78	5.121	
11,700.0	6,906.0	11,909.4	6,919.0	136.1	136.3	90.54	-1,590.9	4,623.1	1,366.2	1,094.7	271.56	5.031	
11,712.6	6,905.9	11,922.0	6,919.0	136.5	136.7	90.55	-1,590.9	4,635.6	1,366.2	1,094.0	272.27	5.018	
11,800.0	6,905.1	12,009.4	6,918.5	138.9	139.1	90.56	-1,590.9	4,723.1	1,366.2	1,089.1	277.14	4.930	
11,811.0	6,905.0	12,020.4	6,918.5	139.2	139.4	90.56	-1,590.9	4,734.1	1,366.2	1,088.5	277.75	4.919	
11,900.0	6,904.2	12,109.4	6,918.1	141.7	141.8	90.58	-1,590.9	4,823.1	1,366.2	1,083.5	282.71	4.833	
11,909.4	6,904.2	12,118.9	6,918.0	141.9	142.1	90.58	-1,590.9	4,832.5	1,366.2	1,083.0	283.24	4.824	
12,000.0	6,903.3	12,209.4	6,917.6	144.5	144.6	90.60	-1,590.9	4,923.1	1,366.2	1,078.0	288.29	4.739	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,007.8	6,903.3	12,217.3	6,917.5	144.7	144.8	90.60	-1,590.9	4,930.9	1,366.2	1,077.5	288.73	4.732	
12,100.0	6,902.4	12,309.4	6,917.1	147.3	147.4	90.61	-1,590.9	5,023.1	1,366.2	1,072.4	293.87	4.649	
12,106.3	6,902.4	12,315.7	6,917.1	147.4	147.6	90.62	-1,590.9	5,029.3	1,366.2	1,072.0	294.22	4.644	
12,200.0	6,901.5	12,409.4	6,916.6	150.1	150.2	90.63	-1,590.9	5,123.0	1,366.3	1,066.8	299.44	4.563	
12,204.7	6,901.5	12,414.1	6,916.6	150.2	150.3	90.63	-1,590.9	5,127.7	1,366.3	1,066.5	299.71	4.559	
12,300.0	6,900.6	12,509.4	6,916.1	152.9	152.9	90.65	-1,590.9	5,223.0	1,366.3	1,061.2	305.03	4.479	
12,303.1	6,900.6	12,512.5	6,916.1	152.9	153.0	90.65	-1,590.9	5,226.2	1,366.3	1,061.1	305.20	4.477	
12,400.0	6,899.7	12,609.4	6,915.6	155.6	155.7	90.67	-1,590.9	5,323.0	1,366.3	1,055.7	310.61	4.399	
12,401.5	6,899.7	12,611.0	6,915.6	155.7	155.8	90.67	-1,590.9	5,324.6	1,366.3	1,055.6	310.69	4.397	
12,500.0	6,898.8	12,709.4	6,915.1	158.4	158.5	90.68	-1,590.9	5,423.0	1,366.3	1,050.1	316.19	4.321	
12,598.4	6,897.9	12,807.8	6,914.7	161.2	161.2	90.70	-1,590.9	5,521.4	1,366.3	1,044.6	321.68	4.247	
12,600.0	6,897.9	12,809.4	6,914.7	161.2	161.3	90.70	-1,590.9	5,523.0	1,366.3	1,044.5	321.77	4.246	
12,696.8	6,897.0	12,906.2	6,914.2	163.9	164.0	90.72	-1,590.9	5,619.9	1,366.3	1,039.1	327.18	4.176	
12,700.0	6,897.0	12,909.4	6,914.2	164.0	164.1	90.72	-1,590.9	5,623.0	1,366.3	1,038.9	327.36	4.174	
12,795.2	6,896.1	13,004.7	6,913.7	166.7	166.7	90.74	-1,590.9	5,718.3	1,366.3	1,033.6	332.68	4.107	
12,800.0	6,896.1	13,009.4	6,913.7	166.8	166.8	90.74	-1,590.9	5,723.0	1,366.3	1,033.3	332.95	4.104	
12,893.7	6,895.3	13,103.1	6,913.2	169.4	169.5	90.75	-1,590.9	5,816.7	1,366.3	1,028.1	338.18	4.040	
12,900.0	6,895.2	13,109.4	6,913.2	169.6	169.6	90.75	-1,590.9	5,823.0	1,366.3	1,027.8	338.53	4.036	
12,992.1	6,894.4	13,201.5	6,912.7	172.2	172.2	90.77	-1,590.9	5,915.1	1,366.3	1,022.6	343.68	3.975	
13,000.0	6,894.3	13,209.4	6,912.7	172.4	172.4	90.77	-1,590.9	5,923.0	1,366.3	1,022.2	344.12	3.970	
13,090.5	6,893.5	13,299.9	6,912.3	175.0	174.9	90.79	-1,590.9	6,013.6	1,366.3	1,017.1	349.18	3.913	
13,100.0	6,893.4	13,309.4	6,912.2	175.2	175.2	90.79	-1,590.9	6,023.0	1,366.3	1,016.6	349.71	3.907	
13,188.9	6,892.6	13,398.4	6,911.8	177.7	177.7	90.81	-1,590.9	6,112.0	1,366.3	1,011.6	354.68	3.852	
13,200.0	6,892.5	13,409.4	6,911.7	178.0	178.0	90.81	-1,590.9	6,123.0	1,366.3	1,011.0	355.30	3.845	
13,287.4	6,891.7	13,496.8	6,911.3	180.5	180.4	90.82	-1,590.9	6,210.4	1,366.3	1,006.1	360.19	3.793	
13,300.0	6,891.6	13,509.4	6,911.3	180.8	180.8	90.82	-1,590.9	6,223.0	1,366.3	1,005.4	360.89	3.786	
13,385.8	6,890.8	13,595.2	6,910.8	183.2	183.2	90.84	-1,590.9	6,308.8	1,366.3	1,000.6	365.69	3.736	
13,400.0	6,890.7	13,609.4	6,910.8	183.6	183.6	90.84	-1,590.9	6,323.0	1,366.3	999.8	366.48	3.728	
13,484.2	6,889.9	13,693.6	6,910.4	186.0	185.9	90.86	-1,590.9	6,407.2	1,366.3	995.1	371.19	3.681	
13,500.0	6,889.8	13,709.4	6,910.3	186.4	186.3	90.86	-1,590.9	6,423.0	1,366.3	994.2	372.07	3.672	
13,582.6	6,889.0	13,792.1	6,909.9	188.7	188.6	90.87	-1,590.9	6,505.7	1,366.3	989.6	376.70	3.627	
13,600.0	6,888.9	13,809.4	6,909.8	189.2	189.1	90.88	-1,590.9	6,523.0	1,366.3	988.7	377.67	3.618	
13,681.1	6,888.1	13,890.5	6,909.4	191.5	191.4	90.89	-1,590.9	6,604.1	1,366.3	984.1	382.20	3.575	
13,700.0	6,888.0	13,909.4	6,909.3	192.0	191.9	90.89	-1,590.9	6,623.0	1,366.3	983.1	383.26	3.565	
13,779.5	6,887.3	13,988.9	6,908.9	194.2	194.1	90.91	-1,590.9	6,702.5	1,366.3	978.6	387.71	3.524	
13,800.0	6,887.1	14,009.4	6,908.8	194.8	194.7	90.91	-1,590.9	6,723.0	1,366.3	977.5	388.85	3.514	
13,877.9	6,886.4	14,087.3	6,908.4	197.0	196.9	90.93	-1,590.9	6,800.9	1,366.3	973.1	393.21	3.475	
13,900.0	6,886.2	14,109.4	6,908.3	197.6	197.5	90.93	-1,590.9	6,823.0	1,366.3	971.9	394.45	3.464	
13,976.3	6,885.5	14,185.8	6,908.0	199.7	199.6	90.94	-1,590.9	6,899.4	1,366.3	967.6	398.72	3.427	
14,000.0	6,885.3	14,209.4	6,907.9	200.4	200.3	90.95	-1,590.9	6,923.0	1,366.3	966.3	400.04	3.415	
14,074.8	6,884.6	14,284.2	6,907.5	202.5	202.4	90.96	-1,590.9	6,997.8	1,366.4	962.1	404.23	3.380	
14,100.0	6,884.4	14,309.4	6,907.4	203.2	203.1	90.96	-1,590.9	7,023.0	1,366.4	960.7	405.64	3.368	
14,173.2	6,883.7	14,382.6	6,907.0	205.3	205.1	90.98	-1,590.9	7,096.2	1,366.4	956.6	409.74	3.335	
14,200.0	6,883.5	14,409.4	6,906.9	206.0	205.9	90.98	-1,590.9	7,123.0	1,366.4	955.1	411.24	3.323	
14,271.6	6,882.8	14,481.0	6,906.5	208.0	207.9	90.99	-1,590.9	7,194.6	1,366.4	951.1	415.25	3.291	
14,300.0	6,882.6	14,509.4	6,906.4	208.8	208.7	91.00	-1,590.9	7,223.0	1,366.4	949.5	416.83	3.278	
14,370.0	6,881.9	14,579.5	6,906.1	210.8	210.6	91.01	-1,590.9	7,293.1	1,366.4	945.6	420.75	3.247	
14,400.0	6,881.7	14,609.4	6,905.9	211.6	211.5	91.02	-1,590.9	7,323.0	1,366.4	943.9	422.43	3.235	
14,468.5	6,881.0	14,677.9	6,905.6	213.5	213.4	91.03	-1,590.9	7,391.5	1,366.4	940.1	426.26	3.205	
14,500.0	6,880.8	14,709.4	6,905.4	214.4	214.2	91.03	-1,590.9	7,423.0	1,366.4	938.4	428.03	3.192	
14,566.9	6,880.2	14,776.3	6,905.1	216.3	216.1	91.05	-1,590.9	7,489.9	1,366.4	934.6	431.77	3.165	
14,584.2	6,880.0	14,793.6	6,905.0	216.8	216.6	91.05	-1,590.9	7,507.2	1,366.4	933.6	432.74	3.158 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	-58.3	0.0	58.3				
98.4	98.4	98.4	98.4	0.1	0.1	180.00	-58.3	0.0	58.3	58.1	0.17	343.030	
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-58.3	0.0	58.3	58.1	0.17	336.821	
196.8	196.8	196.8	196.8	0.3	0.3	180.00	-58.3	0.0	58.3	57.7	0.61	95.808	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-58.3	0.0	58.3	57.7	0.62	93.629	
295.3	295.3	295.3	295.3	0.5	0.5	180.00	-58.3	0.0	58.3	57.2	1.05	55.470	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-58.3	0.0	58.3	57.2	1.07	54.372	
393.7	393.7	393.7	393.7	0.7	0.7	180.00	-58.3	0.0	58.3	56.8	1.49	39.036	
400.0	400.0	400.0	400.0	0.8	0.8	180.00	-58.3	0.0	58.3	56.8	1.52	38.309	
492.1	492.1	492.1	492.1	1.0	1.0	180.00	-58.3	0.0	58.3	56.4	1.94	30.113	
500.0	500.0	500.0	500.0	1.0	1.0	180.00	-58.3	0.0	58.3	56.3	1.97	29.573	
590.5	590.5	590.5	590.5	1.2	1.2	180.00	-58.3	0.0	58.3	55.9	2.38	24.511	
600.0	600.0	600.0	600.0	1.2	1.2	180.00	-58.3	0.0	58.3	55.9	2.42	24.081	
689.0	689.0	689.0	689.0	1.4	1.4	180.00	-58.3	0.0	58.3	55.5	2.82	20.666	
700.0	700.0	700.0	700.0	1.4	1.4	180.00	-58.3	0.0	58.3	55.4	2.87	20.309	
787.4	787.4	787.4	787.4	1.6	1.6	180.00	-58.3	0.0	58.3	55.0	3.26	17.864	
800.0	800.0	800.0	800.0	1.7	1.7	180.00	-58.3	0.0	58.3	55.0	3.32	17.559	
885.8	885.8	885.8	885.8	1.9	1.9	180.00	-58.3	0.0	58.3	54.6	3.71	15.731	
900.0	900.0	900.0	900.0	1.9	1.9	180.00	-58.3	0.0	58.3	54.5	3.77	15.465	
984.2	984.2	984.2	984.2	2.1	2.1	180.00	-58.3	0.0	58.3	54.1	4.15	14.053	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	180.00	-58.3	0.0	58.3	54.1	4.22	13.817	
1,082.7	1,082.7	1,082.7	1,082.7	2.3	2.3	180.00	-58.3	0.0	58.3	53.7	4.59	12.699	
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	180.00	-58.3	0.0	58.3	53.6	4.67	12.487	
1,181.1	1,181.1	1,181.1	1,181.1	2.5	2.5	180.00	-58.3	0.0	58.3	53.3	5.03	11.582	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	180.00	-58.3	0.0	58.3	53.2	5.12	11.390	
1,237.4	1,237.4	1,237.4	1,237.4	2.6	2.6	180.00	-58.3	0.0	58.3	53.0	5.29	11.028 CC	
1,279.5	1,279.5	1,279.0	1,279.0	2.7	2.7	-179.95	-58.4	0.0	58.4	53.0	5.47	10.691 ES	
1,300.0	1,300.0	1,299.1	1,299.1	2.8	2.8	-179.86	-58.7	-0.1	58.7	53.1	5.55	10.574	
1,377.9	1,377.9	1,375.5	1,375.4	3.0	2.9	-179.14	-60.9	-0.9	60.9	55.1	5.86	10.402	
1,400.0	1,400.0	1,397.0	1,397.0	3.0	2.9	-178.83	-61.9	-1.3	61.9	56.0	5.95	10.418	
1,476.4	1,476.4	1,471.7	1,471.5	3.2	3.1	-177.53	-66.4	-2.9	66.6	60.4	6.25	10.653	
1,500.0	1,500.0	1,494.7	1,494.4	3.2	3.1	-177.07	-68.1	-3.5	68.5	62.1	6.35	10.783	
1,574.8	1,574.8	1,567.4	1,566.7	3.4	3.3	-175.52	-74.8	-5.9	75.5	68.8	6.66	11.338	
1,600.0	1,600.0	1,591.8	1,591.0	3.5	3.3	-174.99	-77.5	-6.8	78.3	71.5	6.77	11.574	
1,650.0	1,650.0	1,640.0	1,638.8	3.6	3.4	-173.93	-83.3	-8.9	84.5	77.5	6.98	12.099	
1,673.2	1,673.2	1,662.4	1,661.0	3.6	3.5	-53.87	-86.2	-9.9	87.6	80.5	7.06	12.403	
1,700.0	1,700.0	1,688.1	1,686.4	3.7	3.5	-53.43	-89.8	-11.2	91.3	84.1	7.17	12.732	
1,771.6	1,771.6	1,756.8	1,754.1	3.8	3.7	-52.81	-100.4	-14.9	101.5	94.0	7.44	13.641	
1,800.0	1,799.9	1,783.9	1,780.8	3.9	3.8	-52.75	-105.0	-16.6	105.7	98.1	7.55	14.005	
1,870.1	1,869.9	1,850.6	1,846.2	4.0	4.0	-52.92	-117.4	-20.9	116.5	108.7	7.82	14.892	
1,900.0	1,899.7	1,879.0	1,873.9	4.1	4.0	-53.12	-123.1	-23.0	121.3	113.3	7.94	15.274	
1,968.5	1,967.8	1,943.7	1,936.9	4.2	4.3	-53.78	-137.1	-27.9	132.6	124.4	8.22	16.128	
2,000.0	1,999.1	1,973.3	1,965.7	4.3	4.4	-54.16	-143.9	-30.3	138.0	129.7	8.35	16.522	
2,066.9	2,065.5	2,036.1	2,026.3	4.4	4.6	-55.10	-159.3	-35.8	149.9	141.2	8.65	17.334	
2,100.0	2,098.2	2,067.9	2,056.9	4.5	4.7	-55.64	-167.5	-38.7	155.9	147.1	8.80	17.723	
2,165.3	2,162.6	2,132.1	2,118.6	4.7	5.0	-56.91	-184.2	-44.6	167.3	158.2	9.12	18.348	
2,200.0	2,196.6	2,166.2	2,151.3	4.7	5.2	-57.69	-193.1	-47.7	173.1	163.8	9.29	18.627	
2,249.9	2,245.5	2,215.2	2,198.5	4.9	5.4	-58.90	-205.8	-52.2	181.1	171.5	9.56	18.945	
2,263.8	2,259.1	2,228.9	2,211.7	4.9	5.4	-59.29	-209.3	-53.5	183.3	173.6	9.64	19.014	
2,300.0	2,294.5	2,264.6	2,245.9	5.0	5.6	-60.27	-218.6	-56.8	189.0	179.2	9.85	19.188	
2,362.2	2,355.4	2,325.7	2,304.7	5.2	5.9	-61.81	-234.4	-62.4	199.0	188.7	10.23	19.449	
2,400.0	2,392.3	2,362.9	2,340.5	5.4	6.1	-62.67	-244.1	-65.8	205.1	194.6	10.47	19.597	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,422.5	2,397.8	5.6	6.4	-63.95	-259.6	-71.3	215.0	204.1	10.86	19.799	
2,500.0	2,490.2	2,461.3	2,435.0	5.7	6.6	-64.72	-269.6	-74.9	221.5	210.3	11.12	19.919	
2,559.0	2,547.9	2,519.4	2,490.9	5.9	6.9	-65.80	-284.7	-80.2	231.2	219.7	11.52	20.073	
2,600.0	2,588.0	2,559.6	2,529.6	6.1	7.1	-66.49	-295.1	-83.9	238.1	226.3	11.80	20.168	
2,657.5	2,644.2	2,616.2	2,583.9	6.3	7.3	-67.40	-309.8	-89.1	247.7	235.5	12.21	20.282	
2,700.0	2,685.8	2,658.0	2,624.1	6.4	7.6	-68.03	-320.7	-92.9	254.9	242.4	12.52	20.358	
2,755.9	2,740.5	2,713.0	2,677.0	6.6	7.9	-68.80	-334.9	-98.0	264.3	251.4	12.93	20.441	
2,800.0	2,783.6	2,756.4	2,718.7	6.8	8.1	-69.38	-346.2	-102.0	271.8	258.6	13.26	20.499	
2,854.3	2,836.7	2,809.8	2,770.1	7.0	8.4	-70.04	-360.0	-106.9	281.1	267.4	13.67	20.559	
2,900.0	2,881.4	2,854.7	2,813.3	7.2	8.6	-70.57	-371.7	-111.0	288.9	274.9	14.02	20.604	
2,952.7	2,933.0	2,906.6	2,863.2	7.4	8.9	-71.14	-385.2	-115.8	298.0	283.6	14.43	20.646	
3,000.0	2,979.2	2,953.1	2,907.8	7.6	9.1	-71.62	-397.2	-120.1	306.1	291.3	14.80	20.679	
3,051.2	3,029.3	3,003.4	2,956.2	7.8	9.4	-72.12	-410.3	-124.7	315.0	299.8	15.21	20.708	
3,100.0	3,077.1	3,051.4	3,002.4	8.0	9.7	-72.57	-422.7	-129.1	323.4	307.8	15.60	20.731	
3,149.6	3,125.6	3,100.2	3,049.3	8.2	9.9	-73.00	-435.4	-133.6	332.0	316.0	16.00	20.750	
3,200.0	3,174.9	3,149.8	3,097.0	8.4	10.2	-73.41	-448.3	-138.1	340.8	324.4	16.41	20.766	
3,248.0	3,221.8	3,197.0	3,142.4	8.6	10.4	-73.79	-460.5	-142.5	349.2	332.3	16.80	20.777	
3,300.0	3,272.7	3,248.2	3,191.5	8.9	10.7	-74.18	-473.8	-147.2	358.2	341.0	17.23	20.787	
3,346.4	3,318.1	3,293.9	3,235.4	9.0	11.0	-74.51	-485.6	-151.4	366.3	348.7	17.62	20.793	
3,400.0	3,370.5	3,346.5	3,286.1	9.3	11.3	-74.88	-499.3	-156.2	375.7	357.6	18.06	20.798	
3,444.9	3,414.4	3,390.7	3,328.5	9.5	11.5	-75.17	-510.8	-160.3	383.6	365.1	18.44	20.800	
3,500.0	3,468.3	3,444.9	3,380.6	9.7	11.8	-75.51	-524.8	-165.3	393.2	374.3	18.91	20.801	
3,543.3	3,510.7	3,487.5	3,421.6	9.9	12.0	-75.77	-535.9	-169.2	400.9	381.6	19.27	20.799	
3,600.0	3,566.1	3,543.2	3,475.2	10.1	12.3	-76.09	-550.4	-174.3	410.8	391.1	19.75	20.797	
3,641.7	3,606.9	3,584.3	3,514.7	10.3	12.6	-76.32	-561.0	-178.1	418.2	398.1	20.11	20.794	
3,700.0	3,664.0	3,641.6	3,569.8	10.6	12.9	-76.62	-575.9	-183.4	428.4	407.8	20.61	20.789	
3,740.1	3,703.2	3,681.1	3,607.7	10.7	13.1	-76.82	-586.1	-187.0	435.5	414.6	20.95	20.784	
3,800.0	3,761.8	3,740.0	3,664.3	11.0	13.4	-77.11	-601.4	-192.4	446.1	424.6	21.47	20.777	
3,837.4	3,798.3	3,776.7	3,699.6	11.2	13.6	-77.28	-610.9	-195.8	452.7	430.9	21.79	20.772	
3,838.6	3,799.5	3,777.9	3,700.8	11.2	13.7	-77.29	-611.2	-195.9	452.9	431.1	21.80	20.772	
3,900.0	3,859.7	3,838.3	3,758.9	11.4	14.0	-77.70	-626.9	-201.4	463.9	441.6	22.31	20.796	
3,937.0	3,896.1	3,874.7	3,793.8	11.5	14.2	-77.87	-636.4	-204.8	470.7	448.1	22.58	20.846	
4,000.0	3,958.3	3,936.6	3,853.3	11.7	14.5	-78.03	-652.4	-210.5	482.4	459.4	23.03	20.951	
4,035.4	3,993.3	3,971.4	3,886.8	11.8	14.7	-78.05	-661.4	-213.7	489.2	465.9	23.26	21.030	
4,100.0	4,057.4	4,034.6	3,947.6	12.0	15.1	-77.98	-677.9	-219.5	501.7	478.0	23.67	21.191	
4,133.8	4,091.0	4,067.8	3,979.5	12.1	15.3	-77.88	-686.5	-222.5	508.4	484.5	23.87	21.294	
4,200.0	4,156.8	4,132.4	4,041.6	12.2	15.6	-77.59	-703.2	-228.5	521.7	497.4	24.25	21.514	
4,232.3	4,189.0	4,163.8	4,071.8	12.3	15.8	-77.40	-711.4	-231.4	528.3	503.9	24.41	21.640	
4,300.0	4,256.6	4,229.7	4,135.1	12.4	16.2	-76.92	-728.5	-237.4	542.6	517.8	24.75	21.924	
4,330.7	4,287.3	4,259.4	4,163.7	12.5	16.3	-76.67	-736.2	-240.1	549.2	524.3	24.88	22.071	
4,400.0	4,356.6	4,326.4	4,228.1	12.6	16.7	-76.01	-753.6	-246.3	564.5	539.3	25.17	22.425	
4,429.1	4,385.7	4,354.4	4,255.0	12.6	16.9	-75.70	-760.8	-248.9	571.1	545.8	25.28	22.589	
4,437.2	4,393.8	4,362.2	4,262.5	12.7	16.9	164.80	-762.9	-249.6	572.9	547.9	24.99	22.922	
4,500.0	4,456.6	4,422.6	4,320.5	12.7	17.3	165.75	-778.5	-255.1	587.4	561.8	25.53	23.007	
4,527.5	4,484.1	4,449.1	4,346.0	12.8	17.4	166.15	-785.4	-257.6	593.8	568.0	25.77	23.045	
4,600.0	4,556.6	4,518.7	4,413.0	12.9	17.8	167.17	-803.5	-264.0	610.7	584.3	26.38	23.147	
4,626.0	4,582.6	4,543.7	4,437.0	12.9	18.0	167.52	-809.9	-266.3	616.8	590.2	26.61	23.184	
4,700.0	4,656.6	4,614.8	4,505.4	13.1	18.4	168.49	-828.4	-272.8	634.4	607.2	27.23	23.293	
4,724.4	4,681.0	4,638.3	4,527.9	13.1	18.5	168.79	-834.5	-275.0	640.2	612.8	27.44	23.330	
4,800.0	4,756.6	4,711.0	4,597.8	13.2	18.9	169.71	-853.4	-281.6	658.4	630.3	28.08	23.445	
4,822.8	4,779.4	4,732.9	4,618.9	13.3	19.0	169.98	-859.0	-283.7	663.9	635.6	28.27	23.481	
4,900.0	4,856.6	4,807.1	4,690.2	13.4	19.4	170.85	-878.3	-290.5	682.6	653.7	28.92	23.602	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,827.5	4,709.9	13.4	19.6	171.08	-883.6	-292.4	687.8	658.7	29.10	23.636	
5,000.0	4,956.6	4,903.3	4,782.7	13.6	20.0	171.91	-903.2	-299.3	707.1	677.3	29.76	23.762	
5,019.7	4,976.3	4,922.2	4,800.8	13.6	20.1	172.11	-908.2	-301.1	711.9	682.0	29.92	23.793	
5,100.0	5,056.6	4,999.4	4,875.1	13.7	20.5	172.90	-928.2	-308.2	731.8	701.2	30.59	23.923	
5,118.1	5,074.7	5,016.8	4,891.8	13.8	20.6	173.07	-932.7	-309.8	736.3	705.5	30.74	23.952	
5,200.0	5,156.6	5,095.5	4,967.5	13.9	21.1	173.83	-953.1	-317.0	756.7	725.3	31.42	24.085	
5,216.5	5,173.1	5,111.4	4,982.8	13.9	21.2	173.97	-957.3	-318.5	760.8	729.3	31.55	24.112	
5,300.0	5,256.6	5,191.7	5,059.9	14.1	21.6	174.69	-978.1	-325.8	781.8	749.5	32.24	24.248	
5,314.9	5,271.5	5,206.0	5,073.7	14.1	21.7	174.82	-981.8	-327.2	785.5	753.2	32.36	24.272	
5,400.0	5,356.6	5,287.8	5,152.4	14.2	22.2	175.51	-1,003.0	-334.7	807.0	773.9	33.06	24.410	
5,413.4	5,370.0	5,300.7	5,164.7	14.3	22.2	175.61	-1,006.4	-335.8	810.4	777.2	33.17	24.432	
5,500.0	5,456.6	5,383.9	5,244.8	14.4	22.7	176.28	-1,028.0	-343.5	832.4	798.5	33.88	24.571	
5,511.8	5,468.4	5,395.3	5,255.7	14.4	22.8	176.36	-1,030.9	-344.5	835.4	801.4	33.97	24.590	
5,600.0	5,556.6	5,480.1	5,337.2	14.6	23.3	177.00	-1,052.9	-352.3	857.9	823.2	34.69	24.731	
5,610.2	5,566.8	5,489.9	5,346.6	14.6	23.3	177.07	-1,055.5	-353.2	860.5	825.7	34.77	24.748	
5,700.0	5,656.6	5,586.5	5,439.5	14.8	23.8	177.74	-1,080.3	-362.0	883.4	847.8	35.53	24.862	
5,708.6	5,665.2	5,598.2	5,450.9	14.8	23.9	177.82	-1,083.2	-363.1	885.5	849.9	35.61	24.864	
5,800.0	5,756.6	5,723.6	5,572.6	14.9	24.3	178.53	-1,111.4	-373.0	905.8	869.5	36.33	24.933	
5,807.1	5,763.7	5,733.4	5,582.2	14.9	24.4	178.58	-1,113.3	-373.7	907.2	870.9	36.38	24.936	
5,900.0	5,856.6	5,863.7	5,710.1	15.1	24.8	179.14	-1,136.8	-382.1	923.9	886.9	37.04	24.942	
5,905.5	5,862.1	5,871.4	5,717.7	15.1	24.8	179.17	-1,138.0	-382.5	924.8	887.7	37.08	24.941	
6,000.0	5,956.6	6,006.1	5,851.0	15.3	25.2	179.58	-1,156.2	-388.9	937.5	899.8	37.67	24.887	
6,003.9	5,960.5	6,011.8	5,856.6	15.3	25.2	179.59	-1,156.8	-389.2	937.9	900.2	37.69	24.884	
6,100.0	6,056.6	6,150.3	5,994.6	15.5	25.5	179.86	-1,169.1	-393.5	946.4	908.2	38.20	24.777	
6,102.3	6,058.9	6,153.7	5,998.0	15.5	25.5	179.86	-1,169.3	-393.6	946.5	908.3	38.21	24.774	
6,200.0	6,156.6	6,295.6	6,139.6	15.7	25.7	179.99	-1,175.1	-395.6	950.6	911.9	38.63	24.606	
6,200.8	6,157.4	6,296.7	6,140.8	15.7	25.7	179.99	-1,175.1	-395.6	950.6	911.9	38.63	24.604	
6,272.2	6,228.8	6,384.7	6,228.8	15.8	25.8	180.00	-1,175.6	-395.8	950.9	912.0	38.88	24.457	
6,299.2	6,255.8	6,411.7	6,255.8	15.8	25.8	89.99	-1,175.6	-395.1	950.9	918.7	32.21	29.517	
6,300.0	6,256.6	6,412.5	6,256.6	15.8	25.8	89.99	-1,175.6	-395.1	950.9	918.7	32.22	29.515	
6,350.0	6,306.4	6,462.5	6,306.4	15.9	25.8	89.97	-1,175.6	-391.0	950.9	918.6	32.33	29.415	
6,397.6	6,353.6	6,510.0	6,353.4	15.9	25.8	89.95	-1,175.6	-384.0	950.9	918.5	32.39	29.356	
6,400.0	6,355.9	6,512.4	6,355.7	15.9	25.8	89.95	-1,175.6	-383.5	950.9	918.5	32.39	29.354	
6,450.0	6,404.8	6,562.3	6,404.4	15.9	25.8	89.92	-1,175.6	-372.6	950.9	918.5	32.42	29.330	
6,496.0	6,449.0	6,608.3	6,448.5	16.0	25.8	89.91	-1,175.6	-359.6	950.9	918.5	32.42	29.334	
6,500.0	6,452.8	6,612.2	6,452.3	16.0	25.8	89.90	-1,175.6	-358.4	950.9	918.5	32.41	29.335	
6,550.0	6,499.7	6,662.1	6,498.9	15.9	25.8	89.89	-1,175.6	-340.8	950.9	918.5	32.38	29.363	
6,594.5	6,540.3	6,706.5	6,539.3	15.9	25.8	89.87	-1,175.6	-322.6	950.9	918.5	32.35	29.397	
6,600.0	6,545.3	6,712.0	6,544.3	15.9	25.8	89.87	-1,175.6	-320.1	950.9	918.6	32.34	29.401	
6,650.0	6,589.3	6,761.8	6,588.0	15.9	25.8	89.85	-1,175.6	-296.3	950.9	918.6	32.30	29.439	
6,692.9	6,625.7	6,804.5	6,624.1	15.9	25.7	89.83	-1,175.6	-273.5	950.9	918.6	32.28	29.458	
6,700.0	6,631.6	6,811.6	6,630.0	15.9	25.7	89.83	-1,175.6	-269.5	950.9	918.6	32.28	29.460	
6,750.0	6,671.9	6,861.4	6,670.0	15.9	25.7	89.81	-1,175.6	-239.8	950.9	918.6	32.29	29.447	
6,791.3	6,703.6	6,902.6	6,701.4	15.9	25.6	89.80	-1,175.6	-213.3	950.9	918.6	32.35	29.396	
6,800.0	6,710.1	6,911.2	6,707.8	15.9	25.6	89.80	-1,175.6	-207.5	950.9	918.5	32.37	29.380	
6,850.0	6,745.9	6,960.9	6,743.3	16.0	25.6	89.78	-1,175.6	-172.6	950.9	918.4	32.52	29.238	
6,889.7	6,772.6	7,000.5	6,769.7	16.1	25.5	89.77	-1,175.6	-143.2	950.9	918.2	32.72	29.060	
6,900.0	6,779.2	7,010.7	6,776.3	16.1	25.5	89.77	-1,175.6	-135.4	950.9	918.1	32.78	29.004	
6,950.0	6,809.8	7,060.4	6,806.5	16.3	25.5	89.76	-1,175.6	-96.0	950.9	917.7	33.18	28.663	
6,988.2	6,831.3	7,098.4	6,827.8	16.4	25.4	89.75	-1,175.6	-64.5	950.9	917.3	33.57	28.323	
7,000.0	6,837.6	7,110.1	6,834.0	16.5	25.4	89.74	-1,175.6	-54.5	950.9	917.2	33.71	28.206	
7,050.0	6,862.5	7,159.8	6,858.5	16.9	25.4	89.73	-1,175.6	-11.3	950.9	916.5	34.41	27.633	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,086.6	6,878.7	7,196.2	6,874.6	17.2	25.4	89.73	-1,175.6	21.3	950.9	915.9	35.04	27.141	
7,100.0	6,884.2	7,209.5	6,880.0	17.3	25.4	89.72	-1,175.6	33.5	950.9	915.6	35.28	26.952	
7,150.0	6,902.7	7,259.2	6,898.3	17.8	25.4	89.72	-1,175.6	79.6	950.9	914.6	36.32	26.178	
7,185.0	6,913.8	7,294.0	6,909.2	18.3	25.4	89.71	-1,175.6	112.7	950.9	913.7	37.16	25.587	
7,200.0	6,918.0	7,308.8	6,913.4	18.5	25.4	89.71	-1,175.6	127.0	950.9	913.4	37.54	25.333	
7,250.0	6,929.9	7,358.5	6,925.1	19.2	25.4	89.71	-1,175.6	175.2	950.9	912.0	38.91	24.440	
7,283.4	6,936.0	7,391.7	6,931.1	19.7	25.5	89.70	-1,175.6	207.9	950.9	911.0	39.91	23.824	
7,300.0	6,938.4	7,408.2	6,933.5	20.0	25.5	89.70	-1,175.6	224.1	950.9	910.5	40.42	23.525	
7,350.0	6,943.4	7,457.8	6,938.5	20.9	25.6	89.70	-1,175.6	273.5	950.9	908.8	42.06	22.608	
7,381.9	6,944.8	7,489.5	6,939.8	21.4	25.8	89.70	-1,175.6	305.2	950.9	907.7	43.17	22.029	
7,403.7	6,945.0	7,511.2	6,940.0	21.8	25.9	89.70	-1,175.6	326.9	950.9	907.0	43.94	21.643	
7,480.3	6,944.3	7,587.8	6,939.6	23.3	26.5	89.72	-1,175.6	403.4	950.9	904.1	46.83	20.307	
7,500.0	6,944.1	7,607.5	6,939.5	23.7	26.7	89.72	-1,175.6	423.1	950.9	903.3	47.58	19.985	
7,578.7	6,943.4	7,686.2	6,939.1	25.4	27.7	89.74	-1,175.6	501.9	950.9	900.1	50.80	18.717	
7,600.0	6,943.2	7,707.5	6,939.0	25.8	28.1	89.75	-1,175.6	523.1	950.9	899.2	51.68	18.398	
7,677.1	6,942.5	7,784.6	6,938.6	27.5	29.4	89.77	-1,175.6	600.3	950.9	895.9	55.04	17.277	
7,700.0	6,942.3	7,807.5	6,938.5	28.0	29.8	89.77	-1,175.6	623.1	950.9	894.9	56.04	16.968	
7,775.6	6,941.6	7,883.0	6,938.2	29.8	31.4	89.79	-1,175.6	698.7	950.9	891.4	59.49	15.985	
7,800.0	6,941.4	7,907.5	6,938.0	30.3	31.9	89.80	-1,175.6	723.1	950.9	890.3	60.61	15.689	
7,874.0	6,940.7	7,981.5	6,937.7	32.1	33.5	89.82	-1,175.6	797.1	950.9	886.8	64.12	14.831	
7,900.0	6,940.5	8,007.5	6,937.5	32.7	34.1	89.82	-1,175.6	823.1	950.9	885.5	65.35	14.550	
7,972.4	6,939.8	8,079.9	6,937.2	34.5	35.7	89.84	-1,175.6	895.6	950.9	882.0	68.88	13.805	
8,000.0	6,939.6	8,107.5	6,937.1	35.2	36.4	89.85	-1,175.6	923.1	950.9	880.7	70.23	13.541	
8,070.8	6,938.9	8,178.3	6,936.7	37.0	38.1	89.87	-1,175.6	994.0	950.9	877.1	73.75	12.894	
8,100.0	6,938.7	8,207.5	6,936.6	37.7	38.8	89.87	-1,175.6	1,023.1	950.9	875.7	75.20	12.645	
8,169.3	6,938.0	8,276.7	6,936.2	39.5	40.4	89.89	-1,175.6	1,092.4	950.9	872.2	78.71	12.082	
8,200.0	6,937.7	8,307.5	6,936.1	40.3	41.2	89.90	-1,175.6	1,123.1	950.9	870.6	80.26	11.847	
8,267.7	6,937.1	8,375.2	6,935.8	42.0	42.9	89.92	-1,175.6	1,190.8	950.9	867.2	83.74	11.356	
8,300.0	6,936.8	8,407.5	6,935.6	42.8	43.7	89.93	-1,175.6	1,223.1	950.9	865.5	85.40	11.135	
8,366.1	6,936.2	8,473.6	6,935.3	44.6	45.3	89.94	-1,175.6	1,289.3	950.9	862.1	88.83	10.705	
8,400.0	6,935.9	8,507.5	6,935.1	45.5	46.2	89.95	-1,175.6	1,323.1	950.9	860.3	90.58	10.497	
8,464.5	6,935.3	8,572.0	6,934.8	47.2	47.9	89.97	-1,175.6	1,387.7	950.9	856.9	93.96	10.120	
8,500.0	6,935.0	8,607.5	6,934.6	48.1	48.8	89.98	-1,175.6	1,423.1	950.9	855.1	95.82	9.924	
8,563.0	6,934.5	8,670.4	6,934.3	49.8	50.4	89.99	-1,175.6	1,486.1	950.9	851.7	99.15	9.591	
8,600.0	6,934.1	8,707.5	6,934.1	50.7	51.3	90.00	-1,175.6	1,523.1	950.9	849.8	101.10	9.405	
8,661.4	6,933.6	8,768.9	6,933.8	52.4	52.9	90.02	-1,175.6	1,584.5	950.9	846.5	104.36	9.111	
8,700.0	6,933.2	8,807.5	6,933.6	53.4	54.0	90.03	-1,175.6	1,623.1	950.9	844.5	106.41	8.936	
8,716.7	6,933.1	8,824.1	6,933.6	53.9	54.4	90.03	-1,175.6	1,639.8	950.9	843.6	107.30	8.862	
8,759.8	6,932.7	8,867.3	6,933.4	55.0	55.5	90.04	-1,175.6	1,682.9	950.9	841.3	109.61	8.675	
8,800.0	6,932.3	8,907.5	6,933.2	56.1	56.6	90.05	-1,175.6	1,723.1	950.9	839.1	111.76	8.509	
8,858.2	6,931.8	8,965.7	6,932.9	57.7	58.1	90.07	-1,175.6	1,781.4	950.9	836.0	114.88	8.277	
8,900.0	6,931.4	9,007.5	6,932.7	58.8	59.2	90.08	-1,175.6	1,823.1	950.9	833.8	117.13	8.118	
8,956.7	6,930.9	9,064.1	6,932.4	60.3	60.7	90.09	-1,175.6	1,879.8	950.9	830.7	120.18	7.912	
9,000.0	6,930.5	9,107.5	6,932.2	61.5	61.9	90.10	-1,175.6	1,923.1	950.9	828.4	122.52	7.761	
9,055.1	6,930.0	9,162.6	6,931.9	63.0	63.4	90.12	-1,175.6	1,978.2	950.9	825.4	125.50	7.577	
9,100.0	6,929.6	9,207.5	6,931.7	64.2	64.6	90.13	-1,175.6	2,023.1	950.9	823.0	127.93	7.433	
9,153.5	6,929.1	9,261.0	6,931.4	65.6	66.0	90.14	-1,175.6	2,076.6	950.9	820.1	130.83	7.268	
9,200.0	6,928.7	9,307.5	6,931.2	66.9	67.2	90.15	-1,175.6	2,123.1	950.9	817.5	133.36	7.130	
9,251.9	6,928.2	9,359.4	6,931.0	68.3	68.6	90.17	-1,175.6	2,175.1	950.9	814.7	136.19	6.982	
9,300.0	6,927.8	9,407.5	6,930.7	69.6	69.9	90.18	-1,175.6	2,223.1	950.9	812.1	138.80	6.851	
9,350.4	6,927.3	9,457.8	6,930.5	71.0	71.3	90.19	-1,175.6	2,273.5	950.9	809.3	141.55	6.718	
9,400.0	6,926.9	9,507.5	6,930.2	72.4	72.6	90.20	-1,175.6	2,323.1	950.9	806.6	144.26	6.592	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,448.8	6,926.4	9,556.3	6,930.0	73.7	73.9	90.21	-1,175.6	2,371.9	950.9	804.0	146.93	6.472	
9,500.0	6,926.0	9,607.5	6,929.7	75.1	75.3	90.23	-1,175.6	2,423.1	950.9	801.2	149.73	6.351	
9,547.2	6,925.5	9,654.7	6,929.5	76.4	76.6	90.24	-1,175.6	2,470.3	950.9	798.6	152.31	6.243	
9,600.0	6,925.1	9,707.5	6,929.3	77.9	78.0	90.25	-1,175.6	2,523.1	950.9	795.7	155.21	6.127	
9,645.6	6,924.6	9,753.1	6,929.0	79.1	79.3	90.26	-1,175.6	2,568.8	950.9	793.2	157.71	6.029	
9,700.0	6,924.1	9,807.5	6,928.8	80.6	80.8	90.28	-1,175.6	2,623.1	950.9	790.2	160.69	5.917	
9,744.1	6,923.7	9,851.5	6,928.6	81.8	82.0	90.29	-1,175.6	2,667.2	950.9	787.8	163.12	5.830	
9,800.0	6,923.2	9,907.5	6,928.3	83.4	83.5	90.30	-1,175.6	2,723.1	950.9	784.7	166.19	5.722	
9,842.5	6,922.9	9,950.0	6,928.1	84.5	84.7	90.31	-1,175.6	2,765.6	950.9	782.4	168.53	5.642	
9,900.0	6,922.3	10,007.5	6,927.8	86.1	86.2	90.33	-1,175.6	2,823.1	950.9	779.2	171.70	5.538	
9,940.9	6,922.0	10,048.4	6,927.6	87.2	87.4	90.34	-1,175.6	2,864.0	950.9	777.0	173.95	5.466	
10,000.0	6,921.4	10,107.5	6,927.3	88.9	89.0	90.35	-1,175.6	2,923.1	950.9	773.7	177.21	5.366	
10,039.3	6,921.1	10,146.8	6,927.1	90.0	90.0	90.36	-1,175.6	2,962.4	950.9	771.5	179.38	5.301	
10,100.0	6,920.5	10,207.5	6,926.8	91.6	91.7	90.38	-1,175.6	3,023.1	950.9	768.2	182.73	5.204	
10,137.8	6,920.2	10,245.2	6,926.6	92.7	92.7	90.39	-1,175.6	3,060.9	950.9	766.1	184.82	5.145	
10,200.0	6,919.6	10,307.5	6,926.3	94.4	94.5	90.40	-1,175.6	3,123.1	950.9	762.7	188.25	5.051	
10,236.2	6,919.3	10,343.7	6,926.2	95.4	95.5	90.41	-1,175.6	3,159.3	950.9	760.7	190.26	4.998	
10,300.0	6,918.7	10,407.5	6,925.8	97.2	97.2	90.43	-1,175.6	3,223.1	950.9	757.1	193.78	4.907	
10,334.6	6,918.4	10,442.1	6,925.7	98.1	98.2	90.44	-1,175.6	3,257.7	950.9	755.2	195.70	4.859	
10,400.0	6,917.8	10,507.5	6,925.4	99.9	100.0	90.45	-1,175.6	3,323.1	950.9	751.6	199.32	4.771	
10,433.0	6,917.5	10,540.5	6,925.2	100.9	100.9	90.46	-1,175.6	3,356.1	950.9	749.8	201.15	4.727	
10,500.0	6,916.9	10,607.5	6,924.9	102.7	102.7	90.48	-1,175.6	3,423.1	950.9	746.1	204.86	4.642	
10,531.5	6,916.6	10,638.9	6,924.7	103.6	103.6	90.49	-1,175.6	3,454.6	950.9	744.3	206.60	4.603	
10,600.0	6,916.0	10,707.4	6,924.4	105.5	105.5	90.50	-1,175.6	3,523.1	950.9	740.5	210.40	4.520	
10,629.9	6,915.7	10,737.3	6,924.2	106.3	106.3	90.51	-1,175.6	3,553.0	950.9	738.9	212.06	4.484	
10,700.0	6,915.1	10,807.4	6,923.9	108.3	108.2	90.53	-1,175.6	3,623.1	950.9	735.0	215.95	4.403	
10,728.3	6,914.8	10,835.8	6,923.8	109.1	109.0	90.54	-1,175.6	3,651.4	950.9	733.4	217.52	4.372	
10,800.0	6,914.2	10,907.4	6,923.4	111.0	111.0	90.56	-1,175.6	3,723.1	950.9	729.4	221.50	4.293	
10,826.7	6,913.9	10,934.2	6,923.3	111.8	111.7	90.56	-1,175.6	3,749.8	950.9	727.9	222.99	4.265	
10,900.0	6,913.3	11,007.4	6,922.9	113.8	113.8	90.58	-1,175.6	3,823.1	950.9	723.9	227.05	4.188	
10,925.2	6,913.1	11,032.6	6,922.8	114.5	114.5	90.59	-1,175.6	3,848.3	950.9	722.5	228.45	4.162	
11,000.0	6,912.4	11,107.4	6,922.4	116.6	116.5	90.61	-1,175.6	3,923.1	950.9	718.3	232.61	4.088	
11,023.6	6,912.2	11,131.0	6,922.3	117.3	117.2	90.61	-1,175.6	3,946.7	950.9	717.0	233.92	4.065	
11,100.0	6,911.5	11,207.4	6,921.9	119.4	119.3	90.63	-1,175.6	4,023.1	950.9	712.8	238.17	3.993	
11,122.0	6,911.3	11,229.5	6,921.8	120.0	119.9	90.64	-1,175.6	4,045.1	950.9	711.5	239.40	3.972	
11,200.0	6,910.6	11,307.4	6,921.5	122.2	122.1	90.66	-1,175.6	4,123.1	950.9	707.2	243.73	3.902	
11,220.4	6,910.4	11,327.9	6,921.4	122.7	122.6	90.66	-1,175.6	4,143.5	950.9	706.1	244.87	3.883	
11,300.0	6,909.7	11,407.4	6,921.0	125.0	124.8	90.68	-1,175.6	4,223.1	950.9	701.6	249.30	3.814	
11,318.9	6,909.5	11,426.3	6,920.9	125.5	125.4	90.69	-1,175.6	4,241.9	950.9	700.6	250.35	3.798	
11,400.0	6,908.8	11,507.4	6,920.5	127.7	127.6	90.71	-1,175.6	4,323.1	951.0	696.1	254.87	3.731	
11,417.3	6,908.6	11,524.7	6,920.4	128.2	128.1	90.71	-1,175.6	4,340.4	951.0	695.1	255.83	3.717	
11,500.0	6,907.9	11,607.4	6,920.0	130.5	130.4	90.73	-1,175.6	4,423.1	951.0	690.5	260.43	3.651	
11,515.7	6,907.7	11,623.2	6,919.9	131.0	130.8	90.74	-1,175.6	4,438.8	951.0	689.6	261.31	3.639	
11,600.0	6,907.0	11,707.4	6,919.5	133.3	133.2	90.76	-1,175.6	4,523.1	951.0	685.0	266.01	3.575	
11,614.1	6,906.8	11,721.6	6,919.4	133.7	133.6	90.76	-1,175.6	4,537.2	951.0	684.2	266.79	3.564	
11,700.0	6,906.0	11,807.4	6,919.0	136.1	135.9	90.78	-1,175.6	4,623.1	951.0	679.4	271.58	3.502	
11,712.6	6,905.9	11,820.0	6,919.0	136.5	136.3	90.79	-1,175.6	4,635.6	951.0	678.7	272.28	3.493	
11,800.0	6,905.1	11,907.4	6,918.5	138.9	138.7	90.81	-1,175.6	4,723.1	951.0	673.8	277.15	3.431	
11,811.0	6,905.0	11,918.4	6,918.5	139.2	139.0	90.81	-1,175.6	4,734.1	951.0	673.2	277.77	3.424	
11,900.0	6,904.2	12,007.4	6,918.1	141.7	141.5	90.83	-1,175.6	4,823.1	951.0	668.2	282.73	3.364	
11,909.4	6,904.2	12,016.9	6,918.0	141.9	141.8	90.83	-1,175.6	4,832.5	951.0	667.7	283.25	3.357	
12,000.0	6,903.3	12,107.4	6,917.6	144.5	144.3	90.86	-1,175.6	4,923.1	951.0	662.7	288.31	3.299	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,007.8	6,903.3	12,115.3	6,917.5	144.7	144.5	90.86	-1,175.6	4,930.9	951.0	662.2	288.74	3.294	
12,100.0	6,902.4	12,207.4	6,917.1	147.3	147.1	90.88	-1,175.6	5,023.1	951.0	657.1	293.89	3.236	
12,106.3	6,902.4	12,213.7	6,917.0	147.4	147.3	90.88	-1,175.6	5,029.3	951.0	656.8	294.24	3.232	
12,200.0	6,901.5	12,307.4	6,916.6	150.1	149.9	90.91	-1,175.6	5,123.1	951.0	651.5	299.47	3.176	
12,204.7	6,901.5	12,312.1	6,916.6	150.2	150.0	90.91	-1,175.6	5,127.8	951.0	651.3	299.73	3.173	
12,300.0	6,900.6	12,407.4	6,916.1	152.9	152.6	90.93	-1,175.6	5,223.1	951.0	646.0	305.05	3.118	
12,303.1	6,900.6	12,410.6	6,916.1	152.9	152.7	90.93	-1,175.6	5,226.2	951.0	645.8	305.22	3.116	
12,400.0	6,899.7	12,507.4	6,915.6	155.6	155.4	90.96	-1,175.6	5,323.1	951.0	640.4	310.63	3.062	
12,401.5	6,899.7	12,509.0	6,915.6	155.7	155.5	90.96	-1,175.6	5,324.6	951.0	640.3	310.72	3.061	
12,500.0	6,898.8	12,607.4	6,915.1	158.4	158.2	90.98	-1,175.6	5,423.0	951.0	634.8	316.21	3.007	
12,598.4	6,897.9	12,705.8	6,914.7	161.2	161.0	91.01	-1,175.6	5,521.4	951.0	629.3	321.71	2.956	
12,600.0	6,897.9	12,707.4	6,914.6	161.2	161.0	91.01	-1,175.6	5,523.0	951.0	629.2	321.80	2.955	
12,696.8	6,897.0	12,804.3	6,914.2	163.9	163.7	91.03	-1,175.6	5,619.9	951.0	623.8	327.21	2.906	
12,700.0	6,897.0	12,807.4	6,914.2	164.0	163.8	91.03	-1,175.6	5,623.0	951.0	623.6	327.38	2.905	
12,795.2	6,896.1	12,902.7	6,913.7	166.7	166.5	91.06	-1,175.6	5,718.3	951.0	618.3	332.71	2.858	
12,800.0	6,896.1	12,907.4	6,913.7	166.8	166.6	91.06	-1,175.6	5,723.0	951.0	618.1	332.97	2.856	
12,893.7	6,895.3	13,001.1	6,913.2	169.4	169.2	91.08	-1,175.6	5,816.7	951.0	612.8	338.20	2.812	
12,900.0	6,895.2	13,007.4	6,913.2	169.6	169.4	91.08	-1,175.6	5,823.0	951.0	612.5	338.56	2.809	
12,992.1	6,894.4	13,099.5	6,912.7	172.2	171.9	91.11	-1,175.6	5,915.1	951.0	607.3	343.70	2.767	
13,000.0	6,894.3	13,107.4	6,912.7	172.4	172.2	91.11	-1,175.6	5,923.0	951.0	606.9	344.15	2.763	
13,090.5	6,893.5	13,198.0	6,912.3	175.0	174.7	91.13	-1,175.6	6,013.6	951.1	601.8	349.21	2.723	
13,100.0	6,893.4	13,207.4	6,912.2	175.2	175.0	91.13	-1,175.6	6,023.0	951.1	601.3	349.74	2.719	
13,188.9	6,892.6	13,296.4	6,911.8	177.7	177.4	91.16	-1,175.6	6,112.0	951.1	596.4	354.71	2.681	
13,200.0	6,892.5	13,307.4	6,911.7	178.0	177.7	91.16	-1,175.6	6,123.0	951.1	595.7	355.33	2.677	
13,287.4	6,891.7	13,394.8	6,911.3	180.5	180.2	91.18	-1,175.6	6,210.4	951.1	590.9	360.21	2.640	
13,300.0	6,891.6	13,407.4	6,911.2	180.8	180.5	91.18	-1,175.6	6,223.0	951.1	590.2	360.92	2.635	
13,385.8	6,890.8	13,493.2	6,910.8	183.2	182.9	91.21	-1,175.6	6,308.8	951.1	585.4	365.71	2.601	
13,400.0	6,890.7	13,507.4	6,910.8	183.6	183.3	91.21	-1,175.6	6,323.0	951.1	584.6	366.51	2.595	
13,484.2	6,889.9	13,591.7	6,910.4	186.0	185.7	91.23	-1,175.6	6,407.3	951.1	579.9	371.22	2.562	
13,500.0	6,889.8	13,607.4	6,910.3	186.4	186.1	91.23	-1,175.6	6,423.0	951.1	579.0	372.10	2.556	
13,582.6	6,889.0	13,690.1	6,909.9	188.7	188.4	91.26	-1,175.6	6,505.7	951.1	574.4	376.72	2.525	
13,600.0	6,888.9	13,707.4	6,909.8	189.2	188.9	91.26	-1,175.6	6,523.0	951.1	573.4	377.69	2.518	
13,681.1	6,888.1	13,788.5	6,909.4	191.5	191.2	91.28	-1,175.6	6,604.1	951.1	568.9	382.22	2.488	
13,700.0	6,888.0	13,807.4	6,909.3	192.0	191.7	91.28	-1,175.6	6,623.0	951.1	567.8	383.28	2.481	
13,779.5	6,887.3	13,886.9	6,908.9	194.2	193.9	91.30	-1,175.6	6,702.5	951.1	563.4	387.73	2.453	
13,800.0	6,887.1	13,907.4	6,908.8	194.8	194.5	91.31	-1,175.6	6,723.0	951.1	562.2	388.88	2.446	
13,877.9	6,886.4	13,985.3	6,908.4	197.0	196.7	91.33	-1,175.6	6,800.9	951.1	557.9	393.23	2.419	
13,900.0	6,886.2	14,007.4	6,908.3	197.6	197.3	91.34	-1,175.6	6,823.0	951.1	556.6	394.47	2.411	
13,976.3	6,885.5	14,083.8	6,908.0	199.7	199.4	91.35	-1,175.6	6,899.4	951.1	552.4	398.74	2.385	
14,000.0	6,885.3	14,107.4	6,907.8	200.4	200.1	91.36	-1,175.6	6,923.0	951.1	551.1	400.06	2.377	
14,074.8	6,884.6	14,182.2	6,907.5	202.5	202.2	91.38	-1,175.6	6,997.8	951.1	546.9	404.25	2.353	
14,100.0	6,884.4	14,207.4	6,907.4	203.2	202.9	91.39	-1,175.6	7,023.0	951.1	545.5	405.66	2.345	
14,173.2	6,883.7	14,280.6	6,907.0	205.3	204.9	91.40	-1,175.6	7,096.2	951.1	541.4	409.75	2.321	
14,200.0	6,883.5	14,307.4	6,906.9	206.0	205.7	91.41	-1,175.6	7,123.0	951.1	539.9	411.25	2.313	
14,271.6	6,882.8	14,379.0	6,906.5	208.0	207.7	91.43	-1,175.6	7,194.6	951.1	535.9	415.26	2.290	
14,300.0	6,882.6	14,407.4	6,906.4	208.8	208.5	91.44	-1,175.6	7,223.0	951.2	534.3	416.85	2.282	
14,370.0	6,881.9	14,477.5	6,906.1	210.8	210.4	91.45	-1,175.6	7,293.1	951.2	530.4	420.77	2.261	
14,400.0	6,881.7	14,507.4	6,905.9	211.6	211.3	91.46	-1,175.6	7,323.0	951.2	528.7	422.44	2.252	
14,468.5	6,881.0	14,575.9	6,905.6	213.5	213.2	91.48	-1,175.6	7,391.5	951.2	524.9	426.27	2.231	
14,500.0	6,880.8	14,607.4	6,905.4	214.4	214.1	91.49	-1,175.6	7,423.0	951.2	523.1	428.04	2.222	
14,566.9	6,880.2	14,674.3	6,905.1	216.3	216.0	91.50	-1,175.6	7,489.9	951.2	519.4	431.78	2.203	
14,584.2	6,880.0	14,691.6	6,905.0	216.8	216.4	91.51	-1,175.6	7,507.2	951.2	518.4	432.75	2.198 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	86.43	505.9	8,112.6	8,128.4				
98.4	98.4	68.4	68.4	0.1	0.4	86.43	505.9	8,112.6	8,128.4	8,127.8	0.53	N/A	
100.0	100.0	70.0	70.0	0.1	0.5	86.43	505.9	8,112.6	8,128.4	8,127.8	0.54	N/A	
196.8	196.8	166.8	166.8	0.3	2.3	86.43	505.9	8,112.6	8,128.4	8,125.8	2.58	3,149.763	
200.0	200.0	170.0	170.0	0.3	2.4	86.43	505.9	8,112.6	8,128.4	8,125.7	2.66	3,050.921	
295.3	295.3	265.3	265.3	0.5	4.4	86.43	505.9	8,112.6	8,128.4	8,123.4	4.97	1,636.894	
300.0	300.0	270.0	270.0	0.5	4.5	86.43	505.9	8,112.6	8,128.4	8,123.3	5.07	1,601.748	
393.7	393.7	363.7	363.7	0.7	6.5	86.43	505.9	8,112.6	8,128.4	8,121.1	7.21	1,127.366	
400.0	400.0	370.0	370.0	0.8	6.6	86.43	505.9	8,112.6	8,128.4	8,121.0	7.35	1,105.476	
492.1	492.1	462.1	462.1	1.0	8.5	86.43	505.9	8,112.6	8,128.4	8,118.9	9.43	861.764	
500.0	500.0	470.0	470.0	1.0	8.6	86.43	505.9	8,112.6	8,128.4	8,118.7	9.61	845.854	
590.5	590.5	560.5	560.5	1.2	10.5	86.43	505.9	8,112.6	8,128.4	8,116.7	11.65	697.962	
600.0	600.0	570.0	570.0	1.2	10.6	86.43	505.9	8,112.6	8,128.4	8,116.5	11.86	685.465	
689.0	689.0	659.0	659.0	1.4	12.4	86.43	505.9	8,112.6	8,128.4	8,114.5	13.86	586.666	
700.0	700.0	670.0	670.0	1.4	12.7	86.43	505.9	8,112.6	8,128.4	8,114.2	14.10	576.377	
787.4	787.4	757.4	757.4	1.6	14.4	86.43	505.9	8,112.6	8,128.4	8,112.3	16.06	506.060	
800.0	800.0	770.0	770.0	1.7	14.7	86.43	505.9	8,112.6	8,128.4	8,112.0	16.34	497.316	
885.8	885.8	855.8	855.8	1.9	16.4	86.43	505.9	8,112.6	8,128.4	8,110.1	18.27	444.967	
900.0	900.0	870.0	870.0	1.9	16.7	86.43	505.9	8,112.6	8,128.4	8,109.8	18.58	437.365	
984.2	984.2	954.2	954.2	2.1	18.4	86.43	505.9	8,112.6	8,128.4	8,107.9	20.47	397.056	
1,000.0	1,000.0	970.0	970.0	2.1	18.7	86.43	505.9	8,112.6	8,128.4	8,107.5	20.82	390.332	
1,082.7	1,082.7	1,052.7	1,052.7	2.3	20.4	86.43	505.9	8,112.6	8,128.4	8,105.7	22.68	358.471	
1,100.0	1,100.0	1,070.0	1,070.0	2.3	20.7	86.43	505.9	8,112.6	8,128.4	8,105.3	23.06	352.443	
1,181.1	1,181.1	1,151.1	1,151.1	2.5	22.4	86.43	505.9	8,112.6	8,128.4	8,103.5	24.88	326.728	
1,200.0	1,200.0	1,170.0	1,170.0	2.6	22.7	86.43	505.9	8,112.6	8,128.4	8,103.1	25.30	321.266	
1,279.5	1,279.5	1,249.5	1,249.5	2.7	24.3	86.43	505.9	8,112.6	8,128.4	8,101.3	27.08	300.154	
1,300.0	1,300.0	1,270.0	1,270.0	2.8	24.8	86.43	505.9	8,112.6	8,128.4	8,100.8	27.54	295.160	
1,377.9	1,377.9	1,347.9	1,347.9	3.0	26.3	86.43	505.9	8,112.6	8,128.4	8,099.1	29.28	277.580	
1,400.0	1,400.0	1,370.0	1,370.0	3.0	26.8	86.43	505.9	8,112.6	8,128.4	8,098.6	29.78	272.981	
1,476.4	1,476.4	1,446.4	1,446.4	3.2	28.3	86.43	505.9	8,112.6	8,128.4	8,096.9	31.48	258.167	
1,500.0	1,500.0	1,470.0	1,470.0	3.2	28.8	86.43	505.9	8,112.6	8,128.4	8,096.3	32.01	253.905	
1,574.8	1,574.8	1,544.8	1,544.8	3.4	30.3	86.43	505.9	8,112.6	8,128.4	8,094.7	33.69	241.293	
1,600.0	1,600.0	1,570.0	1,570.0	3.5	30.8	86.43	505.9	8,112.6	8,128.4	8,094.1	34.25	237.321	
1,650.0	1,650.0	1,620.0	1,620.0	3.6	31.8	86.43	505.9	8,112.6	8,128.4	8,093.0	35.37	229.817	
1,673.2	1,673.2	1,643.2	1,643.2	3.6	32.3	-153.98	505.9	8,112.6	8,128.4	8,092.6	35.88	226.530	
1,700.0	1,700.0	1,670.0	1,670.0	3.7	32.8	-153.98	505.9	8,112.6	8,128.7	8,092.3	36.47	222.877	
1,771.6	1,771.6	1,741.6	1,741.6	3.8	34.2	-153.97	505.9	8,112.6	8,130.7	8,092.7	38.02	213.842	
1,800.0	1,799.9	1,769.9	1,769.9	3.9	34.8	-153.97	505.9	8,112.6	8,131.9	8,093.3	38.63	210.513	
1,870.1	1,869.9	1,839.9	1,839.9	4.0	36.2	-153.94	505.9	8,112.6	8,135.9	8,095.8	40.12	202.809	
1,900.0	1,899.7	1,869.7	1,869.7	4.1	36.8	-153.93	505.9	8,112.6	8,138.1	8,097.4	40.74	199.742	
1,968.5	1,967.8	1,937.8	1,937.8	4.2	38.2	-153.90	505.9	8,112.6	8,144.3	8,102.1	42.16	193.153	
2,000.0	1,999.1	1,969.1	1,969.1	4.3	38.8	-153.88	505.9	8,112.6	8,147.5	8,104.7	42.81	190.325	
2,066.9	2,065.5	2,035.5	2,035.5	4.4	40.2	-153.84	505.9	8,112.6	8,155.6	8,111.4	44.16	184.676	
2,100.0	2,098.2	2,068.2	2,068.2	4.5	40.8	-153.81	505.9	8,112.6	8,160.1	8,115.2	44.82	182.069	
2,165.3	2,162.6	2,132.6	2,132.6	4.7	42.1	-153.76	505.9	8,112.6	8,169.9	8,123.8	46.10	177.216	
2,200.0	2,196.6	2,166.6	2,166.6	4.7	42.8	-153.73	505.9	8,112.6	8,175.7	8,128.9	46.77	174.811	
2,249.9	2,245.5	2,215.5	2,215.5	4.9	43.8	-153.68	505.9	8,112.6	8,184.6	8,136.9	47.72	171.523	
2,263.8	2,259.1	2,229.1	2,229.1	4.9	44.1	-153.69	505.9	8,112.6	8,187.2	8,139.2	48.02	170.504	
2,300.0	2,294.5	2,264.5	2,264.5	5.0	44.8	-153.71	505.9	8,112.6	8,194.0	8,145.2	48.80	167.908	
2,362.2	2,355.4	2,325.4	2,325.4	5.2	46.0	-153.75	505.9	8,112.6	8,205.7	8,155.5	50.15	163.622	
2,400.0	2,392.3	2,362.3	2,362.3	5.4	46.7	-153.77	505.9	8,112.6	8,212.7	8,161.8	50.97	161.133	
2,460.6	2,451.6	2,421.6	2,421.6	5.6	47.9	-153.81	505.9	8,112.6	8,224.1	8,171.8	52.29	157.289	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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
2,500.0	2,490.2	2,460.2	2,460.2	5.7	48.7	-153.84	505.9	8,112.6	8,231.5	8,178.3	53.15	154.886	
2,559.0	2,547.9	2,517.9	2,517.9	5.9	49.9	-153.87	505.9	8,112.6	8,242.5	8,188.1	54.43	151.421	
2,600.0	2,588.0	2,558.0	2,558.0	6.1	50.7	-153.90	505.9	8,112.6	8,250.2	8,194.9	55.33	149.111	
2,657.5	2,644.2	2,614.2	2,614.2	6.3	51.8	-153.94	505.9	8,112.6	8,261.0	8,204.4	56.59	145.984	
2,700.0	2,685.8	2,655.8	2,655.8	6.4	52.6	-153.96	505.9	8,112.6	8,269.0	8,211.4	57.52	143.758	
2,755.9	2,740.5	2,710.5	2,710.5	6.6	53.7	-154.00	505.9	8,112.6	8,279.4	8,220.7	58.75	140.933	
2,800.0	2,783.6	2,753.6	2,753.6	6.8	54.6	-154.03	505.9	8,112.6	8,287.7	8,228.0	59.72	138.786	
2,854.3	2,836.7	2,806.7	2,806.7	7.0	55.7	-154.06	505.9	8,112.6	8,297.9	8,237.0	60.91	136.230	
2,900.0	2,881.4	2,851.4	2,851.4	7.2	56.6	-154.09	505.9	8,112.6	8,306.5	8,244.6	61.92	134.157	
2,952.7	2,933.0	2,903.0	2,903.0	7.4	57.6	-154.12	505.9	8,112.6	8,316.4	8,253.3	63.08	131.840	
3,000.0	2,979.2	2,949.2	2,949.2	7.6	58.5	-154.15	505.9	8,112.6	8,325.3	8,261.1	64.12	129.837	
3,051.2	3,029.3	2,999.3	2,999.3	7.8	59.5	-154.18	505.9	8,112.6	8,334.9	8,269.6	65.25	127.735	
3,100.0	3,077.1	3,047.1	3,047.1	8.0	60.5	-154.21	505.9	8,112.6	8,344.1	8,277.7	66.33	125.797	
3,149.6	3,125.6	3,095.6	3,095.6	8.2	61.5	-154.24	505.9	8,112.6	8,353.4	8,286.0	67.43	123.889	
3,200.0	3,174.9	3,144.9	3,144.9	8.4	62.5	-154.27	505.9	8,112.6	8,362.9	8,294.3	68.54	122.013	
3,248.0	3,221.8	3,191.8	3,191.8	8.6	63.4	-154.30	505.9	8,112.6	8,371.9	8,302.3	69.60	120.278	
3,300.0	3,272.7	3,242.7	3,242.7	8.9	64.4	-154.34	505.9	8,112.6	8,381.7	8,310.9	70.75	118.461	
3,346.4	3,318.1	3,288.1	3,288.1	9.0	65.4	-154.36	505.9	8,112.6	8,390.4	8,318.6	71.78	116.883	
3,400.0	3,370.5	3,340.5	3,340.5	9.3	66.4	-154.40	505.9	8,112.6	8,400.5	8,327.5	72.97	115.120	
3,444.9	3,414.4	3,384.4	3,384.4	9.5	67.3	-154.42	505.9	8,112.6	8,408.9	8,335.0	73.97	113.685	
3,500.0	3,468.3	3,438.3	3,438.3	9.7	68.4	-154.46	505.9	8,112.6	8,419.3	8,344.1	75.19	111.974	
3,543.3	3,510.7	3,480.7	3,480.7	9.9	69.2	-154.48	505.9	8,112.6	8,427.5	8,351.3	76.15	110.668	
3,600.0	3,566.1	3,536.1	3,536.1	10.1	70.3	-154.52	505.9	8,112.6	8,438.1	8,360.7	77.41	109.006	
3,641.7	3,606.9	3,576.9	3,576.9	10.3	71.2	-154.54	505.9	8,112.6	8,446.0	8,367.7	78.34	107.816	
3,700.0	3,664.0	3,634.0	3,634.0	10.6	72.3	-154.58	505.9	8,112.6	8,457.0	8,377.4	79.63	106.201	
3,740.1	3,703.2	3,673.2	3,673.2	10.7	73.1	-154.60	505.9	8,112.6	8,464.6	8,384.0	80.52	105.118	
3,800.0	3,761.8	3,731.8	3,731.8	11.0	74.3	-154.64	505.9	8,112.6	8,475.8	8,394.0	81.85	103.547	
3,837.4	3,798.3	3,768.3	3,768.3	11.2	75.0	-154.66	505.9	8,112.6	8,482.9	8,400.2	82.69	102.592	
3,838.6	3,799.5	3,769.5	3,769.5	11.2	75.0	-154.66	505.9	8,112.6	8,483.1	8,400.4	82.72	102.555	
3,900.0	3,859.7	3,829.7	3,829.7	11.4	76.2	-154.79	505.9	8,112.6	8,494.1	8,409.8	84.34	100.716	
3,937.0	3,896.1	3,866.1	3,866.1	11.5	77.0	-154.87	505.9	8,112.6	8,500.1	8,414.8	85.29	99.658	
4,000.0	3,958.3	3,928.3	3,928.3	11.7	78.2	-154.97	505.9	8,112.6	8,509.5	8,422.5	86.91	97.915	
4,035.4	3,993.3	3,963.3	3,963.3	11.8	78.9	-155.03	505.9	8,112.6	8,514.1	8,426.3	87.80	96.972	
4,100.0	4,057.4	4,027.4	4,027.4	12.0	80.2	-155.12	505.9	8,112.6	8,521.7	8,432.3	89.41	95.309	
4,133.8	4,091.0	4,061.0	4,061.0	12.1	80.9	-155.16	505.9	8,112.6	8,525.1	8,434.9	90.24	94.470	
4,200.0	4,156.8	4,126.8	4,126.8	12.2	82.2	-155.22	505.9	8,112.6	8,530.8	8,438.9	91.84	92.886	
4,232.3	4,189.0	4,159.0	4,159.0	12.3	82.9	-155.25	505.9	8,112.6	8,533.0	8,440.4	92.61	92.143	
4,300.0	4,256.6	4,226.6	4,226.6	12.4	84.2	-155.29	505.9	8,112.6	8,536.7	8,442.5	94.19	90.637	
4,330.7	4,287.3	4,257.3	4,257.3	12.5	84.8	-155.30	505.9	8,112.6	8,537.9	8,443.0	94.89	89.980	
4,400.0	4,356.6	4,326.6	4,326.6	12.6	86.2	-155.32	505.9	8,112.6	8,539.5	8,443.0	96.44	88.550	
4,429.1	4,385.7	4,355.7	4,355.7	12.6	86.8	-155.32	505.9	8,112.6	8,539.7	8,442.6	97.07	87.972	
4,437.2	4,393.8	4,363.8	4,363.8	12.7	87.0	85.09	505.9	8,112.6	8,539.7	8,440.5	99.17	86.110	
4,500.0	4,456.6	4,426.6	4,426.6	12.7	88.2	85.09	505.9	8,112.6	8,539.7	8,439.2	100.53	84.945	
4,527.5	4,484.1	4,454.1	4,454.1	12.8	88.8	85.09	505.9	8,112.6	8,539.7	8,438.6	101.13	84.441	
4,600.0	4,556.6	4,526.6	4,526.6	12.9	90.3	85.09	505.9	8,112.6	8,539.7	8,437.0	102.71	83.145	
4,626.0	4,582.6	4,552.6	4,552.6	12.9	90.8	85.09	505.9	8,112.6	8,539.7	8,436.4	103.27	82.690	
4,700.0	4,656.6	4,626.6	4,626.6	13.1	92.3	85.09	505.9	8,112.6	8,539.7	8,434.8	104.89	81.419	
4,724.4	4,681.0	4,651.0	4,651.0	13.1	92.8	85.09	505.9	8,112.6	8,539.7	8,434.3	105.42	81.008	
4,800.0	4,756.6	4,726.6	4,726.6	13.2	94.3	85.09	505.9	8,112.6	8,539.7	8,432.6	107.07	79.761	
4,822.8	4,779.4	4,749.4	4,749.4	13.3	94.7	85.09	505.9	8,112.6	8,539.7	8,432.1	107.56	79.392	
4,900.0	4,856.6	4,826.6	4,826.6	13.4	96.3	85.09	505.9	8,112.6	8,539.7	8,430.5	109.25	78.169	
4,921.2	4,877.8	4,847.8	4,847.8	13.4	96.7	85.09	505.9	8,112.6	8,539.7	8,430.0	109.71	77.838	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,926.6	4,926.6	13.6	98.3	85.09	505.9	8,112.6	8,539.7	8,428.3	111.43	76.638	
5,019.7	4,976.3	4,946.3	4,946.3	13.6	98.7	85.09	505.9	8,112.6	8,539.7	8,427.8	111.86	76.343	
5,100.0	5,056.6	5,026.6	5,026.6	13.7	100.3	85.09	505.9	8,112.6	8,539.7	8,426.1	113.61	75.164	
5,118.1	5,074.7	5,044.7	5,044.7	13.8	100.7	85.09	505.9	8,112.6	8,539.7	8,425.7	114.01	74.903	
5,200.0	5,156.6	5,126.6	5,126.6	13.9	102.3	85.09	505.9	8,112.6	8,539.7	8,423.9	115.80	73.745	
5,216.5	5,173.1	5,143.1	5,143.1	13.9	102.7	85.09	505.9	8,112.6	8,539.7	8,423.5	116.16	73.516	
5,300.0	5,256.6	5,226.6	5,226.6	14.1	104.3	85.09	505.9	8,112.6	8,539.7	8,421.7	117.99	72.378	
5,314.9	5,271.5	5,241.5	5,241.5	14.1	104.6	85.09	505.9	8,112.6	8,539.7	8,421.4	118.31	72.178	
5,400.0	5,356.6	5,326.6	5,326.6	14.2	106.3	85.09	505.9	8,112.6	8,539.7	8,419.5	120.18	71.060	
5,413.4	5,370.0	5,340.0	5,340.0	14.3	106.6	85.09	505.9	8,112.6	8,539.7	8,419.2	120.47	70.887	
5,500.0	5,456.6	5,426.6	5,426.6	14.4	108.4	85.09	505.9	8,112.6	8,539.7	8,417.3	122.37	69.788	
5,511.8	5,468.4	5,438.4	5,438.4	14.4	108.6	85.09	505.9	8,112.6	8,539.7	8,417.1	122.63	69.641	
5,600.0	5,556.6	5,526.6	5,526.6	14.6	110.4	85.09	505.9	8,112.6	8,539.7	8,415.1	124.56	68.560	
5,610.2	5,566.8	5,536.8	5,536.8	14.6	110.6	85.09	505.9	8,112.6	8,539.7	8,414.9	124.78	68.437	
5,700.0	5,656.6	5,626.6	5,626.6	14.8	112.4	85.09	505.9	8,112.6	8,539.7	8,413.0	126.75	67.374	
5,708.6	5,665.2	5,635.2	5,635.2	14.8	112.6	85.09	505.9	8,112.6	8,539.7	8,412.8	126.94	67.273	
5,800.0	5,756.6	5,726.6	5,726.6	14.9	114.4	85.09	505.9	8,112.6	8,539.7	8,410.8	128.94	66.228	
5,807.1	5,763.7	5,733.7	5,733.7	14.9	114.5	85.09	505.9	8,112.6	8,539.7	8,410.6	129.10	66.148	
5,900.0	5,856.6	5,826.6	5,826.6	15.1	116.4	85.09	505.9	8,112.6	8,539.7	8,408.6	131.14	65.119	
5,905.5	5,862.1	5,832.1	5,832.1	15.1	116.5	85.09	505.9	8,112.6	8,539.7	8,408.4	131.26	65.059	
6,000.0	5,956.6	5,926.6	5,926.6	15.3	118.4	85.09	505.9	8,112.6	8,539.7	8,406.4	133.34	64.046	
6,003.9	5,960.5	5,930.5	5,930.5	15.3	118.5	85.09	505.9	8,112.6	8,539.7	8,406.3	133.42	64.005	
6,100.0	6,056.6	6,026.6	6,026.6	15.5	120.4	85.09	505.9	8,112.6	8,539.7	8,404.2	135.53	63.008	
6,102.3	6,058.9	6,028.9	6,028.9	15.5	120.5	85.09	505.9	8,112.6	8,539.7	8,404.1	135.59	62.984	
6,200.0	6,156.6	6,126.6	6,126.6	15.7	122.4	85.09	505.9	8,112.6	8,539.7	8,402.0	137.73	62.002	
6,200.8	6,157.4	6,127.4	6,127.4	15.7	122.5	85.09	505.9	8,112.6	8,539.7	8,402.0	137.75	61.995	
6,272.2	6,228.8	6,198.8	6,198.8	15.8	123.9	85.09	505.9	8,112.6	8,539.7	8,400.4	139.32	61.296	
6,299.2	6,255.8	6,225.8	6,225.8	15.8	124.4	-4.91	505.9	8,112.6	8,539.2	8,401.0	138.24	61.770	
6,300.0	6,256.6	6,226.6	6,226.6	15.8	124.4	-4.91	505.9	8,112.6	8,539.2	8,400.9	138.25	61.765	
6,350.0	6,306.4	6,276.4	6,276.4	15.9	125.4	-4.94	505.9	8,112.6	8,535.5	8,396.9	138.59	61.587	
6,397.6	6,353.6	6,323.6	6,323.6	15.9	126.4	-4.99	505.9	8,112.6	8,528.8	8,390.5	138.28	61.678	
6,400.0	6,355.9	6,325.9	6,325.9	15.9	126.4	-4.99	505.9	8,112.6	8,528.4	8,390.1	138.25	61.689	
6,450.0	6,404.8	6,374.8	6,374.8	15.9	127.4	-5.08	505.9	8,112.6	8,517.8	8,380.6	137.21	62.078	
6,496.0	6,449.0	6,419.0	6,419.0	16.0	128.3	-5.18	505.9	8,112.6	8,505.1	8,369.5	135.64	62.703	
6,500.0	6,452.8	6,422.8	6,422.8	16.0	128.4	-5.19	505.9	8,112.6	8,503.9	8,368.4	135.48	62.769	
6,550.0	6,499.7	6,469.7	6,469.7	15.9	129.3	-5.33	505.9	8,112.6	8,486.7	8,353.7	133.05	63.787	
6,594.5	6,540.3	6,510.3	6,510.3	15.9	130.2	-5.49	505.9	8,112.6	8,468.7	8,338.4	130.30	64.992	
6,600.0	6,545.3	6,515.3	6,515.3	15.9	130.3	-5.52	505.9	8,112.6	8,466.3	8,336.3	129.92	65.163	
6,650.0	6,589.3	6,559.3	6,559.3	15.9	131.1	-5.74	505.9	8,112.6	8,442.7	8,316.6	126.12	66.940	
6,692.9	6,625.7	6,595.7	6,595.7	15.9	131.9	-5.97	505.9	8,112.6	8,420.1	8,297.8	122.34	68.825	
6,700.0	6,631.6	6,601.6	6,601.6	15.9	132.0	-6.02	505.9	8,112.6	8,416.2	8,294.5	121.67	69.172	
6,750.0	6,671.9	6,641.9	6,641.9	15.9	132.8	-6.35	505.9	8,112.6	8,386.7	8,270.1	116.59	71.933	
6,791.3	6,703.6	6,673.6	6,673.6	15.9	133.4	-6.68	505.9	8,112.6	8,360.3	8,248.4	111.96	74.676	
6,800.0	6,710.1	6,680.1	6,680.1	15.9	133.6	-6.76	505.9	8,112.6	8,354.6	8,243.6	110.93	75.311	
6,850.0	6,745.9	6,715.9	6,715.9	16.0	134.3	-7.26	505.9	8,112.6	8,319.8	8,215.1	104.76	79.418	
6,889.7	6,772.6	6,742.6	6,742.6	16.1	134.8	-7.74	505.9	8,112.6	8,290.5	8,191.0	99.54	83.291	
6,900.0	6,779.2	6,749.2	6,749.2	16.1	135.0	-7.88	505.9	8,112.6	8,282.7	8,184.6	98.15	84.387	
6,950.0	6,809.8	6,779.8	6,779.8	16.3	135.6	-8.65	505.9	8,112.6	8,243.4	8,152.1	91.23	90.353	
6,988.2	6,831.3	6,801.3	6,801.3	16.4	136.0	-9.38	505.9	8,112.6	8,211.9	8,126.1	85.86	95.642	
7,000.0	6,837.6	6,807.6	6,807.6	16.5	136.1	-9.64	505.9	8,112.6	8,202.0	8,117.8	84.20	97.411	
7,050.0	6,862.5	6,832.5	6,832.5	16.9	136.6	-10.92	505.9	8,112.6	8,158.8	8,081.4	77.36	105.462	
7,086.6	6,878.7	6,848.7	6,848.7	17.2	137.0	-12.12	505.9	8,112.6	8,126.1	8,053.3	72.79	111.636	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,854.2	6,854.2	17.3	137.1	-12.64	505.9	8,112.6	8,113.9	8,042.6	71.28	113.830	
7,150.0	6,902.7	6,872.7	6,872.7	17.8	137.4	-15.04	505.9	8,112.6	8,067.7	8,000.7	67.01	120.399	
7,185.0	6,913.8	6,883.8	6,883.8	18.3	137.7	-17.37	505.9	8,112.6	8,034.6	7,968.5	66.10	121.556	
7,200.0	6,918.0	6,888.0	6,888.0	18.5	137.7	-18.59	505.9	8,112.6	8,020.3	7,953.8	66.51	120.579	
7,250.0	6,929.9	6,899.9	6,899.9	19.2	138.0	-24.27	505.9	8,112.6	7,971.9	7,898.7	73.25	108.832	
7,283.4	6,936.0	6,906.0	6,906.0	19.7	138.1	-30.29	505.9	8,112.6	7,939.2	7,854.8	84.41	94.056	
7,300.0	6,938.4	6,908.4	6,908.4	20.0	138.2	-34.38	505.9	8,112.6	7,922.9	7,830.2	92.67	85.498	
7,350.0	6,943.4	6,913.4	6,913.4	20.9	138.3	-54.74	505.9	8,112.6	7,873.4	7,742.8	130.56	60.305	
7,381.9	6,944.8	6,914.8	6,914.8	21.4	138.3	-77.10	505.9	8,112.6	7,841.7	7,686.0	155.69	50.369	
7,403.7	6,945.0	6,915.0	6,915.0	21.8	138.3	-95.52	505.9	8,112.6	7,819.9	7,660.5	159.44	49.047	
7,480.3	6,944.3	6,914.3	6,914.3	23.3	138.3	-95.47	505.9	8,112.6	7,743.7	7,582.7	160.92	48.122	
7,500.0	6,944.1	6,914.1	6,914.1	23.7	138.3	-95.46	505.9	8,112.6	7,724.1	7,562.8	161.30	47.887	
7,578.7	6,943.4	6,913.4	6,913.4	25.4	138.3	-95.40	505.9	8,112.6	7,645.7	7,482.7	162.94	46.924	
7,600.0	6,943.2	6,913.2	6,913.2	25.8	138.3	-95.38	505.9	8,112.6	7,624.5	7,461.1	163.38	46.667	
7,677.1	6,942.5	6,912.5	6,912.5	27.5	138.2	-95.33	505.9	8,112.6	7,547.7	7,382.6	165.09	45.720	
7,700.0	6,942.3	6,912.3	6,912.3	28.0	138.2	-95.31	505.9	8,112.6	7,525.0	7,359.4	165.59	45.443	
7,775.6	6,941.6	6,911.6	6,911.6	29.8	138.2	-95.26	505.9	8,112.6	7,449.8	7,282.4	167.34	44.519	
7,800.0	6,941.4	6,911.4	6,911.4	30.3	138.2	-95.24	505.9	8,112.6	7,425.5	7,257.6	167.90	44.225	
7,874.0	6,940.7	6,910.7	6,910.7	32.1	138.2	-95.19	505.9	8,112.6	7,351.8	7,182.2	169.67	43.330	
7,900.0	6,940.5	6,910.5	6,910.5	32.7	138.2	-95.17	505.9	8,112.6	7,326.0	7,155.7	170.29	43.020	
7,972.4	6,939.8	6,909.8	6,909.8	34.5	138.2	-95.12	505.9	8,112.6	7,253.9	7,081.8	172.07	42.158	
8,000.0	6,939.6	6,909.6	6,909.6	35.2	138.2	-95.10	505.9	8,112.6	7,226.5	7,053.7	172.74	41.834	
8,070.8	6,938.9	6,908.9	6,908.9	37.0	138.2	-95.05	505.9	8,112.6	7,156.0	6,981.5	174.51	41.006	
8,100.0	6,938.7	6,908.7	6,908.7	37.7	138.2	-95.03	505.9	8,112.6	7,127.0	6,951.8	175.24	40.670	
8,169.3	6,938.0	6,908.0	6,908.0	39.5	138.2	-94.98	505.9	8,112.6	7,058.1	6,881.1	177.00	39.876	
8,200.0	6,937.7	6,907.7	6,907.7	40.3	138.1	-94.96	505.9	8,112.6	7,027.5	6,849.8	177.78	39.529	
8,267.7	6,937.1	6,907.1	6,907.1	42.0	138.1	-94.91	505.9	8,112.6	6,960.2	6,780.7	179.52	38.771	
8,300.0	6,936.8	6,906.8	6,906.8	42.8	138.1	-94.89	505.9	8,112.6	6,928.1	6,747.7	180.35	38.414	
8,366.1	6,936.2	6,906.2	6,906.2	44.6	138.1	-94.84	505.9	8,112.6	6,862.3	6,680.3	182.07	37.691	
8,400.0	6,935.9	6,905.9	6,905.9	45.5	138.1	-94.82	505.9	8,112.6	6,828.7	6,645.7	182.95	37.325	
8,464.5	6,935.3	6,905.3	6,905.3	47.2	138.1	-94.77	505.9	8,112.6	6,764.5	6,579.8	184.64	36.635	
8,500.0	6,935.0	6,905.0	6,905.0	48.1	138.1	-94.75	505.9	8,112.6	6,729.2	6,543.7	185.57	36.262	
8,563.0	6,934.5	6,904.5	6,904.5	49.8	138.1	-94.70	505.9	8,112.6	6,666.6	6,479.4	187.24	35.606	
8,600.0	6,934.1	6,904.1	6,904.1	50.7	138.1	-94.67	505.9	8,112.6	6,629.8	6,441.6	188.21	35.225	
8,661.4	6,933.6	6,903.6	6,903.6	52.4	138.1	-94.63	505.9	8,112.6	6,568.8	6,379.0	189.85	34.601	
8,700.0	6,933.2	6,903.2	6,903.2	53.4	138.1	-94.60	505.9	8,112.6	6,530.5	6,339.6	190.87	34.214	
8,759.8	6,932.7	6,902.7	6,902.7	55.0	138.0	-94.56	505.9	8,112.6	6,471.0	6,278.6	192.47	33.621	
8,800.0	6,932.3	6,902.3	6,902.3	56.1	138.0	-94.53	505.9	8,112.6	6,431.1	6,237.6	193.54	33.228	
8,858.2	6,931.8	6,901.8	6,901.8	57.7	138.0	-94.49	505.9	8,112.6	6,373.2	6,178.1	195.11	32.665	
8,900.0	6,931.4	6,901.4	6,901.4	58.8	138.0	-94.46	505.9	8,112.6	6,331.8	6,135.5	196.23	32.267	
8,956.7	6,930.9	6,900.9	6,900.9	60.3	138.0	-94.42	505.9	8,112.6	6,275.5	6,077.7	197.76	31.734	
9,000.0	6,930.5	6,900.5	6,900.5	61.5	138.0	-94.39	505.9	8,112.6	6,232.5	6,033.5	198.92	31.331	
9,055.1	6,930.0	6,900.0	6,900.0	63.0	138.0	-94.35	505.9	8,112.6	6,177.7	5,977.3	200.41	30.825	
9,100.0	6,929.6	6,899.6	6,899.6	64.2	138.0	-94.32	505.9	8,112.6	6,133.2	5,931.5	201.63	30.418	
9,153.5	6,929.1	6,899.1	6,899.1	65.6	138.0	-94.28	505.9	8,112.6	6,080.0	5,876.9	203.08	29.939	
9,200.0	6,928.7	6,898.7	6,898.7	66.9	138.0	-94.25	505.9	8,112.6	6,033.9	5,829.5	204.34	29.529	
9,251.9	6,928.2	6,898.2	6,898.2	68.3	138.0	-94.21	505.9	8,112.6	5,982.3	5,776.6	205.75	29.075	
9,300.0	6,927.8	6,897.8	6,897.8	69.6	137.9	-94.18	505.9	8,112.6	5,934.6	5,727.6	207.06	28.662	
9,350.4	6,927.3	6,897.3	6,897.3	71.0	137.9	-94.14	505.9	8,112.6	5,884.7	5,676.2	208.43	28.233	
9,400.0	6,926.9	6,896.9	6,896.9	72.4	137.9	-94.11	505.9	8,112.6	5,835.4	5,625.6	209.79	27.816	
9,448.8	6,926.4	6,896.4	6,896.4	73.7	137.9	-94.07	505.9	8,112.6	5,787.0	5,575.9	211.12	27.411	
9,500.0	6,926.0	6,896.0	6,896.0	75.1	137.9	-94.04	505.9	8,112.6	5,736.2	5,523.7	212.52	26.992	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,895.5	6,895.5	76.4	137.9	-94.00	505.9	8,112.6	5,689.4	5,475.6	213.81	26.609	
9,600.0	6,925.1	6,895.1	6,895.1	77.9	137.9	-93.96	505.9	8,112.6	5,637.1	5,421.8	215.26	26.188	
9,645.6	6,924.6	6,894.6	6,894.6	79.1	137.9	-93.93	505.9	8,112.6	5,591.8	5,375.3	216.51	25.827	
9,700.0	6,924.1	6,894.1	6,894.1	80.6	137.9	-93.89	505.9	8,112.6	5,537.9	5,319.9	218.00	25.404	
9,744.1	6,923.7	6,893.7	6,893.7	81.8	137.9	-93.86	505.9	8,112.6	5,494.2	5,275.0	219.21	25.064	
9,800.0	6,923.2	6,893.2	6,893.2	83.4	137.9	-93.82	505.9	8,112.6	5,438.8	5,218.1	220.74	24.639	
9,842.5	6,922.9	6,892.9	6,892.9	84.5	137.8	-93.79	505.9	8,112.6	5,396.7	5,174.8	221.91	24.319	
9,900.0	6,922.3	6,892.3	6,892.3	86.1	137.8	-93.75	505.9	8,112.6	5,339.7	5,116.2	223.49	23.892	
9,940.9	6,922.0	6,892.0	6,892.0	87.2	137.8	-93.72	505.9	8,112.6	5,299.2	5,074.6	224.62	23.592	
10,000.0	6,921.4	6,891.4	6,891.4	88.9	137.8	-93.68	505.9	8,112.6	5,240.7	5,014.5	226.25	23.164	
10,039.3	6,921.1	6,891.1	6,891.1	90.0	137.8	-93.65	505.9	8,112.6	5,201.7	4,974.4	227.33	22.882	
10,100.0	6,920.5	6,890.5	6,890.5	91.6	137.8	-93.61	505.9	8,112.6	5,141.7	4,912.7	229.00	22.453	
10,137.8	6,920.2	6,890.2	6,890.2	92.7	137.8	-93.58	505.9	8,112.6	5,104.3	4,874.3	230.04	22.188	
10,200.0	6,919.6	6,889.6	6,889.6	94.4	137.8	-93.54	505.9	8,112.6	5,042.7	4,811.0	231.76	21.758	
10,236.2	6,919.3	6,889.3	6,889.3	95.4	137.8	-93.51	505.9	8,112.6	5,006.9	4,774.2	232.76	21.511	
10,300.0	6,918.7	6,888.7	6,888.7	97.2	137.8	-93.47	505.9	8,112.6	4,943.8	4,709.3	234.52	21.080	
10,334.6	6,918.4	6,888.4	6,888.4	98.1	137.8	-93.44	505.9	8,112.6	4,909.6	4,674.1	235.48	20.849	
10,400.0	6,917.8	6,887.8	6,887.8	99.9	137.7	-93.40	505.9	8,112.6	4,844.9	4,607.7	237.29	20.418	
10,433.0	6,917.5	6,887.5	6,887.5	100.9	137.7	-93.37	505.9	8,112.6	4,812.3	4,574.1	238.20	20.203	
10,500.0	6,916.9	6,886.9	6,886.9	102.7	137.7	-93.33	505.9	8,112.6	4,746.1	4,506.1	240.05	19.771	
10,531.5	6,916.6	6,886.6	6,886.6	103.6	137.7	-93.30	505.9	8,112.6	4,715.0	4,474.1	240.92	19.571	
10,600.0	6,916.0	6,886.0	6,886.0	105.5	137.7	-93.25	505.9	8,112.6	4,647.3	4,404.5	242.82	19.139	
10,629.9	6,915.7	6,885.7	6,885.7	106.3	137.7	-93.23	505.9	8,112.6	4,617.8	4,374.2	243.65	18.953	
10,700.0	6,915.1	6,885.1	6,885.1	108.3	137.7	-93.18	505.9	8,112.6	4,548.6	4,303.0	245.59	18.521	
10,728.3	6,914.8	6,884.8	6,884.8	109.1	137.7	-93.16	505.9	8,112.6	4,520.7	4,274.3	246.38	18.349	
10,800.0	6,914.2	6,884.2	6,884.2	111.0	137.7	-93.11	505.9	8,112.6	4,449.9	4,201.6	248.36	17.917	
10,826.7	6,913.9	6,883.9	6,883.9	111.8	137.7	-93.09	505.9	8,112.6	4,423.6	4,174.5	249.11	17.758	
10,900.0	6,913.3	6,883.3	6,883.3	113.8	137.7	-93.04	505.9	8,112.6	4,351.3	4,100.2	251.14	17.327	
10,925.2	6,913.1	6,883.1	6,883.1	114.5	137.6	-93.02	505.9	8,112.6	4,326.5	4,074.7	251.84	17.180	
11,000.0	6,912.4	6,882.4	6,882.4	116.6	137.6	-92.97	505.9	8,112.6	4,252.8	3,998.9	253.91	16.749	
11,023.6	6,912.2	6,882.2	6,882.2	117.3	137.6	-92.95	505.9	8,112.6	4,229.5	3,975.0	254.57	16.615	
11,100.0	6,911.5	6,881.5	6,881.5	119.4	137.6	-92.90	505.9	8,112.6	4,154.3	3,897.6	256.69	16.184	
11,122.0	6,911.3	6,881.3	6,881.3	120.0	137.6	-92.88	505.9	8,112.6	4,132.6	3,875.3	257.30	16.062	
11,200.0	6,910.6	6,880.6	6,880.6	122.2	137.6	-92.83	505.9	8,112.6	4,055.9	3,796.5	259.46	15.632	
11,220.4	6,910.4	6,880.4	6,880.4	122.7	137.6	-92.81	505.9	8,112.6	4,035.8	3,775.8	260.03	15.520	
11,300.0	6,909.7	6,879.7	6,879.7	125.0	137.6	-92.76	505.9	8,112.6	3,957.6	3,695.4	262.24	15.091	
11,318.9	6,909.5	6,879.5	6,879.5	125.5	137.6	-92.74	505.9	8,112.6	3,939.1	3,676.3	262.77	14.991	
11,400.0	6,908.8	6,878.8	6,878.8	127.7	137.6	-92.69	505.9	8,112.6	3,859.4	3,594.3	265.02	14.562	
11,417.3	6,908.6	6,878.6	6,878.6	128.2	137.6	-92.67	505.9	8,112.6	3,842.4	3,576.9	265.50	14.472	
11,500.0	6,907.9	6,877.9	6,877.9	130.5	137.5	-92.61	505.9	8,112.6	3,761.2	3,493.4	267.80	14.045	
11,515.7	6,907.7	6,877.7	6,877.7	131.0	137.5	-92.60	505.9	8,112.6	3,745.8	3,477.6	268.24	13.964	
11,600.0	6,907.0	6,877.0	6,877.0	133.3	137.5	-92.54	505.9	8,112.6	3,663.2	3,392.6	270.58	13.538	
11,614.1	6,906.8	6,876.8	6,876.8	133.7	137.5	-92.53	505.9	8,112.6	3,649.3	3,378.3	270.98	13.467	
11,700.0	6,906.0	6,876.0	6,876.0	136.1	137.5	-92.47	505.9	8,112.6	3,565.3	3,291.9	273.37	13.042	
11,712.6	6,905.9	6,875.9	6,875.9	136.5	137.5	-92.46	505.9	8,112.6	3,553.0	3,279.2	273.72	12.980	
11,800.0	6,905.1	6,875.1	6,875.1	138.9	137.5	-92.40	505.9	8,112.6	3,467.4	3,191.3	276.15	12.556	
11,811.0	6,905.0	6,875.0	6,875.0	139.2	137.5	-92.39	505.9	8,112.6	3,456.7	3,180.2	276.46	12.504	
11,900.0	6,904.2	6,874.2	6,874.2	141.7	137.5	-92.33	505.9	8,112.6	3,369.8	3,090.8	278.93	12.081	
11,909.4	6,904.2	6,874.2	6,874.2	141.9	137.5	-92.32	505.9	8,112.6	3,360.6	3,081.4	279.19	12.037	
12,000.0	6,903.3	6,873.3	6,873.3	144.5	137.5	-92.26	505.9	8,112.6	3,272.2	2,990.5	281.72	11.615	
12,007.8	6,903.3	6,873.3	6,873.3	144.7	137.5	-92.25	505.9	8,112.6	3,264.6	2,982.6	281.94	11.579	
12,100.0	6,902.4	6,872.4	6,872.4	147.3	137.4	-92.19	505.9	8,112.6	3,174.8	2,890.3	284.50	11.159	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,106.3	6,902.4	6,872.4	6,872.4	147.4	137.4	-92.18	505.9	8,112.6	3,168.7	2,884.0	284.68	11.131	
12,200.0	6,901.5	6,871.5	6,871.5	150.1	137.4	-92.12	505.9	8,112.6	3,077.6	2,790.3	287.29	10.713	
12,204.7	6,901.5	6,871.5	6,871.5	150.2	137.4	-92.11	505.9	8,112.6	3,073.0	2,785.6	287.42	10.692	
12,300.0	6,900.6	6,870.6	6,870.6	152.9	137.4	-92.05	505.9	8,112.6	2,980.6	2,690.5	290.07	10.275	
12,303.1	6,900.6	6,870.6	6,870.6	152.9	137.4	-92.04	505.9	8,112.6	2,977.5	2,687.4	290.16	10.262	
12,400.0	6,899.7	6,869.7	6,869.7	155.6	137.4	-91.98	505.9	8,112.6	2,883.7	2,590.9	292.86	9.847	
12,401.5	6,899.7	6,869.7	6,869.7	155.7	137.4	-91.98	505.9	8,112.6	2,882.2	2,589.3	292.90	9.840	
12,500.0	6,898.8	6,868.8	6,868.8	158.4	137.4	-91.91	505.9	8,112.6	2,787.1	2,491.4	295.64	9.427	
12,598.4	6,897.9	6,867.9	6,867.9	161.2	137.3	-91.84	505.9	8,112.6	2,692.3	2,393.9	298.39	9.023	
12,600.0	6,897.9	6,867.9	6,867.9	161.2	137.3	-91.83	505.9	8,112.6	2,690.7	2,392.3	298.43	9.016	
12,696.8	6,897.0	6,867.0	6,867.0	163.9	137.3	-91.77	505.9	8,112.6	2,597.7	2,296.5	301.13	8.626	
12,700.0	6,897.0	6,867.0	6,867.0	164.0	137.3	-91.76	505.9	8,112.6	2,594.6	2,293.4	301.22	8.614	
12,795.2	6,896.1	6,866.1	6,866.1	166.7	137.3	-91.70	505.9	8,112.6	2,503.4	2,199.5	303.87	8.238	
12,800.0	6,896.1	6,866.1	6,866.1	166.8	137.3	-91.69	505.9	8,112.6	2,498.8	2,194.8	304.00	8.220	
12,893.7	6,895.3	6,865.3	6,865.3	169.4	137.3	-91.63	505.9	8,112.6	2,409.4	2,102.8	306.62	7.858	
12,900.0	6,895.2	6,865.2	6,865.2	169.6	137.3	-91.62	505.9	8,112.6	2,403.4	2,096.6	306.79	7.834	
12,992.1	6,894.4	6,864.4	6,864.4	172.2	137.3	-91.56	505.9	8,112.6	2,315.8	2,006.5	309.36	7.486	
13,000.0	6,894.3	6,864.3	6,864.3	172.4	137.3	-91.55	505.9	8,112.6	2,308.3	1,998.7	309.58	7.456	
13,090.5	6,893.5	6,863.5	6,863.5	175.0	137.3	-91.49	505.9	8,112.6	2,222.6	1,910.5	312.10	7.121	
13,100.0	6,893.4	6,863.4	6,863.4	175.2	137.3	-91.48	505.9	8,112.6	2,213.7	1,901.3	312.37	7.087	
13,188.9	6,892.6	6,862.6	6,862.6	177.7	137.2	-91.42	505.9	8,112.6	2,129.9	1,815.1	314.85	6.765	
13,200.0	6,892.5	6,862.5	6,862.5	178.0	137.2	-91.41	505.9	8,112.6	2,119.6	1,804.4	315.16	6.725	
13,287.4	6,891.7	6,861.7	6,861.7	180.5	137.2	-91.35	505.9	8,112.6	2,037.8	1,720.2	317.59	6.416	
13,300.0	6,891.6	6,861.6	6,861.6	180.8	137.2	-91.34	505.9	8,112.6	2,026.0	1,708.0	317.94	6.372	
13,385.8	6,890.8	6,860.8	6,860.8	183.2	137.2	-91.28	505.9	8,112.6	1,946.2	1,625.9	320.34	6.076	
13,400.0	6,890.7	6,860.7	6,860.7	183.6	137.2	-91.27	505.9	8,112.6	1,933.1	1,612.3	320.73	6.027	
13,484.2	6,889.9	6,859.9	6,859.9	186.0	137.2	-91.21	505.9	8,112.6	1,855.4	1,532.3	323.08	5.743	
13,500.0	6,889.8	6,859.8	6,859.8	186.4	137.2	-91.20	505.9	8,112.6	1,840.9	1,517.3	323.52	5.690	
13,582.6	6,889.0	6,859.0	6,859.0	188.7	137.2	-91.14	505.9	8,112.6	1,765.3	1,439.5	325.82	5.418	
13,600.0	6,888.9	6,858.9	6,858.9	189.2	137.2	-91.13	505.9	8,112.6	1,749.5	1,423.2	326.31	5.362	
13,681.1	6,888.1	6,858.1	6,858.1	191.5	137.1	-91.07	505.9	8,112.6	1,676.2	1,347.6	328.57	5.102	
13,700.0	6,888.0	6,858.0	6,858.0	192.0	137.1	-91.05	505.9	8,112.6	1,659.2	1,330.1	329.10	5.042	
13,779.5	6,887.3	6,857.3	6,857.3	194.2	137.1	-91.00	505.9	8,112.6	1,588.2	1,256.9	331.31	4.794	
13,800.0	6,887.1	6,857.1	6,857.1	194.8	137.1	-90.98	505.9	8,112.6	1,570.0	1,238.2	331.88	4.731	
13,877.9	6,886.4	6,856.4	6,856.4	197.0	137.1	-90.93	505.9	8,112.6	1,501.5	1,167.4	334.06	4.495	
13,900.0	6,886.2	6,856.2	6,856.2	197.6	137.1	-90.91	505.9	8,112.6	1,482.3	1,147.6	334.67	4.429	
13,976.3	6,885.5	6,855.5	6,855.5	199.7	137.1	-90.86	505.9	8,112.6	1,416.3	1,079.5	336.80	4.205	
14,000.0	6,885.3	6,855.3	6,855.3	200.4	137.1	-90.84	505.9	8,112.6	1,396.1	1,058.7	337.46	4.137	
14,074.8	6,884.6	6,854.6	6,854.6	202.5	137.1	-90.79	505.9	8,112.6	1,333.0	993.4	339.54	3.926	
14,100.0	6,884.4	6,854.4	6,854.4	203.2	137.1	-90.77	505.9	8,112.6	1,312.0	971.7	340.25	3.856	
14,173.2	6,883.7	6,853.7	6,853.7	205.3	137.1	-90.72	505.9	8,112.6	1,251.8	909.5	342.29	3.657	
14,200.0	6,883.5	6,853.5	6,853.5	206.0	137.1	-90.70	505.9	8,112.6	1,230.2	887.1	343.03	3.586	
14,271.6	6,882.8	6,852.8	6,852.8	208.0	137.0	-90.65	505.9	8,112.6	1,173.3	828.3	345.03	3.401	
14,300.0	6,882.6	6,852.6	6,852.6	208.8	137.0	-90.63	505.9	8,112.6	1,151.3	805.4	345.82	3.329	
14,370.0	6,881.9	6,851.9	6,851.9	210.8	137.0	-90.58	505.9	8,112.6	1,098.0	750.2	347.77	3.157	
14,400.0	6,881.7	6,851.7	6,851.7	211.6	137.0	-90.56	505.9	8,112.6	1,075.8	727.2	348.61	3.086	
14,468.5	6,881.0	6,851.0	6,851.0	213.5	137.0	-90.51	505.9	8,112.6	1,026.6	676.1	350.52	2.929	
14,500.0	6,880.8	6,850.8	6,850.8	214.4	137.0	-90.49	505.9	8,112.6	1,004.7	653.3	351.40	2.859	
14,566.9	6,880.2	6,850.2	6,850.2	216.3	137.0	-90.44	505.9	8,112.6	960.1	606.8	353.26	2.718	
14,584.2	6,880.0	6,850.0	6,850.0	216.8	137.0	-90.43	505.9	8,112.6	949.0	595.2	353.74	2.683 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
0.0	0.0	0.0	0.0	0.0	0.0	103.22	-990.6	4,216.2	4,331.1				
98.4	98.4	65.2	65.2	0.1	0.0	103.22	-990.6	4,216.2	4,331.0	4,330.9	0.12	N/A	
100.0	100.0	66.7	66.7	0.1	0.0	103.22	-990.6	4,216.2	4,331.0	4,330.9	0.12	N/A	
196.8	196.8	161.9	161.9	0.3	0.2	103.22	-990.8	4,216.3	4,331.1	4,330.7	0.45	9,531.502	
200.0	200.0	165.0	165.0	0.3	0.2	103.22	-990.8	4,216.3	4,331.2	4,330.7	0.47	9,284.039	
295.3	295.3	256.5	256.5	0.5	0.3	103.23	-991.2	4,216.3	4,331.3	4,330.5	0.79	5,513.448	
300.0	300.0	261.0	261.0	0.5	0.3	103.23	-991.2	4,216.3	4,331.3	4,330.5	0.80	5,413.772	
393.7	393.7	360.1	360.1	0.7	0.3	103.23	-991.6	4,216.4	4,331.5	4,330.4	1.08	4,019.749	
400.0	400.0	367.4	367.4	0.8	0.3	103.23	-991.7	4,216.4	4,331.5	4,330.4	1.10	3,953.166	
492.1	492.1	501.7	501.7	1.0	0.4	103.23	-991.6	4,216.0	4,331.2	4,329.8	1.37	3,172.568	
500.0	500.0	509.6	509.6	1.0	0.4	103.23	-991.5	4,215.9	4,331.1	4,329.7	1.39	3,122.231	
590.5	590.5	600.0	600.0	1.2	0.5	103.23	-991.2	4,215.1	4,330.3	4,328.6	1.64	2,640.149	
600.0	600.0	608.8	608.8	1.2	0.5	103.23	-991.2	4,215.0	4,330.2	4,328.5	1.67	2,599.877	
689.0	689.0	687.6	687.6	1.4	0.5	103.23	-991.0	4,214.5	4,329.5	4,327.6	1.90	2,275.687	
700.0	700.0	700.0	700.0	1.4	0.5	103.23	-990.9	4,214.4	4,329.4	4,327.5	1.93	2,239.642	
787.4	787.4	800.0	800.0	1.6	0.5	103.23	-990.6	4,213.6	4,328.7	4,326.5	2.17	1,992.522	
800.0	800.0	813.8	813.8	1.7	0.5	103.23	-990.5	4,213.5	4,328.6	4,326.4	2.21	1,961.575	
885.8	885.8	895.4	895.3	1.9	0.6	103.23	-990.3	4,212.7	4,327.8	4,325.3	2.43	1,777.790	
900.0	900.0	910.2	910.1	1.9	0.6	103.23	-990.3	4,212.6	4,327.6	4,325.2	2.47	1,750.567	
984.2	984.2	1,002.4	1,002.4	2.1	0.6	103.23	-989.9	4,211.7	4,326.8	4,324.1	2.70	1,604.094	
1,000.0	1,000.0	1,021.1	1,021.0	2.1	0.6	103.23	-989.8	4,211.5	4,326.6	4,323.8	2.74	1,579.269	
1,082.7	1,082.7	1,115.3	1,115.3	2.3	0.7	103.23	-989.5	4,210.3	4,325.5	4,322.5	2.96	1,461.284	
1,100.0	1,100.0	1,131.9	1,131.8	2.3	0.7	103.23	-989.4	4,210.1	4,325.2	4,322.2	3.00	1,439.415	
1,181.1	1,181.1	1,211.1	1,211.1	2.5	0.7	103.22	-989.1	4,209.0	4,324.1	4,320.9	3.22	1,344.973	
1,200.0	1,200.0	1,232.9	1,232.9	2.6	0.7	103.22	-988.9	4,208.7	4,323.8	4,320.6	3.26	1,324.429	
1,279.5	1,279.5	1,318.5	1,318.5	2.7	0.8	103.22	-988.3	4,207.5	4,322.6	4,319.1	3.47	1,245.302	
1,300.0	1,300.0	1,336.3	1,336.2	2.8	0.8	103.22	-988.1	4,207.3	4,322.3	4,318.7	3.52	1,227.011	
1,377.9	1,377.9	1,400.0	1,399.9	3.0	0.8	103.21	-987.5	4,206.5	4,321.2	4,317.4	3.72	1,162.692	
1,400.0	1,400.0	1,423.6	1,423.6	3.0	0.8	103.21	-987.2	4,206.2	4,320.9	4,317.1	3.77	1,145.316	
1,476.4	1,476.4	1,491.9	1,491.8	3.2	0.8	103.20	-986.3	4,205.6	4,320.0	4,316.0	3.96	1,090.230	
1,500.0	1,500.0	1,512.6	1,512.5	3.2	0.8	103.20	-986.1	4,205.5	4,319.8	4,315.7	4.02	1,074.364	
1,574.8	1,574.8	1,577.3	1,577.2	3.4	0.8	103.19	-985.2	4,205.1	4,319.1	4,314.9	4.20	1,027.252	
1,600.0	1,600.0	1,600.0	1,599.9	3.5	0.9	103.18	-984.9	4,205.0	4,318.9	4,314.7	4.27	1,012.285	
1,650.0	1,650.0	1,643.1	1,643.0	3.6	0.9	103.17	-984.2	4,204.9	4,318.6	4,314.2	4.39	984.022	
1,668.7	1,668.7	1,659.5	1,659.4	3.6	0.9	-137.25	-984.0	4,204.9	4,318.6	4,314.1	4.48	963.809	
1,673.2	1,673.2	1,663.5	1,663.4	3.6	0.9	-137.25	-983.9	4,204.9	4,318.6	4,314.1	4.49	961.601	
1,700.0	1,700.0	1,687.1	1,687.0	3.7	0.9	-137.25	-983.6	4,204.9	4,318.7	4,314.2	4.55	948.701	
1,771.6	1,771.6	1,755.5	1,755.4	3.8	0.9	-137.27	-982.6	4,204.8	4,320.0	4,315.3	4.70	918.402	
1,800.0	1,799.9	1,783.1	1,783.0	3.9	0.9	-137.27	-982.2	4,204.9	4,320.9	4,316.2	4.76	907.008	
1,870.1	1,869.9	1,861.1	1,861.0	4.0	0.9	-137.29	-980.9	4,204.9	4,324.0	4,319.1	4.92	878.899	
1,900.0	1,899.7	1,895.8	1,895.7	4.1	0.9	-137.30	-980.4	4,204.8	4,325.7	4,320.7	4.99	867.463	
1,968.5	1,967.8	1,957.3	1,957.2	4.2	1.0	-137.30	-979.4	4,204.7	4,330.3	4,325.2	5.14	842.333	
2,000.0	1,999.1	1,985.1	1,985.0	4.3	1.0	-137.30	-979.0	4,204.7	4,332.9	4,327.7	5.21	831.324	
2,066.9	2,065.5	2,054.7	2,054.5	4.4	1.0	-137.32	-977.8	4,204.6	4,339.2	4,333.8	5.37	807.517	
2,100.0	2,098.2	2,090.7	2,090.6	4.5	1.0	-137.33	-977.2	4,204.6	4,342.7	4,337.3	5.45	796.223	
2,165.3	2,162.6	2,154.6	2,154.4	4.7	1.0	-137.33	-976.1	4,204.5	4,350.5	4,344.9	5.62	773.860	
2,200.0	2,196.6	2,187.7	2,187.6	4.7	1.0	-137.33	-975.5	4,204.5	4,355.1	4,349.4	5.71	762.564	
2,249.9	2,245.5	2,232.3	2,232.1	4.9	1.0	-137.32	-974.8	4,204.4	4,362.2	4,356.4	5.85	746.129	
2,263.8	2,259.1	2,244.4	2,244.2	4.9	1.0	-137.35	-974.6	4,204.4	4,364.3	4,358.5	5.88	741.654	
2,300.0	2,294.5	2,275.9	2,275.7	5.0	1.1	-137.41	-974.2	4,204.4	4,369.8	4,363.8	5.98	730.243	
2,362.2	2,355.4	2,328.3	2,328.2	5.2	1.1	-137.52	-973.5	4,204.5	4,379.3	4,373.2	6.16	710.923	
2,400.0	2,392.3	2,359.4	2,359.2	5.4	1.1	-137.58	-973.1	4,204.6	4,385.2	4,378.9	6.27	699.805	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,410.8	2,410.6	5.6	1.1	-137.68	-972.6	4,204.8	4,394.7	4,388.3	6.44	682.016	
2,500.0	2,490.2	2,448.7	2,448.6	5.7	1.1	-137.76	-972.3	4,205.0	4,400.9	4,394.4	6.56	670.701	
2,559.0	2,547.9	2,505.8	2,505.6	5.9	1.1	-137.87	-971.7	4,205.2	4,410.3	4,403.5	6.74	654.180	
2,600.0	2,588.0	2,547.0	2,546.8	6.1	1.1	-137.95	-971.3	4,205.4	4,416.8	4,409.9	6.87	643.193	
2,657.5	2,644.2	2,604.8	2,604.6	6.3	1.1	-138.07	-970.6	4,205.7	4,425.9	4,418.8	7.05	628.063	
2,700.0	2,685.8	2,647.8	2,647.5	6.4	1.2	-138.15	-970.0	4,205.9	4,432.6	4,425.4	7.18	617.303	
2,755.9	2,740.5	2,704.2	2,704.0	6.6	1.2	-138.26	-969.3	4,206.2	4,441.4	4,434.1	7.36	603.465	
2,800.0	2,783.6	2,749.0	2,748.7	6.8	1.2	-138.35	-968.8	4,206.3	4,448.4	4,440.9	7.50	592.974	
2,854.3	2,836.7	2,803.8	2,803.6	7.0	1.2	-138.46	-968.1	4,206.5	4,457.0	4,449.3	7.68	580.362	
2,900.0	2,881.4	2,846.8	2,846.6	7.2	1.2	-138.54	-967.6	4,206.7	4,464.2	4,456.4	7.83	570.215	
2,952.7	2,933.0	2,896.4	2,896.2	7.4	1.2	-138.64	-967.1	4,206.8	4,472.6	4,464.6	8.00	558.798	
3,000.0	2,979.2	2,940.2	2,940.0	7.6	1.2	-138.72	-966.6	4,207.0	4,480.1	4,471.9	8.16	549.002	
3,051.2	3,029.3	2,987.5	2,987.3	7.8	1.2	-138.81	-966.2	4,207.2	4,488.3	4,480.0	8.33	538.679	
3,100.0	3,077.1	3,031.1	3,030.9	8.0	1.3	-138.89	-965.8	4,207.4	4,496.2	4,487.7	8.50	529.250	
3,149.6	3,125.6	3,074.8	3,074.5	8.2	1.3	-138.98	-965.4	4,207.7	4,504.2	4,495.5	8.66	519.948	
3,200.0	3,174.9	3,119.9	3,119.6	8.4	1.3	-139.06	-964.9	4,208.0	4,512.5	4,503.6	8.83	510.867	
3,248.0	3,221.8	3,163.8	3,163.5	8.6	1.3	-139.15	-964.5	4,208.3	4,520.4	4,511.4	9.00	502.461	
3,300.0	3,272.7	3,212.2	3,212.0	8.9	1.3	-139.24	-964.0	4,208.8	4,528.9	4,519.8	9.17	493.706	
3,346.4	3,318.1	3,258.3	3,258.0	9.0	1.3	-139.32	-963.5	4,209.2	4,536.6	4,527.3	9.33	486.099	
3,400.0	3,370.5	3,312.1	3,311.9	9.3	1.3	-139.43	-963.0	4,209.6	4,545.5	4,536.0	9.52	477.648	
3,444.9	3,414.4	3,359.6	3,359.4	9.5	1.3	-139.52	-962.4	4,210.0	4,552.9	4,543.3	9.67	470.754	
3,500.0	3,468.3	3,416.3	3,416.0	9.7	1.4	-139.62	-961.7	4,210.4	4,562.0	4,552.2	9.86	462.588	
3,543.3	3,510.7	3,457.6	3,457.4	9.9	1.4	-139.70	-961.2	4,210.7	4,569.2	4,559.1	10.01	456.358	
3,600.0	3,566.1	3,510.3	3,510.0	10.1	1.4	-139.80	-960.6	4,211.1	4,578.5	4,568.3	10.21	448.487	
3,641.7	3,606.9	3,544.9	3,544.6	10.3	1.4	-139.86	-960.2	4,211.4	4,585.5	4,575.1	10.35	442.866	
3,700.0	3,664.0	3,600.0	3,599.7	10.6	1.4	-139.97	-959.5	4,212.0	4,595.3	4,584.8	10.56	435.256	
3,740.1	3,703.2	3,632.8	3,632.5	10.7	1.4	-140.03	-959.1	4,212.4	4,602.1	4,591.4	10.70	430.192	
3,800.0	3,761.8	3,694.6	3,694.3	11.0	1.4	-140.14	-958.2	4,213.0	4,612.2	4,601.3	10.91	422.838	
3,837.4	3,798.3	3,733.3	3,733.0	11.2	1.4	-140.22	-957.6	4,213.4	4,618.6	4,607.5	11.04	418.390	
3,838.6	3,799.5	3,734.5	3,734.2	11.2	1.4	-140.22	-957.6	4,213.5	4,618.8	4,607.7	11.04	418.279	
3,900.0	3,859.7	3,798.4	3,798.1	11.4	1.5	-140.46	-956.7	4,214.1	4,628.6	4,617.4	11.21	412.717	
3,937.0	3,896.1	3,834.6	3,834.3	11.5	1.5	-140.59	-956.1	4,214.4	4,634.0	4,622.7	11.30	410.025	
4,000.0	3,958.3	3,896.1	3,895.8	11.7	1.5	-140.79	-955.2	4,215.0	4,642.4	4,631.0	11.45	405.461	
4,035.4	3,993.3	3,926.8	3,926.5	11.8	1.5	-140.89	-954.8	4,215.3	4,646.7	4,635.2	11.53	403.127	
4,100.0	4,057.4	3,981.9	3,981.6	12.0	1.5	-141.04	-954.1	4,215.9	4,653.8	4,642.1	11.67	398.881	
4,133.8	4,091.0	4,013.1	4,012.8	12.1	1.5	-141.11	-953.7	4,216.3	4,657.1	4,645.3	11.73	396.858	
4,200.0	4,156.8	4,081.6	4,081.2	12.2	1.5	-141.25	-952.7	4,217.2	4,662.6	4,650.7	11.87	392.851	
4,232.3	4,189.0	4,115.6	4,115.2	12.3	1.5	-141.30	-952.1	4,217.6	4,664.9	4,652.9	11.93	391.080	
4,300.0	4,256.6	4,188.3	4,187.9	12.4	1.6	-141.40	-950.8	4,218.4	4,668.6	4,656.6	12.05	387.297	
4,330.7	4,287.3	4,221.6	4,221.2	12.5	1.6	-141.44	-950.2	4,218.8	4,669.9	4,657.8	12.11	385.745	
4,400.0	4,356.6	4,297.1	4,296.7	12.6	1.6	-141.49	-948.9	4,219.6	4,671.7	4,659.5	12.23	382.119	
4,429.1	4,385.7	4,328.9	4,328.5	12.6	1.6	-141.51	-948.3	4,219.8	4,672.1	4,659.8	12.27	380.652	
4,437.2	4,393.8	4,337.8	4,337.3	12.7	1.6	98.91	-948.1	4,219.9	4,672.1	4,658.9	13.20	354.008	
4,500.0	4,456.6	4,406.2	4,405.8	12.7	1.6	98.89	-946.8	4,220.5	4,672.5	4,659.1	13.32	350.706	
4,527.5	4,484.1	4,435.9	4,435.4	12.8	1.6	98.88	-946.2	4,220.7	4,672.6	4,659.2	13.38	349.214	
4,600.0	4,556.6	4,511.2	4,510.8	12.9	1.7	98.87	-944.9	4,221.2	4,672.8	4,659.3	13.53	345.374	
4,626.0	4,582.6	4,533.9	4,533.4	12.9	1.7	98.86	-944.6	4,221.3	4,672.9	4,659.3	13.58	344.049	
4,700.0	4,656.6	4,600.0	4,599.5	13.1	1.7	98.85	-943.8	4,221.8	4,673.3	4,659.6	13.73	340.324	
4,724.4	4,681.0	4,624.0	4,623.6	13.1	1.7	98.85	-943.5	4,222.0	4,673.4	4,659.7	13.78	339.091	
4,800.0	4,756.6	4,704.3	4,703.8	13.2	1.7	98.84	-942.6	4,222.5	4,673.8	4,659.9	13.94	335.278	
4,822.8	4,779.4	4,727.3	4,726.8	13.3	1.7	98.83	-942.3	4,222.7	4,674.0	4,660.0	13.99	334.141	
4,900.0	4,856.6	4,805.1	4,804.6	13.4	1.8	98.82	-941.4	4,223.2	4,674.3	4,660.2	14.15	330.355	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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		
4,921.2	4,877.8	4,825.9	4,825.4	13.4	1.8	98.82	-941.2	4,223.3	4,674.4	4,660.2	14.19	329.328		
5,000.0	4,956.6	4,903.0	4,902.5	13.6	1.8	98.81	-940.5	4,223.8	4,674.8	4,660.5	14.36	325.578		
5,019.7	4,976.3	4,923.1	4,922.6	13.6	1.8	98.81	-940.3	4,224.0	4,674.9	4,660.5	14.40	324.644		
5,100.0	5,056.6	5,005.4	5,004.9	13.7	1.8	98.80	-939.6	4,224.5	4,675.3	4,660.7	14.57	320.881		
5,118.1	5,074.7	5,023.7	5,023.2	13.8	1.8	98.79	-939.4	4,224.6	4,675.4	4,660.8	14.61	320.042		
5,200.0	5,156.6	5,106.9	5,106.4	13.9	1.8	98.78	-938.8	4,225.1	4,675.8	4,661.0	14.78	316.296		
5,216.5	5,173.1	5,123.9	5,123.4	13.9	1.8	98.78	-938.7	4,225.2	4,675.8	4,661.0	14.82	315.545		
5,300.0	5,256.6	5,211.3	5,210.8	14.1	1.9	98.78	-938.1	4,225.6	4,676.2	4,661.2	15.00	311.795		
5,314.9	5,271.5	5,228.5	5,228.0	14.1	1.9	98.77	-938.0	4,225.7	4,676.2	4,661.2	15.03	311.116		
5,400.0	5,356.6	5,322.2	5,321.7	14.2	1.9	98.77	-937.4	4,225.9	4,676.3	4,661.1	15.22	307.324		
5,413.4	5,370.0	5,335.3	5,334.8	14.3	1.9	98.77	-937.4	4,225.9	4,676.4	4,661.1	15.25	306.740		
5,500.0	5,456.6	5,423.9	5,423.3	14.4	1.9	98.76	-936.9	4,226.1	4,676.5	4,661.0	15.43	302.995		
5,511.8	5,468.4	5,437.7	5,437.2	14.4	1.9	98.76	-936.8	4,226.1	4,676.5	4,661.0	15.46	302.479		
5,600.0	5,556.6	5,541.1	5,540.6	14.6	2.0	98.75	-936.2	4,226.1	4,676.3	4,660.7	15.66	298.680		
5,610.2	5,566.8	5,553.1	5,552.6	14.6	2.0	98.75	-936.1	4,226.1	4,676.3	4,660.6	15.68	298.244		
5,700.0	5,656.6	5,637.9	5,637.4	14.8	2.0	98.74	-935.5	4,225.8	4,676.0	4,660.1	15.87	294.593		
5,708.6	5,665.2	5,644.5	5,644.0	14.8	2.0	98.74	-935.5	4,225.8	4,676.0	4,660.1	15.89	294.255		
5,738.6	5,695.1	5,667.3	5,666.8	14.8	2.0	98.74	-935.3	4,225.8	4,675.9	4,660.0	15.95	293.092		
5,800.0	5,756.6	5,728.1	5,727.5	14.9	2.0	98.74	-935.0	4,225.9	4,676.0	4,659.9	16.08	290.770		
5,807.1	5,763.7	5,738.8	5,738.3	14.9	2.0	98.74	-934.9	4,225.9	4,676.0	4,659.9	16.10	290.511		
5,900.0	5,856.6	5,885.2	5,884.7	15.1	2.0	98.74	-935.0	4,224.9	4,675.4	4,659.1	16.28	287.166		
5,905.5	5,862.1	5,894.1	5,893.6	15.1	2.0	98.74	-935.0	4,224.8	4,675.3	4,659.0	16.29	286.970		
6,000.0	5,956.6	5,994.1	5,993.5	15.3	2.0	98.74	-935.1	4,223.4	4,674.0	4,657.5	16.48	283.635		
6,003.9	5,960.5	5,998.1	5,997.6	15.3	2.0	98.74	-935.1	4,223.3	4,673.9	4,657.4	16.49	283.497		
6,100.0	6,056.6	6,093.2	6,092.7	15.5	2.0	98.75	-935.2	4,221.9	4,672.5	4,655.9	16.68	280.175		
6,102.3	6,058.9	6,095.5	6,095.0	15.5	2.0	98.75	-935.2	4,221.9	4,672.5	4,655.8	16.68	280.094		
6,200.0	6,156.6	6,171.4	6,170.8	15.7	2.0	98.75	-935.3	4,221.0	4,671.4	4,654.5	16.87	276.846		
6,200.8	6,157.4	6,172.0	6,171.4	15.7	2.0	98.75	-935.3	4,221.0	4,671.3	4,654.5	16.87	276.821		
6,272.2	6,228.8	6,230.6	6,230.0	15.8	2.1	98.75	-935.4	4,220.5	4,670.8	4,653.8	17.01	274.529		
6,299.2	6,255.8	6,254.2	6,253.7	15.8	2.1	8.76	-935.5	4,220.3	4,670.1	4,654.1	16.04	291.135		
6,300.0	6,256.6	6,254.9	6,254.4	15.8	2.1	8.76	-935.5	4,220.3	4,670.1	4,654.0	16.04	291.107		
6,350.0	6,306.4	6,300.0	6,299.5	15.9	2.1	8.82	-935.7	4,220.1	4,666.2	4,650.0	16.15	288.948		
6,397.6	6,353.6	6,337.7	6,337.1	15.9	2.0	8.92	-935.9	4,219.9	4,659.3	4,643.1	16.28	286.163		
6,400.0	6,355.9	6,339.6	6,339.1	15.9	2.0	8.93	-935.9	4,219.9	4,658.9	4,642.6	16.29	286.010		
6,450.0	6,404.8	6,380.0	6,379.4	15.9	2.0	9.08	-936.3	4,219.7	4,648.4	4,631.9	16.44	282.714		
6,496.0	6,449.0	6,418.1	6,417.6	16.0	2.0	9.28	-936.8	4,219.6	4,635.8	4,619.2	16.58	279.661		
6,500.0	6,452.8	6,421.5	6,421.0	16.0	2.0	9.30	-936.9	4,219.6	4,634.6	4,618.0	16.59	279.400		
6,550.0	6,499.7	6,464.1	6,463.5	15.9	2.0	9.58	-937.5	4,219.6	4,617.5	4,600.8	16.71	276.297		
6,594.5	6,540.3	6,501.1	6,500.5	15.9	2.0	9.88	-938.1	4,219.5	4,599.7	4,582.9	16.80	273.820		
6,600.0	6,545.3	6,506.3	6,505.7	15.9	2.0	9.92	-938.2	4,219.5	4,597.3	4,580.5	16.81	273.520		
6,650.0	6,589.3	6,552.4	6,551.9	15.9	2.0	10.36	-939.0	4,219.5	4,574.1	4,557.2	16.88	271.031		
6,692.9	6,625.7	6,590.6	6,590.0	15.9	2.0	10.81	-939.8	4,219.4	4,551.7	4,534.8	16.91	269.180		
6,700.0	6,631.6	6,596.7	6,596.2	15.9	2.0	10.89	-939.9	4,219.4	4,547.8	4,530.9	16.91	268.895		
6,750.0	6,671.9	6,652.6	6,652.0	15.9	2.0	11.57	-941.2	4,219.2	4,518.6	4,501.7	16.94	266.783		
6,791.3	6,703.6	6,697.1	6,696.5	15.9	2.0	12.25	-942.3	4,218.8	4,492.4	4,475.4	16.94	265.158		
6,800.0	6,710.1	6,713.3	6,712.7	15.9	2.0	12.43	-942.7	4,218.7	4,486.6	4,469.6	16.95	264.677		
6,850.0	6,745.9	6,806.2	6,805.5	16.0	2.0	13.63	-946.0	4,216.8	4,451.7	4,434.6	17.01	261.707		
6,889.7	6,772.6	6,831.2	6,830.4	16.1	2.0	14.61	-947.1	4,216.1	4,422.1	4,405.1	17.00	260.176		
6,900.0	6,779.2	6,837.3	6,836.6	16.1	2.0	14.89	-947.4	4,216.0	4,414.2	4,397.2	16.99	259.753		
6,950.0	6,809.8	6,865.7	6,865.0	16.3	2.0	16.44	-948.7	4,215.2	4,374.7	4,357.7	17.00	257.284		
6,988.2	6,831.3	6,885.6	6,884.8	16.4	2.0	17.90	-949.6	4,214.6	4,343.1	4,326.1	17.05	254.754		
7,000.0	6,837.6	6,891.4	6,890.5	16.5	2.0	18.41	-949.9	4,214.5	4,333.2	4,316.1	17.07	253.839		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,862.5	6,909.7	6,908.9	16.9	2.0	20.89	-950.9	4,214.0	4,289.9	4,272.7	17.23	248.921	
7,086.6	6,878.7	6,919.9	6,919.0	17.2	2.0	23.16	-951.4	4,213.7	4,257.3	4,239.9	17.46	243.893	
7,100.0	6,884.2	6,923.4	6,922.5	17.3	2.0	24.12	-951.5	4,213.6	4,245.2	4,227.6	17.56	241.720	
7,150.0	6,902.7	6,935.0	6,934.1	17.8	2.0	28.47	-952.1	4,213.3	4,199.2	4,181.1	18.15	231.421	
7,185.0	6,913.8	6,950.0	6,949.1	18.3	2.0	32.68	-952.9	4,213.0	4,166.3	4,147.5	18.79	221.699	
7,200.0	6,918.0	6,950.0	6,949.1	18.5	2.0	34.68	-952.9	4,213.0	4,152.1	4,133.0	19.10	217.368	
7,250.0	6,929.9	6,950.0	6,949.1	19.2	2.0	43.17	-952.9	4,213.0	4,104.2	4,083.8	20.41	201.068	
7,283.4	6,936.0	6,950.0	6,949.1	19.7	2.0	50.93	-952.9	4,213.0	4,071.7	4,050.3	21.47	189.691	
7,300.0	6,938.4	6,950.0	6,949.1	20.0	2.0	55.55	-952.9	4,213.0	4,055.6	4,033.6	21.98	184.505	
7,350.0	6,943.4	6,950.0	6,949.1	20.9	2.0	72.90	-952.9	4,213.0	4,006.7	3,983.5	23.16	173.031	
7,381.9	6,944.8	6,950.0	6,949.1	21.4	2.0	86.11	-952.9	4,213.0	3,975.3	3,951.9	23.48	169.281	
7,403.7	6,945.0	6,950.0	6,949.1	21.8	2.0	95.44	-952.9	4,213.0	3,953.9	3,930.0	23.83	165.916	
7,480.3	6,944.3	6,950.0	6,949.1	23.3	2.0	95.44	-952.9	4,213.0	3,878.6	3,853.3	25.31	153.234	
7,500.0	6,944.1	6,950.0	6,949.1	23.7	2.0	95.44	-952.9	4,213.0	3,859.3	3,833.6	25.69	150.208	
7,578.7	6,943.4	6,950.0	6,949.1	25.4	2.0	95.44	-952.9	4,213.0	3,782.0	3,754.7	27.33	138.367	
7,600.0	6,943.2	6,950.0	6,949.1	25.8	2.0	95.44	-952.9	4,213.0	3,761.1	3,733.4	27.78	135.408	
7,677.1	6,942.5	6,950.0	6,949.1	27.5	2.0	95.44	-952.9	4,213.0	3,685.5	3,656.0	29.48	125.015	
7,700.0	6,942.3	6,950.0	6,949.1	28.0	2.0	95.44	-952.9	4,213.0	3,663.1	3,633.1	29.99	122.164	
7,775.6	6,941.6	6,950.0	6,949.1	29.8	2.0	95.44	-952.9	4,213.0	3,589.1	3,557.4	31.73	113.101	
7,800.0	6,941.4	6,950.0	6,949.1	30.3	2.0	95.44	-952.9	4,213.0	3,565.2	3,532.9	32.30	110.383	
7,874.0	6,940.7	6,950.0	6,949.1	32.1	2.0	95.44	-952.9	4,213.0	3,492.8	3,458.7	34.07	102.528	
7,900.0	6,940.5	6,950.0	6,949.1	32.7	2.0	95.44	-952.9	4,213.0	3,467.4	3,432.7	34.69	99.959	
7,972.4	6,939.8	6,950.0	6,949.1	34.5	2.0	95.44	-952.9	4,213.0	3,396.6	3,360.1	36.46	93.153	
8,000.0	6,939.6	6,950.0	6,949.1	35.2	2.0	95.44	-952.9	4,213.0	3,369.7	3,332.5	37.14	90.734	
8,070.8	6,938.9	6,950.0	6,949.1	37.0	2.0	95.44	-952.9	4,213.0	3,300.6	3,261.6	38.91	84.828	
8,100.0	6,938.7	6,950.0	6,949.1	37.7	2.0	95.44	-952.9	4,213.0	3,272.1	3,232.5	39.64	82.552	
8,169.3	6,938.0	6,943.2	6,942.3	39.5	2.0	94.91	-952.5	4,213.1	3,204.6	3,163.2	41.41	77.393	
8,200.0	6,937.7	6,942.5	6,941.6	40.3	2.0	94.86	-952.5	4,213.1	3,174.7	3,132.5	42.19	75.250	
8,267.7	6,937.1	6,940.9	6,940.0	42.0	2.0	94.73	-952.4	4,213.2	3,108.9	3,065.0	43.93	70.762	
8,300.0	6,936.8	6,940.1	6,939.2	42.8	2.0	94.67	-952.4	4,213.2	3,077.5	3,032.7	44.77	68.745	
8,366.1	6,936.2	6,938.5	6,937.6	44.6	2.0	94.55	-952.3	4,213.2	3,013.3	2,966.8	46.49	64.816	
8,400.0	6,935.9	6,937.7	6,936.8	45.5	2.0	94.49	-952.3	4,213.3	2,980.5	2,933.1	47.37	62.914	
8,464.5	6,935.3	6,936.2	6,935.3	47.2	2.0	94.37	-952.2	4,213.3	2,917.9	2,868.8	49.07	59.463	
8,500.0	6,935.0	6,935.3	6,934.4	48.1	2.0	94.30	-952.1	4,213.3	2,883.6	2,833.6	50.00	57.668	
8,563.0	6,934.5	6,933.7	6,932.9	49.8	2.0	94.18	-952.1	4,213.3	2,822.7	2,771.0	51.67	54.627	
8,600.0	6,934.1	6,932.8	6,931.9	50.7	2.0	94.11	-952.0	4,213.4	2,787.0	2,734.3	52.65	52.930	
8,661.4	6,933.6	6,931.3	6,930.4	52.4	2.0	93.99	-951.9	4,213.4	2,727.7	2,673.5	54.29	50.243	
8,700.0	6,933.2	6,930.3	6,929.4	53.4	2.0	93.91	-951.9	4,213.4	2,690.6	2,635.3	55.32	48.635	
8,759.8	6,932.7	6,928.8	6,927.9	55.0	2.0	93.79	-951.8	4,213.5	2,633.0	2,576.1	56.93	46.254	
8,800.0	6,932.3	6,927.7	6,926.8	56.1	2.0	93.71	-951.8	4,213.5	2,594.5	2,536.4	58.00	44.729	
8,858.2	6,931.8	6,926.2	6,925.3	57.7	2.0	93.59	-951.7	4,213.5	2,538.6	2,479.0	59.57	42.613	
8,900.0	6,931.4	6,925.1	6,924.2	58.8	2.0	93.50	-951.6	4,213.6	2,498.6	2,437.9	60.70	41.164	
8,956.7	6,930.9	6,923.6	6,922.7	60.3	2.0	93.39	-951.6	4,213.6	2,444.5	2,382.2	62.23	39.279	
9,000.0	6,930.5	6,922.4	6,921.6	61.5	2.0	93.29	-951.5	4,213.6	2,403.1	2,339.7	63.41	37.901	
9,055.1	6,930.0	6,920.9	6,920.1	63.0	2.0	93.18	-951.4	4,213.7	2,350.7	2,285.8	64.90	36.219	
9,100.0	6,929.6	6,919.7	6,918.8	64.2	2.0	93.08	-951.4	4,213.7	2,308.0	2,241.9	66.12	34.905	
9,153.5	6,929.1	6,918.2	6,917.4	65.6	2.0	92.97	-951.3	4,213.7	2,257.3	2,189.7	67.58	33.401	
9,200.0	6,928.7	6,916.9	6,916.1	66.9	2.0	92.86	-951.2	4,213.8	2,213.4	2,144.5	68.85	32.149	
9,251.9	6,928.2	6,915.5	6,914.6	68.3	2.0	92.75	-951.1	4,213.8	2,164.4	2,094.1	70.27	30.802	
9,300.0	6,927.8	6,914.1	6,913.2	69.6	2.0	92.64	-951.1	4,213.8	2,119.2	2,047.6	71.58	29.605	
9,350.4	6,927.3	6,912.7	6,911.8	71.0	2.0	92.53	-951.0	4,213.9	2,071.9	1,999.0	72.96	28.398	
9,400.0	6,926.9	6,911.2	6,910.4	72.4	2.0	92.42	-950.9	4,213.9	2,025.5	1,951.2	74.32	27.254	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,448.8	6,926.4	6,909.8	6,908.9	73.7	2.0	92.30	-950.9	4,213.9	1,980.1	1,904.4	75.66	26.170	
9,500.0	6,926.0	6,908.3	6,907.4	75.1	2.0	92.18	-950.8	4,214.0	1,932.5	1,855.5	77.07	25.076	
9,547.2	6,925.5	6,906.9	6,906.0	76.4	2.0	92.07	-950.7	4,214.0	1,888.8	1,810.5	78.37	24.103	
9,600.0	6,925.1	6,905.3	6,904.4	77.9	2.0	91.95	-950.6	4,214.1	1,840.2	1,760.4	79.82	23.055	
9,645.6	6,924.6	6,900.0	6,899.2	79.1	2.0	91.53	-950.4	4,214.2	1,798.4	1,717.3	81.08	22.179	
9,700.0	6,924.1	6,900.0	6,899.2	80.6	2.0	91.53	-950.4	4,214.2	1,748.8	1,666.2	82.58	21.177	
9,744.1	6,923.7	6,900.0	6,899.2	81.8	2.0	91.53	-950.4	4,214.2	1,708.8	1,625.0	83.79	20.393	
9,800.0	6,923.2	6,900.0	6,899.2	83.4	2.0	91.53	-950.4	4,214.2	1,658.3	1,573.0	85.33	19.434	
9,842.5	6,922.9	6,900.0	6,899.2	84.5	2.0	91.53	-950.4	4,214.2	1,620.2	1,533.7	86.50	18.731	
9,900.0	6,922.3	6,895.5	6,894.6	86.1	2.0	91.18	-950.1	4,214.3	1,569.0	1,480.9	88.10	17.810	
9,940.9	6,922.0	6,894.0	6,893.2	87.2	2.0	91.06	-950.1	4,214.4	1,532.9	1,443.6	89.23	17.179	
10,000.0	6,921.4	6,892.0	6,891.2	88.9	2.0	90.90	-950.0	4,214.4	1,481.1	1,390.2	90.86	16.300	
10,039.3	6,921.1	6,890.6	6,889.8	90.0	2.0	90.79	-949.9	4,214.5	1,446.9	1,355.0	91.95	15.736	
10,100.0	6,920.5	6,888.5	6,887.7	91.6	2.0	90.63	-949.8	4,214.5	1,394.8	1,301.1	93.63	14.896	
10,137.8	6,920.2	6,887.2	6,886.4	92.7	2.0	90.52	-949.7	4,214.6	1,362.6	1,268.0	94.68	14.393	
10,200.0	6,919.6	6,885.0	6,884.2	94.4	2.0	90.35	-949.6	4,214.6	1,310.4	1,214.0	96.40	13.593	
10,236.2	6,919.3	6,883.8	6,883.0	95.4	2.0	90.26	-949.6	4,214.7	1,280.4	1,183.0	97.40	13.145	
10,300.0	6,918.7	6,881.6	6,880.8	97.2	2.0	90.08	-949.4	4,214.7	1,228.3	1,129.1	99.17	12.386	
10,334.6	6,918.4	6,880.4	6,879.6	98.1	2.0	89.99	-949.4	4,214.8	1,200.5	1,100.4	100.13	11.990	
10,400.0	6,917.8	6,878.1	6,877.3	99.9	2.0	89.81	-949.3	4,214.8	1,149.1	1,047.1	101.94	11.272	
10,433.0	6,917.5	6,877.0	6,876.2	100.9	2.0	89.72	-949.2	4,214.9	1,123.6	1,020.8	102.86	10.924	
10,500.0	6,916.9	6,874.6	6,873.8	102.7	2.0	89.53	-949.1	4,214.9	1,073.3	968.6	104.71	10.250	
10,531.5	6,916.6	6,873.5	6,872.8	103.6	2.0	89.45	-949.1	4,215.0	1,050.3	944.7	105.59	9.947	
10,600.0	6,916.0	6,871.2	6,870.4	105.5	2.0	89.26	-948.9	4,215.0	1,001.8	894.3	107.49	9.320	
10,629.9	6,915.7	6,870.1	6,869.4	106.3	2.0	89.18	-948.9	4,215.0	981.4	873.1	108.32	9.060	
10,700.0	6,915.1	6,867.7	6,866.9	108.3	2.0	88.99	-948.8	4,215.1	935.5	825.2	110.26	8.485	
10,728.3	6,914.8	6,866.8	6,866.0	109.1	2.0	88.91	-948.7	4,215.1	917.8	806.8	111.04	8.265	
10,800.0	6,914.2	6,864.3	6,863.5	111.0	2.0	88.72	-948.6	4,215.2	875.6	762.6	113.03	7.747	
10,826.7	6,913.9	6,863.4	6,862.6	111.8	2.0	88.64	-948.6	4,215.2	860.9	747.1	113.77	7.566	
10,900.0	6,913.3	6,860.8	6,860.1	113.8	2.0	88.44	-948.5	4,215.3	823.5	707.7	115.80	7.112	
10,925.2	6,913.1	6,860.0	6,859.2	114.5	2.0	88.38	-948.4	4,215.3	811.8	695.3	116.50	6.969	
11,000.0	6,912.4	6,857.4	6,856.6	116.6	2.0	88.17	-948.3	4,215.4	780.8	662.3	118.57	6.585	
11,023.6	6,912.2	6,856.6	6,855.8	117.3	2.0	88.11	-948.3	4,215.4	772.3	653.1	119.23	6.478	
11,100.0	6,911.5	6,854.0	6,853.2	119.4	2.0	87.90	-948.1	4,215.5	749.1	627.8	121.34	6.174	
11,122.0	6,911.3	6,853.2	6,852.5	120.0	2.0	87.84	-948.1	4,215.5	743.8	621.8	121.95	6.099	
11,200.0	6,910.6	6,850.5	6,849.8	122.2	2.0	87.63	-948.0	4,215.6	729.8	605.7	124.11	5.881	
11,220.4	6,910.4	6,849.8	6,849.1	122.7	2.0	87.57	-947.9	4,215.6	727.5	602.8	124.67	5.835	
11,293.0	6,909.7	6,847.4	6,846.6	124.8	2.0	87.38	-947.8	4,215.7	723.9	597.2	126.68	5.714 CC	
11,300.0	6,909.7	6,847.1	6,846.4	125.0	2.0	87.36	-947.8	4,215.7	723.9	597.0	126.87	5.706	
11,318.9	6,909.5	6,846.5	6,845.7	125.5	2.0	87.31	-947.8	4,215.7	724.3	596.9	127.39	5.686 ES	
11,400.0	6,908.8	6,843.7	6,843.0	127.7	2.0	87.09	-947.7	4,215.8	731.7	602.1	129.64	5.645 SF	
11,417.3	6,908.6	6,843.1	6,842.4	128.2	2.0	87.04	-947.6	4,215.8	734.5	604.4	130.11	5.645	
11,500.0	6,907.9	6,840.3	6,839.5	130.5	2.0	86.82	-947.5	4,215.9	752.9	620.5	132.40	5.686	
11,515.7	6,907.7	6,839.8	6,839.0	131.0	2.0	86.78	-947.5	4,215.9	757.3	624.5	132.83	5.702	
11,600.0	6,907.0	6,836.9	6,836.1	133.3	2.0	86.55	-947.4	4,216.0	786.2	651.1	135.15	5.817	
11,614.1	6,906.8	6,836.4	6,835.7	133.7	2.0	86.51	-947.3	4,216.0	791.9	656.3	135.54	5.842	
11,700.0	6,906.0	6,833.5	6,832.7	136.1	2.0	86.28	-947.2	4,216.1	830.3	692.4	137.91	6.021	
11,712.6	6,905.9	6,833.0	6,832.3	136.5	2.0	86.25	-947.2	4,216.1	836.6	698.3	138.26	6.051	
11,800.0	6,905.1	6,830.1	6,829.4	138.9	2.0	86.01	-947.1	4,216.2	883.6	742.9	140.66	6.282	
11,811.0	6,905.0	6,829.7	6,829.0	139.2	2.0	85.98	-947.0	4,216.2	890.0	749.0	140.96	6.313	
11,900.0	6,904.2	6,826.7	6,826.0	141.7	2.0	85.74	-946.9	4,216.2	944.5	801.1	143.41	6.586	
11,909.4	6,904.2	6,826.4	6,825.6	141.9	2.0	85.72	-946.9	4,216.3	950.6	806.9	143.67	6.616	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,000.0	6,903.3	6,823.3	6,822.6	144.5	2.0	85.47	-946.8	4,216.3	1,011.6	865.4	146.16	6.921	
12,007.8	6,903.3	6,823.0	6,822.3	144.7	2.0	85.45	-946.7	4,216.3	1,017.1	870.7	146.37	6.949	
12,100.0	6,902.4	6,819.9	6,819.2	147.3	2.0	85.21	-946.6	4,216.4	1,083.7	934.8	148.90	7.278	
12,106.3	6,902.4	6,819.7	6,819.0	147.4	2.0	85.19	-946.6	4,216.4	1,088.4	939.3	149.07	7.301	
12,200.0	6,901.5	6,816.5	6,815.8	150.1	2.0	84.94	-946.5	4,216.5	1,160.0	1,008.4	151.64	7.650	
12,204.7	6,901.5	6,816.4	6,815.7	150.2	2.0	84.93	-946.5	4,216.5	1,163.7	1,011.9	151.76	7.668	
12,300.0	6,900.6	6,813.1	6,812.4	152.9	2.0	84.67	-946.3	4,216.6	1,239.7	1,085.3	154.37	8.031	
12,303.1	6,900.6	6,813.0	6,812.3	152.9	2.0	84.67	-946.3	4,216.6	1,242.2	1,087.8	154.45	8.043	
12,400.0	6,899.7	6,809.8	6,809.1	155.6	2.0	84.41	-946.2	4,216.7	1,322.1	1,165.0	157.10	8.416	
12,401.5	6,899.7	6,809.7	6,809.0	155.7	2.0	84.40	-946.2	4,216.7	1,323.4	1,166.3	157.14	8.422	
12,500.0	6,898.8	6,806.4	6,805.7	158.4	2.0	84.14	-946.0	4,216.8	1,406.8	1,247.0	159.82	8.802	
12,598.4	6,897.9	6,800.0	6,799.3	161.2	2.0	83.64	-945.8	4,217.0	1,492.0	1,329.6	162.44	9.185	
12,600.0	6,897.9	6,800.0	6,799.3	161.2	2.0	83.64	-945.8	4,217.0	1,493.4	1,330.9	162.49	9.191	
12,696.8	6,897.0	6,800.0	6,799.3	163.9	2.0	83.64	-945.8	4,217.0	1,578.7	1,413.5	165.18	9.558	
12,700.0	6,897.0	6,800.0	6,799.3	164.0	2.0	83.64	-945.8	4,217.0	1,581.5	1,416.3	165.27	9.570	
12,795.2	6,896.1	6,800.0	6,799.3	166.7	2.0	83.64	-945.8	4,217.0	1,666.8	1,498.8	167.91	9.926	
12,800.0	6,896.1	6,800.0	6,799.3	166.8	2.0	83.64	-945.8	4,217.0	1,671.0	1,503.0	168.05	9.944	
12,893.7	6,895.3	6,800.0	6,799.3	169.4	2.0	83.64	-945.8	4,217.0	1,755.9	1,585.2	170.65	10.289	
12,900.0	6,895.2	6,800.0	6,799.3	169.6	2.0	83.64	-945.8	4,217.0	1,761.7	1,590.8	170.83	10.313	
12,992.1	6,894.4	6,800.0	6,799.3	172.2	2.0	83.64	-945.8	4,217.0	1,846.0	1,672.6	173.39	10.647	
13,000.0	6,894.3	6,800.0	6,799.3	172.4	2.0	83.64	-945.8	4,217.0	1,853.2	1,679.6	173.61	10.675	
13,090.5	6,893.5	6,800.0	6,799.3	175.0	2.0	83.64	-945.8	4,217.0	1,936.9	1,760.7	176.12	10.997	
13,100.0	6,893.4	6,800.0	6,799.3	175.2	2.0	83.64	-945.8	4,217.0	1,945.6	1,769.3	176.39	11.031	
13,188.9	6,892.6	6,800.0	6,799.3	177.7	2.0	83.64	-945.8	4,217.0	2,028.5	1,849.6	178.86	11.341	
13,200.0	6,892.5	6,800.0	6,799.3	178.0	2.0	83.64	-945.8	4,217.0	2,038.8	1,859.6	179.17	11.379	
13,287.4	6,891.7	6,800.0	6,799.3	180.5	2.0	83.64	-945.8	4,217.0	2,120.7	1,939.1	181.60	11.678	
13,300.0	6,891.6	6,800.0	6,799.3	180.8	2.0	83.64	-945.8	4,217.0	2,132.5	1,950.6	181.95	11.720	
13,385.8	6,890.8	6,782.9	6,782.2	183.2	2.0	82.30	-945.1	4,217.4	2,213.3	2,029.4	183.92	12.034	
13,400.0	6,890.7	6,782.6	6,781.9	183.6	2.0	82.27	-945.1	4,217.4	2,226.7	2,042.4	184.30	12.082	
13,484.2	6,889.9	6,780.7	6,780.0	186.0	2.0	82.12	-945.0	4,217.5	2,306.5	2,119.9	186.59	12.362	
13,500.0	6,889.8	6,780.4	6,779.7	186.4	2.0	82.10	-945.0	4,217.5	2,321.5	2,134.5	187.01	12.413	
13,582.6	6,889.0	6,778.6	6,777.9	188.7	2.0	81.96	-944.9	4,217.5	2,400.1	2,210.8	189.25	12.682	
13,600.0	6,888.9	6,778.2	6,777.5	189.2	2.0	81.93	-944.9	4,217.5	2,416.6	2,226.9	189.72	12.738	
13,681.1	6,888.1	6,776.5	6,775.8	191.5	2.0	81.79	-944.8	4,217.6	2,494.1	2,302.2	191.92	12.995	
13,700.0	6,888.0	6,776.1	6,775.4	192.0	2.0	81.76	-944.8	4,217.6	2,512.2	2,319.7	192.43	13.055	
13,779.5	6,887.3	6,774.4	6,773.8	194.2	2.0	81.63	-944.8	4,217.6	2,588.4	2,393.8	194.59	13.302	
13,800.0	6,887.1	6,774.0	6,773.3	194.8	2.0	81.60	-944.7	4,217.6	2,608.1	2,412.9	195.14	13.365	
13,877.9	6,886.4	6,772.4	6,771.8	197.0	2.0	81.48	-944.7	4,217.7	2,683.0	2,485.7	197.25	13.602	
13,900.0	6,886.2	6,772.0	6,771.3	197.6	2.0	81.44	-944.7	4,217.7	2,704.2	2,506.4	197.85	13.668	
13,976.3	6,885.5	6,770.5	6,769.8	199.7	2.0	81.32	-944.6	4,217.7	2,777.8	2,577.9	199.91	13.895	
14,000.0	6,885.3	6,770.0	6,769.3	200.4	2.0	81.29	-944.6	4,217.7	2,800.7	2,600.1	200.55	13.965	
14,074.8	6,884.6	6,768.6	6,767.9	202.5	2.0	81.17	-944.5	4,217.7	2,872.9	2,670.4	202.57	14.182	
14,100.0	6,884.4	6,768.1	6,767.4	203.2	2.0	81.14	-944.5	4,217.8	2,897.3	2,694.1	203.25	14.255	
14,173.2	6,883.7	6,766.7	6,766.0	205.3	2.0	81.03	-944.5	4,217.8	2,968.2	2,763.0	205.23	14.463	
14,200.0	6,883.5	6,766.2	6,765.5	206.0	2.0	80.99	-944.5	4,217.8	2,994.2	2,788.3	205.95	14.538	
14,271.6	6,882.8	6,764.8	6,764.2	208.0	2.0	80.88	-944.4	4,217.8	3,063.7	2,855.9	207.89	14.738	
14,300.0	6,882.6	6,764.3	6,763.7	208.8	2.0	80.84	-944.4	4,217.8	3,091.3	2,882.7	208.65	14.816	
14,370.0	6,881.9	6,763.0	6,762.4	210.8	2.0	80.74	-944.3	4,217.9	3,159.4	2,948.9	210.54	15.006	
14,400.0	6,881.7	6,762.5	6,761.9	211.6	2.0	80.70	-944.3	4,217.9	3,188.6	2,977.2	211.35	15.087	
14,468.5	6,881.0	6,761.3	6,760.6	213.5	2.0	80.61	-944.3	4,217.9	3,255.3	3,042.1	213.20	15.269	
14,500.0	6,880.8	6,760.7	6,760.1	214.4	2.0	80.56	-944.3	4,217.9	3,286.0	3,072.0	214.05	15.352	
14,566.9	6,880.2	6,759.6	6,758.9	216.3	2.0	80.47	-944.2	4,217.9	3,351.3	3,135.4	215.85	15.526	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,584.2	6,880.0	6,759.3	6,758.6	216.8	2.0	80.45	-944.2	4,217.9	3,368.1	3,151.8	216.32	15.570	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
0.0	0.0	0.0	0.0	0.0	0.0	111.78	-1,194.8	2,990.1	3,220.1				
98.4	98.4	69.9	69.9	0.1	0.0	111.78	-1,194.7	2,990.1	3,219.9	3,219.8	0.12	N/A	
100.0	100.0	71.5	71.5	0.1	0.0	111.78	-1,194.7	2,990.1	3,219.9	3,219.8	0.12	N/A	
196.8	196.8	171.9	171.9	0.3	0.2	111.77	-1,194.3	2,990.1	3,219.8	3,219.3	0.47	6,802.971	
200.0	200.0	175.2	175.2	0.3	0.2	111.77	-1,194.3	2,990.1	3,219.8	3,219.3	0.49	6,629.986	
295.3	295.3	277.5	277.5	0.5	0.3	111.77	-1,194.0	2,989.9	3,219.5	3,218.7	0.79	4,071.613	
300.0	300.0	282.6	282.6	0.5	0.3	111.77	-1,194.0	2,989.9	3,219.5	3,218.7	0.80	4,000.964	
393.7	393.7	372.5	372.5	0.7	0.3	111.77	-1,194.0	2,989.5	3,219.1	3,218.1	1.07	3,005.005	
400.0	400.0	378.4	378.4	0.8	0.3	111.77	-1,194.0	2,989.5	3,219.1	3,218.0	1.09	2,955.928	
492.1	492.1	464.5	464.5	1.0	0.4	111.77	-1,194.1	2,989.3	3,218.9	3,217.6	1.35	2,389.655	
500.0	500.0	471.9	471.9	1.0	0.4	111.77	-1,194.1	2,989.3	3,218.9	3,217.6	1.37	2,351.266	
590.5	590.5	566.3	566.3	1.2	0.4	111.78	-1,194.2	2,989.1	3,218.8	3,217.2	1.62	1,987.013	
600.0	600.0	576.6	576.6	1.2	0.4	111.78	-1,194.2	2,989.1	3,218.8	3,217.2	1.65	1,955.520	
689.0	689.0	672.1	672.1	1.4	0.5	111.78	-1,194.2	2,988.7	3,218.5	3,216.6	1.89	1,699.437	
700.0	700.0	683.8	683.8	1.4	0.5	111.78	-1,194.2	2,988.7	3,218.5	3,216.5	1.92	1,672.214	
787.4	787.4	773.7	773.7	1.6	0.5	111.79	-1,194.4	2,988.1	3,218.0	3,215.9	2.16	1,486.520	
800.0	800.0	786.5	786.5	1.7	0.6	111.79	-1,194.5	2,988.0	3,218.0	3,215.8	2.20	1,463.210	
885.8	885.8	871.1	871.1	1.9	0.6	111.80	-1,194.9	2,987.3	3,217.5	3,215.1	2.43	1,323.385	
900.0	900.0	885.0	885.0	1.9	0.6	111.80	-1,195.0	2,987.2	3,217.4	3,215.0	2.47	1,302.676	
984.2	984.2	972.7	972.7	2.1	0.6	111.81	-1,195.4	2,986.6	3,217.0	3,214.3	2.70	1,191.983	
1,000.0	1,000.0	989.3	989.3	2.1	0.6	111.82	-1,195.5	2,986.4	3,216.9	3,214.1	2.74	1,173.334	
1,082.7	1,082.7	1,081.5	1,081.5	2.3	0.7	111.83	-1,195.8	2,985.5	3,216.2	3,213.3	2.97	1,083.946	
1,100.0	1,100.0	1,100.9	1,100.8	2.3	0.7	111.83	-1,195.8	2,985.3	3,216.1	3,213.1	3.01	1,066.900	
1,181.1	1,181.1	1,184.0	1,184.0	2.5	0.7	111.84	-1,196.1	2,984.3	3,215.2	3,212.0	3.23	994.977	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	0.7	111.84	-1,196.2	2,984.1	3,215.0	3,211.8	3.28	980.003	
1,279.5	1,279.5	1,275.6	1,275.6	2.7	0.8	111.86	-1,196.6	2,983.1	3,214.3	3,210.8	3.49	920.870	
1,300.0	1,300.0	1,294.3	1,294.2	2.8	0.8	111.86	-1,196.7	2,982.9	3,214.1	3,210.6	3.54	906.861	
1,377.9	1,377.9	1,374.1	1,374.0	3.0	0.8	111.87	-1,197.1	2,982.1	3,213.5	3,209.7	3.75	856.603	
1,400.0	1,400.0	1,396.9	1,396.8	3.0	0.8	111.87	-1,197.2	2,981.8	3,213.3	3,209.5	3.81	843.356	
1,476.4	1,476.4	1,471.9	1,471.9	3.2	0.8	111.88	-1,197.5	2,981.0	3,212.7	3,208.7	4.01	800.877	
1,500.0	1,500.0	1,495.1	1,495.0	3.2	0.9	111.89	-1,197.6	2,980.8	3,212.5	3,208.4	4.07	788.590	
1,574.8	1,574.8	1,570.1	1,570.1	3.4	0.9	111.90	-1,197.9	2,980.0	3,211.9	3,207.6	4.27	751.993	
1,600.0	1,600.0	1,595.5	1,595.4	3.5	0.9	111.90	-1,198.0	2,979.7	3,211.7	3,207.3	4.34	740.408	
1,650.0	1,650.0	1,644.3	1,644.2	3.6	0.9	111.91	-1,198.2	2,979.2	3,211.3	3,206.8	4.47	718.577	
1,673.2	1,673.2	1,666.9	1,666.8	3.6	0.9	-128.51	-1,198.3	2,979.0	3,211.1	3,206.6	4.51	712.744	
1,684.8	1,684.8	1,678.2	1,678.2	3.6	0.9	-128.51	-1,198.4	2,978.9	3,211.1	3,206.6	4.53	708.444	
1,700.0	1,700.0	1,693.0	1,692.9	3.7	0.9	-128.51	-1,198.5	2,978.7	3,211.1	3,206.6	4.57	702.927	
1,771.6	1,771.6	1,762.6	1,762.6	3.8	1.0	-128.51	-1,199.0	2,978.0	3,212.0	3,207.2	4.72	680.150	
1,800.0	1,799.9	1,790.2	1,790.1	3.9	1.0	-128.51	-1,199.2	2,977.7	3,212.6	3,207.8	4.78	671.615	
1,870.1	1,869.9	1,855.1	1,855.0	4.0	1.0	-128.52	-1,199.7	2,977.1	3,215.0	3,210.1	4.94	651.231	
1,900.0	1,899.7	1,882.5	1,882.4	4.1	1.0	-128.52	-1,200.0	2,976.8	3,216.4	3,211.4	5.00	642.997	
1,968.5	1,967.8	1,950.8	1,950.7	4.2	1.0	-128.54	-1,200.6	2,976.3	3,220.4	3,215.2	5.16	624.156	
2,000.0	1,999.1	1,983.1	1,983.0	4.3	1.0	-128.55	-1,201.0	2,976.0	3,222.5	3,217.3	5.23	615.858	
2,066.9	2,065.5	2,050.0	2,050.0	4.4	1.1	-128.58	-1,201.6	2,975.4	3,227.8	3,222.4	5.40	598.200	
2,100.0	2,098.2	2,082.8	2,082.7	4.5	1.1	-128.59	-1,201.9	2,975.1	3,230.8	3,225.3	5.48	589.875	
2,165.3	2,162.6	2,149.2	2,149.1	4.7	1.1	-128.63	-1,202.5	2,974.5	3,237.3	3,231.7	5.65	572.940	
2,200.0	2,196.6	2,184.6	2,184.5	4.7	1.1	-128.66	-1,202.7	2,974.2	3,241.2	3,235.5	5.74	564.334	
2,249.9	2,245.5	2,236.1	2,236.0	4.9	1.1	-128.70	-1,202.8	2,973.8	3,247.2	3,241.3	5.89	551.565	
2,263.8	2,259.1	2,250.6	2,250.5	4.9	1.1	-128.74	-1,202.9	2,973.7	3,248.9	3,243.0	5.93	548.014	
2,300.0	2,294.5	2,288.2	2,288.1	5.0	1.2	-128.85	-1,203.0	2,973.4	3,253.4	3,247.4	6.04	538.942	
2,362.2	2,355.4	2,349.8	2,349.7	5.2	1.2	-129.02	-1,203.1	2,972.8	3,261.2	3,255.0	6.23	523.551	
2,400.0	2,392.3	2,386.9	2,386.7	5.4	1.2	-129.12	-1,203.3	2,972.4	3,265.9	3,259.6	6.35	514.635	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,443.7	2,443.6	5.6	1.2	-129.27	-1,203.5	2,971.9	3,273.5	3,267.0	6.54	500.561	
2,500.0	2,490.2	2,480.1	2,480.0	5.7	1.2	-129.37	-1,203.6	2,971.6	3,278.5	3,271.8	6.67	491.665	
2,559.0	2,547.9	2,534.8	2,534.7	5.9	1.2	-129.52	-1,203.9	2,971.2	3,286.1	3,279.2	6.86	478.693	
2,600.0	2,588.0	2,572.8	2,572.7	6.1	1.3	-129.62	-1,204.0	2,970.9	3,291.3	3,284.3	7.00	470.090	
2,657.5	2,644.2	2,627.1	2,627.0	6.3	1.3	-129.77	-1,204.2	2,970.6	3,298.8	3,291.6	7.20	458.267	
2,700.0	2,685.8	2,668.2	2,668.1	6.4	1.3	-129.88	-1,204.4	2,970.3	3,304.4	3,297.0	7.34	449.889	
2,755.9	2,740.5	2,722.4	2,722.2	6.6	1.3	-130.03	-1,204.5	2,970.0	3,311.7	3,304.2	7.54	439.145	
2,800.0	2,783.6	2,765.3	2,765.2	6.8	1.3	-130.14	-1,204.7	2,969.8	3,317.5	3,309.8	7.70	431.029	
2,854.3	2,836.7	2,817.2	2,817.1	7.0	1.3	-130.28	-1,204.8	2,969.6	3,324.7	3,316.8	7.89	421.344	
2,900.0	2,881.4	2,859.2	2,859.0	7.2	1.4	-130.40	-1,204.9	2,969.4	3,330.8	3,322.7	8.05	413.617	
2,952.7	2,933.0	2,908.0	2,907.8	7.4	1.4	-130.53	-1,205.1	2,969.2	3,337.9	3,329.7	8.24	404.953	
3,000.0	2,979.2	2,953.4	2,953.2	7.6	1.4	-130.65	-1,205.3	2,969.1	3,344.3	3,335.9	8.41	397.545	
3,051.2	3,029.3	3,000.0	2,999.9	7.8	1.4	-130.77	-1,205.5	2,969.0	3,351.2	3,342.6	8.60	389.779	
3,100.0	3,077.1	3,047.7	3,047.6	8.0	1.4	-130.90	-1,205.6	2,968.9	3,357.9	3,349.2	8.77	382.738	
3,149.6	3,125.6	3,093.7	3,093.6	8.2	1.4	-131.02	-1,205.8	2,968.8	3,364.8	3,355.8	8.95	375.815	
3,200.0	3,174.9	3,144.0	3,143.9	8.4	1.5	-131.15	-1,205.9	2,968.8	3,371.7	3,362.6	9.14	369.063	
3,248.0	3,221.8	3,192.4	3,192.3	8.6	1.5	-131.28	-1,206.1	2,968.7	3,378.4	3,369.1	9.31	362.819	
3,300.0	3,272.7	3,241.2	3,241.1	8.9	1.5	-131.40	-1,206.3	2,968.6	3,385.6	3,376.1	9.50	356.411	
3,346.4	3,318.1	3,284.2	3,284.1	9.0	1.5	-131.52	-1,206.4	2,968.6	3,392.1	3,382.4	9.67	350.869	
3,400.0	3,370.5	3,330.3	3,330.2	9.3	1.5	-131.64	-1,206.4	2,968.7	3,399.7	3,389.8	9.86	344.853	
3,444.9	3,414.4	3,367.6	3,367.5	9.5	1.5	-131.74	-1,206.4	2,968.8	3,406.1	3,396.1	10.02	340.045	
3,500.0	3,468.3	3,413.3	3,413.2	9.7	1.5	-131.86	-1,206.2	2,969.2	3,414.2	3,404.0	10.21	334.284	
3,543.3	3,510.7	3,449.2	3,449.1	9.9	1.5	-131.97	-1,205.9	2,969.6	3,420.6	3,410.2	10.37	329.806	
3,600.0	3,566.1	3,500.0	3,499.9	10.1	1.5	-132.11	-1,205.3	2,970.3	3,429.2	3,418.6	10.58	324.162	
3,641.7	3,606.9	3,529.5	3,529.4	10.3	1.5	-132.20	-1,204.9	2,970.8	3,435.6	3,424.9	10.73	320.146	
3,700.0	3,664.0	3,576.1	3,576.0	10.6	1.5	-132.33	-1,204.2	2,971.8	3,444.7	3,433.8	10.94	314.736	
3,740.1	3,703.2	3,610.5	3,610.3	10.7	1.5	-132.43	-1,203.7	2,972.6	3,451.1	3,440.0	11.09	311.125	
3,800.0	3,761.8	3,671.3	3,671.1	11.0	1.5	-132.61	-1,202.8	2,974.0	3,460.7	3,449.4	11.31	305.945	
3,837.4	3,798.3	3,708.0	3,707.8	11.2	1.5	-132.72	-1,202.2	2,974.8	3,466.6	3,455.2	11.45	302.808	
3,838.6	3,799.5	3,709.1	3,708.9	11.2	1.5	-132.72	-1,202.2	2,974.8	3,466.8	3,455.4	11.45	302.729	
3,900.0	3,859.7	3,763.0	3,762.7	11.4	1.5	-133.02	-1,201.3	2,976.1	3,476.3	3,464.6	11.63	298.799	
3,937.0	3,896.1	3,800.0	3,799.7	11.5	1.5	-133.19	-1,200.7	2,977.1	3,481.6	3,469.8	11.72	296.968	
4,000.0	3,958.3	3,858.8	3,858.5	11.7	1.5	-133.45	-1,199.7	2,978.6	3,489.9	3,478.0	11.88	293.858	
4,035.4	3,993.3	3,894.9	3,894.6	11.8	1.5	-133.59	-1,199.1	2,979.5	3,494.2	3,482.2	11.95	292.286	
4,100.0	4,057.4	3,968.3	3,968.0	12.0	1.5	-133.83	-1,198.0	2,981.2	3,501.1	3,489.0	12.10	289.413	
4,133.8	4,091.0	4,007.0	4,006.7	12.1	1.5	-133.93	-1,197.5	2,982.0	3,504.3	3,492.1	12.17	288.062	
4,200.0	4,156.8	4,080.9	4,080.6	12.2	1.5	-134.11	-1,196.7	2,983.3	3,509.6	3,497.3	12.30	285.368	
4,232.3	4,189.0	4,118.4	4,118.0	12.3	1.5	-134.18	-1,196.3	2,983.9	3,511.7	3,499.3	12.36	284.187	
4,300.0	4,256.6	4,200.1	4,199.7	12.4	1.5	-134.31	-1,195.5	2,984.9	3,515.1	3,502.7	12.48	281.617	
4,330.7	4,287.3	4,238.2	4,237.9	12.5	1.5	-134.35	-1,195.2	2,985.3	3,516.3	3,503.7	12.53	280.545	
4,400.0	4,356.6	4,325.0	4,324.6	12.6	1.5	-134.41	-1,194.2	2,985.8	3,517.7	3,505.0	12.65	278.000	
4,429.1	4,385.7	4,362.2	4,361.8	12.6	1.5	-134.43	-1,193.7	2,985.9	3,517.8	3,505.1	12.70	276.941	
4,437.2	4,393.8	4,372.5	4,372.1	12.7	1.5	105.99	-1,193.5	2,985.9	3,517.8	3,505.2	12.64	278.407	
4,500.0	4,456.6	4,440.5	4,440.1	12.7	1.5	105.97	-1,192.5	2,985.9	3,517.5	3,504.8	12.75	275.960	
4,527.5	4,484.1	4,467.6	4,467.2	12.8	1.5	105.96	-1,192.1	2,985.9	3,517.4	3,504.6	12.80	274.845	
4,600.0	4,556.6	4,526.3	4,525.9	12.9	1.5	105.95	-1,191.3	2,986.0	3,517.2	3,504.3	12.93	271.993	
4,601.1	4,557.7	4,527.1	4,526.7	12.9	1.5	105.95	-1,191.3	2,986.0	3,517.2	3,504.3	12.93	271.952	
4,626.0	4,582.6	4,543.7	4,543.3	12.9	1.5	105.95	-1,191.0	2,986.1	3,517.2	3,504.3	12.98	270.992	
4,700.0	4,656.6	4,600.0	4,599.6	13.1	1.5	105.93	-1,190.2	2,986.7	3,517.7	3,504.6	13.12	268.196	
4,724.4	4,681.0	4,611.8	4,611.3	13.1	1.5	105.93	-1,190.0	2,986.9	3,517.9	3,504.8	13.16	267.288	
4,800.0	4,756.6	4,675.6	4,675.2	13.2	1.5	105.91	-1,189.2	2,988.0	3,518.9	3,505.6	13.31	264.472	
4,822.8	4,779.4	4,700.0	4,699.6	13.3	1.5	105.90	-1,188.9	2,988.4	3,519.2	3,505.9	13.35	263.620	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						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	
4,900.0	4,856.6	4,764.9	4,764.5	13.4	1.5	105.89	-1,188.2	2,989.7	3,520.5	3,507.0	13.50	260.813	
4,921.2	4,877.8	4,784.3	4,783.8	13.4	1.5	105.88	-1,188.1	2,990.1	3,520.9	3,507.3	13.54	260.043	
5,000.0	4,956.6	4,857.8	4,857.3	13.6	1.5	105.87	-1,187.5	2,991.7	3,522.3	3,508.6	13.69	257.227	
5,019.7	4,976.3	4,876.3	4,875.8	13.6	1.5	105.86	-1,187.4	2,992.1	3,522.7	3,509.0	13.73	256.528	
5,100.0	5,056.6	4,952.2	4,951.7	13.7	1.5	105.85	-1,186.9	2,993.9	3,524.4	3,510.5	13.89	253.717	
5,118.1	5,074.7	4,969.4	4,968.9	13.8	1.5	105.84	-1,186.8	2,994.3	3,524.7	3,510.8	13.93	253.087	
5,200.0	5,156.6	5,053.5	5,053.0	13.9	1.5	105.83	-1,186.2	2,996.3	3,526.5	3,512.4	14.09	250.269	
5,216.5	5,173.1	5,071.3	5,070.8	13.9	1.5	105.82	-1,186.1	2,996.7	3,526.8	3,512.7	14.12	249.701	
5,300.0	5,256.6	5,170.8	5,170.2	14.1	1.5	105.80	-1,185.2	2,998.8	3,528.4	3,514.1	14.29	246.847	
5,314.9	5,271.5	5,189.4	5,188.8	14.1	1.5	105.80	-1,185.1	2,999.2	3,528.6	3,514.3	14.32	246.335	
5,400.0	5,356.6	5,277.7	5,277.1	14.2	1.5	105.78	-1,184.2	3,000.7	3,529.8	3,515.3	14.50	243.495	
5,413.4	5,370.0	5,291.3	5,290.7	14.3	1.5	105.77	-1,184.1	3,000.9	3,530.0	3,515.4	14.52	243.052	
5,500.0	5,456.6	5,388.1	5,387.5	14.4	1.5	105.75	-1,183.0	3,002.5	3,531.0	3,516.3	14.70	240.199	
5,511.8	5,468.4	5,401.6	5,401.0	14.4	1.5	105.74	-1,182.8	3,002.7	3,531.1	3,516.4	14.72	239.811	
5,600.0	5,556.6	5,512.8	5,512.1	14.6	1.5	105.71	-1,181.2	3,003.9	3,531.8	3,516.9	14.91	236.913	
5,610.2	5,566.8	5,525.5	5,524.8	14.6	1.5	105.71	-1,181.0	3,004.1	3,531.8	3,516.9	14.93	236.578	
5,700.0	5,656.6	5,634.4	5,633.7	14.8	1.6	105.68	-1,179.0	3,004.6	3,531.8	3,516.7	15.12	233.647	
5,708.6	5,665.2	5,644.4	5,643.7	14.8	1.6	105.67	-1,178.8	3,004.7	3,531.8	3,516.7	15.13	233.364	
5,800.0	5,756.6	5,741.1	5,740.4	14.9	1.6	105.64	-1,177.0	3,004.8	3,531.4	3,516.1	15.32	230.446	
5,807.1	5,763.7	5,747.8	5,747.1	14.9	1.6	105.64	-1,176.9	3,004.8	3,531.4	3,516.0	15.34	230.223	
5,900.0	5,856.6	5,837.6	5,836.9	15.1	1.6	105.61	-1,175.1	3,004.9	3,531.1	3,515.5	15.53	227.330	
5,905.5	5,862.1	5,843.0	5,842.3	15.1	1.6	105.61	-1,174.9	3,005.0	3,531.0	3,515.5	15.54	227.160	
6,000.0	5,956.6	5,933.2	5,932.4	15.3	1.6	105.58	-1,172.7	3,005.3	3,530.8	3,515.0	15.74	224.275	
6,003.9	5,960.5	5,936.7	5,935.9	15.3	1.6	105.57	-1,172.6	3,005.3	3,530.8	3,515.0	15.75	224.157	
6,063.4	6,020.0	5,989.7	5,989.0	15.4	1.6	105.55	-1,171.2	3,005.7	3,530.7	3,514.8	15.88	222.384	
6,100.0	6,056.6	6,023.1	6,022.3	15.5	1.6	105.53	-1,170.3	3,005.9	3,530.7	3,514.8	15.95	221.309	
6,102.3	6,058.9	6,025.2	6,024.5	15.5	1.6	105.53	-1,170.3	3,006.0	3,530.7	3,514.8	15.96	221.240	
6,200.0	6,156.6	6,116.2	6,115.4	15.7	1.6	105.50	-1,168.5	3,006.6	3,530.9	3,514.8	16.17	218.427	
6,200.8	6,157.4	6,116.9	6,116.1	15.7	1.6	105.50	-1,168.5	3,006.6	3,530.9	3,514.8	16.17	218.405	
6,272.2	6,228.8	6,187.4	6,186.6	15.8	1.6	105.49	-1,167.9	3,007.0	3,531.2	3,514.8	16.32	216.394	
6,299.2	6,255.8	6,213.3	6,212.5	15.8	1.6	15.50	-1,167.8	3,007.1	3,530.8	3,514.4	16.31	216.418	
6,300.0	6,256.6	6,214.0	6,213.2	15.8	1.6	15.50	-1,167.8	3,007.2	3,530.7	3,514.4	16.32	216.400	
6,350.0	6,306.4	6,260.6	6,259.8	15.9	1.6	15.59	-1,167.8	3,007.3	3,527.4	3,511.0	16.41	214.972	
6,397.6	6,353.6	6,305.4	6,304.6	15.9	1.6	15.75	-1,168.0	3,007.5	3,521.1	3,504.6	16.53	213.002	
6,400.0	6,355.9	6,308.0	6,307.2	15.9	1.6	15.76	-1,168.0	3,007.5	3,520.7	3,504.2	16.54	212.888	
6,450.0	6,404.8	6,361.6	6,360.8	15.9	1.6	16.04	-1,168.3	3,007.7	3,510.7	3,494.1	16.69	210.381	
6,496.0	6,449.0	6,409.9	6,409.1	16.0	1.6	16.40	-1,168.7	3,007.7	3,498.6	3,481.8	16.82	207.953	
6,500.0	6,452.8	6,413.9	6,413.2	16.0	1.6	16.43	-1,168.7	3,007.7	3,497.4	3,480.6	16.84	207.740	
6,550.0	6,499.7	6,464.2	6,463.5	15.9	1.7	16.93	-1,169.2	3,007.7	3,480.9	3,463.9	16.97	205.130	
6,594.5	6,540.3	6,506.8	6,506.0	15.9	1.7	17.47	-1,169.5	3,007.7	3,463.5	3,446.5	17.07	202.928	
6,600.0	6,545.3	6,511.5	6,510.7	15.9	1.7	17.54	-1,169.5	3,007.7	3,461.2	3,444.1	17.08	202.665	
6,650.0	6,589.3	6,552.9	6,552.1	15.9	1.7	18.29	-1,169.9	3,007.6	3,438.5	3,421.4	17.16	200.402	
6,692.9	6,625.7	6,587.1	6,586.3	15.9	1.7	19.05	-1,170.2	3,007.6	3,416.8	3,399.6	17.21	198.575	
6,700.0	6,631.6	6,592.6	6,591.8	15.9	1.7	19.19	-1,170.3	3,007.6	3,413.0	3,395.8	17.21	198.279	
6,750.0	6,671.9	6,629.4	6,628.6	15.9	1.7	20.28	-1,170.8	3,007.6	3,384.8	3,367.5	17.25	196.242	
6,791.3	6,703.6	6,658.2	6,657.4	15.9	1.7	21.33	-1,171.2	3,007.6	3,359.5	3,342.2	17.27	194.530	
6,800.0	6,710.1	6,664.1	6,663.3	15.9	1.7	21.58	-1,171.2	3,007.6	3,353.9	3,336.7	17.27	194.163	
6,850.0	6,745.9	6,700.0	6,699.2	16.0	1.7	23.16	-1,171.7	3,007.6	3,320.7	3,303.4	17.31	191.815	
6,889.7	6,772.6	6,725.3	6,724.5	16.1	1.7	24.65	-1,172.1	3,007.7	3,292.6	3,275.3	17.36	189.643	
6,900.0	6,779.2	6,732.6	6,731.8	16.1	1.7	25.07	-1,172.2	3,007.7	3,285.2	3,267.8	17.38	189.017	
6,950.0	6,809.8	6,766.4	6,765.5	16.3	1.7	27.43	-1,172.7	3,007.7	3,247.5	3,230.0	17.52	185.411	
6,988.2	6,831.3	6,790.0	6,789.2	16.4	1.7	29.57	-1,173.0	3,007.7	3,217.4	3,199.7	17.68	181.939	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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							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		
7,000.0	6,837.6	6,796.9	6,796.1	16.5	1.7	30.30	-1,173.1	3,007.7	3,207.9	3,190.1	17.75	180.750		
7,050.0	6,862.5	6,820.7	6,819.9	16.9	1.7	33.78	-1,173.4	3,007.7	3,166.5	3,148.4	18.11	174.834		
7,086.6	6,878.7	6,836.1	6,835.2	17.2	1.7	36.83	-1,173.6	3,007.7	3,135.3	3,116.8	18.49	169.550		
7,100.0	6,884.2	6,841.3	6,840.5	17.3	1.7	38.07	-1,173.7	3,007.7	3,123.7	3,105.1	18.65	167.477		
7,150.0	6,902.7	6,858.8	6,858.0	17.8	1.7	43.39	-1,173.9	3,007.7	3,079.6	3,060.2	19.39	158.838		
7,185.0	6,913.8	6,869.3	6,868.5	18.3	1.7	47.85	-1,174.0	3,007.7	3,048.0	3,028.0	20.02	152.263		
7,200.0	6,918.0	6,873.4	6,872.5	18.5	1.7	49.96	-1,174.0	3,007.7	3,034.4	3,014.1	20.30	149.475		
7,250.0	6,929.9	6,884.7	6,883.9	19.2	1.7	58.01	-1,174.2	3,007.7	2,988.4	2,967.1	21.30	140.329		
7,283.4	6,936.0	6,890.5	6,889.7	19.7	1.7	64.24	-1,174.2	3,007.7	2,957.3	2,935.3	21.93	134.853		
7,300.0	6,938.4	6,892.9	6,892.0	20.0	1.7	67.57	-1,174.2	3,007.7	2,941.8	2,919.6	22.20	132.509		
7,350.0	6,943.4	6,900.0	6,899.2	20.9	1.7	78.49	-1,174.3	3,007.8	2,894.8	2,871.9	22.85	126.683		
7,381.9	6,944.8	6,900.0	6,899.2	21.4	1.7	85.63	-1,174.3	3,007.8	2,864.7	2,841.5	23.21	123.442		
7,403.7	6,945.0	6,900.0	6,899.2	21.8	1.7	90.58	-1,174.3	3,007.8	2,844.1	2,820.6	23.52	120.938		
7,480.3	6,944.3	6,900.0	6,899.2	23.3	1.7	90.58	-1,174.3	3,007.8	2,772.1	2,747.1	25.01	110.859		
7,500.0	6,944.1	6,900.0	6,899.2	23.7	1.7	90.58	-1,174.3	3,007.8	2,753.6	2,728.2	25.39	108.458		
7,578.7	6,943.4	6,900.0	6,899.2	25.4	1.7	90.58	-1,174.3	3,007.8	2,679.8	2,652.8	27.04	99.121		
7,600.0	6,943.2	6,900.0	6,899.2	25.8	1.7	90.58	-1,174.3	3,007.8	2,659.9	2,632.4	27.48	96.792		
7,677.1	6,942.5	6,897.5	6,896.7	27.5	1.7	90.43	-1,174.3	3,007.8	2,588.0	2,558.8	29.19	88.651		
7,700.0	6,942.3	6,897.4	6,896.5	28.0	1.7	90.42	-1,174.3	3,007.8	2,566.8	2,537.1	29.70	86.423		
7,775.6	6,941.6	6,896.9	6,896.0	29.8	1.7	90.39	-1,174.3	3,007.8	2,496.7	2,465.2	31.46	79.372		
7,800.0	6,941.4	6,896.7	6,895.9	30.3	1.7	90.38	-1,174.3	3,007.8	2,474.1	2,442.1	32.02	77.261		
7,874.0	6,940.7	6,896.2	6,895.4	32.1	1.7	90.35	-1,174.3	3,007.8	2,406.0	2,372.2	33.80	71.185		
7,900.0	6,940.5	6,896.0	6,895.2	32.7	1.7	90.34	-1,174.3	3,007.8	2,382.1	2,347.7	34.42	69.201		
7,972.4	6,939.8	6,895.5	6,894.7	34.5	1.7	90.31	-1,174.3	3,007.7	2,315.9	2,279.6	36.20	63.965		
8,000.0	6,939.6	6,895.3	6,894.5	35.2	1.7	90.29	-1,174.3	3,007.7	2,290.7	2,253.8	36.88	62.108		
8,070.8	6,938.9	6,894.9	6,894.0	37.0	1.7	90.27	-1,174.3	3,007.7	2,226.4	2,187.8	38.66	57.589		
8,100.0	6,938.7	6,894.7	6,893.8	37.7	1.7	90.25	-1,174.3	3,007.7	2,200.1	2,160.7	39.39	55.851		
8,169.3	6,938.0	6,894.2	6,893.4	39.5	1.7	90.22	-1,174.3	3,007.7	2,137.8	2,096.7	41.16	51.941		
8,200.0	6,937.7	6,894.0	6,893.2	40.3	1.7	90.21	-1,174.3	3,007.7	2,110.4	2,068.4	41.94	50.316		
8,267.7	6,937.1	6,893.5	6,892.7	42.0	1.7	90.18	-1,174.3	3,007.7	2,050.1	2,006.4	43.69	46.924		
8,300.0	6,936.8	6,893.3	6,892.5	42.8	1.7	90.17	-1,174.2	3,007.7	2,021.5	1,977.0	44.52	45.404		
8,366.1	6,936.2	6,892.8	6,892.0	44.6	1.7	90.14	-1,174.2	3,007.7	1,963.4	1,917.2	46.25	42.453		
8,400.0	6,935.9	6,892.6	6,891.8	45.5	1.7	90.13	-1,174.2	3,007.7	1,933.8	1,886.7	47.13	41.030		
8,464.5	6,935.3	6,892.2	6,891.3	47.2	1.7	90.10	-1,174.2	3,007.7	1,877.9	1,829.0	48.83	38.456		
8,500.0	6,935.0	6,891.9	6,891.1	48.1	1.7	90.09	-1,174.2	3,007.7	1,847.4	1,797.6	49.76	37.122		
8,563.0	6,934.5	6,891.5	6,890.6	49.8	1.7	90.06	-1,174.2	3,007.7	1,793.6	1,742.2	51.43	34.873		
8,600.0	6,934.1	6,891.2	6,890.4	50.7	1.7	90.04	-1,174.2	3,007.7	1,762.3	1,709.9	52.42	33.623		
8,661.4	6,933.6	6,890.8	6,890.0	52.4	1.7	90.02	-1,174.2	3,007.7	1,710.9	1,656.9	54.05	31.653		
8,700.0	6,933.2	6,890.5	6,889.7	53.4	1.7	90.00	-1,174.2	3,007.7	1,679.0	1,623.9	55.08	30.481		
8,759.8	6,932.7	6,890.1	6,889.3	55.0	1.7	89.98	-1,174.2	3,007.7	1,630.0	1,573.3	56.69	28.754		
8,800.0	6,932.3	6,889.8	6,889.0	56.1	1.7	89.96	-1,174.2	3,007.7	1,597.5	1,539.7	57.76	27.656		
8,858.2	6,931.8	6,889.4	6,888.6	57.7	1.7	89.93	-1,174.2	3,007.7	1,551.0	1,491.7	59.33	26.142		
8,900.0	6,931.4	6,889.1	6,888.3	58.8	1.7	89.92	-1,174.2	3,007.7	1,518.2	1,457.8	60.46	25.113		
8,956.7	6,930.9	6,888.7	6,887.9	60.3	1.7	89.89	-1,174.2	3,007.7	1,474.4	1,412.5	61.99	23.786		
9,000.0	6,930.5	6,888.4	6,887.5	61.5	1.7	89.87	-1,174.2	3,007.7	1,441.6	1,378.4	63.16	22.824		
9,055.1	6,930.0	6,888.0	6,887.1	63.0	1.7	89.85	-1,174.2	3,007.7	1,400.6	1,335.9	64.65	21.662		
9,100.0	6,929.6	6,887.6	6,886.8	64.2	1.7	89.83	-1,174.2	3,007.7	1,367.9	1,302.0	65.87	20.766		
9,153.5	6,929.1	6,887.3	6,886.4	65.6	1.7	89.81	-1,174.2	3,007.7	1,329.9	1,262.6	67.33	19.752		
9,200.0	6,928.7	6,886.9	6,886.1	66.9	1.7	89.78	-1,174.2	3,007.7	1,297.8	1,229.2	68.59	18.920		
9,251.9	6,928.2	6,886.5	6,885.7	68.3	1.7	89.76	-1,174.2	3,007.7	1,262.9	1,192.9	70.01	18.039		
9,300.0	6,927.8	6,886.2	6,885.4	69.6	1.7	89.74	-1,174.2	3,007.7	1,231.8	1,160.5	71.32	17.271		
9,350.4	6,927.3	6,885.8	6,885.0	71.0	1.7	89.72	-1,174.2	3,007.7	1,200.3	1,127.6	72.70	16.511		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						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		
9,400.0	6,926.9	6,885.5	6,884.6	72.4	1.7	89.70	-1,174.2	3,007.7	1,170.6	1,096.6	74.05	15.807		
9,448.8	6,926.4	6,885.1	6,884.3	73.7	1.7	89.67	-1,174.2	3,007.7	1,142.8	1,067.4	75.39	15.158		
9,500.0	6,926.0	6,884.7	6,883.9	75.1	1.7	89.65	-1,174.2	3,007.7	1,115.1	1,038.3	76.79	14.520		
9,547.2	6,925.5	6,884.4	6,883.5	76.4	1.7	89.63	-1,174.2	3,007.7	1,091.1	1,013.0	78.09	13.972		
9,600.0	6,925.1	6,884.0	6,883.2	77.9	1.7	89.61	-1,174.2	3,007.7	1,066.0	986.5	79.54	13.403		
9,645.6	6,924.6	6,883.6	6,882.8	79.1	1.7	89.59	-1,174.1	3,007.7	1,046.1	965.3	80.79	12.948		
9,700.0	6,924.1	6,883.2	6,882.4	80.6	1.7	89.56	-1,174.1	3,007.7	1,024.5	942.2	82.29	12.450		
9,744.1	6,923.7	6,882.9	6,882.1	81.8	1.7	89.54	-1,174.1	3,007.7	1,008.7	925.2	83.50	12.080		
9,800.0	6,923.2	6,882.5	6,881.7	83.4	1.7	89.52	-1,174.1	3,007.7	991.2	906.2	85.04	11.656		
9,842.5	6,922.9	6,882.2	6,881.3	84.5	1.7	89.50	-1,174.1	3,007.7	979.9	893.7	86.21	11.366		
9,900.0	6,922.3	6,881.7	6,880.9	86.1	1.7	89.47	-1,174.1	3,007.7	967.3	879.5	87.80	11.017		
9,940.9	6,922.0	6,881.4	6,880.6	87.2	1.7	89.45	-1,174.1	3,007.7	960.3	871.4	88.93	10.799		
10,000.0	6,921.4	6,881.0	6,880.1	88.9	1.7	89.43	-1,174.1	3,007.7	953.2	862.7	90.56	10.526		
10,039.3	6,921.1	6,880.7	6,879.8	90.0	1.7	89.41	-1,174.1	3,007.7	950.5	858.9	91.64	10.372		
10,084.8	6,920.7	6,880.3	6,879.5	91.2	1.7	89.39	-1,174.1	3,007.7	949.5	856.6	92.90	10.220 CC		
10,100.0	6,920.5	6,880.2	6,879.4	91.6	1.7	89.38	-1,174.1	3,007.7	949.6	856.3	93.32	10.176 ES		
10,137.8	6,920.2	6,879.9	6,879.1	92.7	1.7	89.36	-1,174.1	3,007.7	950.9	856.6	94.36	10.077		
10,200.0	6,919.6	6,879.4	6,878.6	94.4	1.7	89.33	-1,174.1	3,007.7	956.4	860.3	96.09	9.954		
10,236.2	6,919.3	6,879.1	6,878.3	95.4	1.7	89.32	-1,174.1	3,007.7	961.5	864.4	97.09	9.903		
10,300.0	6,918.7	6,878.6	6,877.8	97.2	1.7	89.29	-1,174.1	3,007.7	973.6	874.7	98.85	9.849		
10,334.6	6,918.4	6,878.4	6,877.6	98.1	1.7	89.27	-1,174.1	3,007.7	981.8	882.0	99.81	9.836 SF		
10,400.0	6,917.8	6,877.9	6,877.0	99.9	1.7	89.24	-1,174.1	3,007.7	1,000.4	898.8	101.62	9.845		
10,433.0	6,917.5	6,877.6	6,876.8	100.9	1.7	89.22	-1,174.1	3,007.7	1,011.3	908.8	102.54	9.863		
10,500.0	6,916.9	6,877.1	6,876.3	102.7	1.7	89.19	-1,174.1	3,007.7	1,036.3	931.9	104.39	9.927		
10,531.5	6,916.6	6,876.8	6,876.0	103.6	1.7	89.18	-1,174.1	3,007.7	1,049.3	944.0	105.27	9.968		
10,600.0	6,916.0	6,876.3	6,875.5	105.5	1.7	89.14	-1,174.1	3,007.7	1,080.3	973.1	107.17	10.080		
10,629.9	6,915.7	6,876.1	6,875.2	106.3	1.7	89.13	-1,174.1	3,007.7	1,094.8	986.8	108.00	10.137		
10,700.0	6,915.1	6,875.5	6,874.7	108.3	1.7	89.10	-1,174.1	3,007.7	1,131.4	1,021.4	109.94	10.290		
10,728.3	6,914.8	6,875.3	6,874.5	109.1	1.7	89.08	-1,174.1	3,007.7	1,147.0	1,036.3	110.73	10.359		
10,800.0	6,914.2	6,874.7	6,873.9	111.0	1.7	89.05	-1,174.1	3,007.7	1,188.7	1,076.0	112.72	10.546		
10,826.7	6,913.9	6,874.5	6,873.7	111.8	1.7	89.03	-1,174.1	3,007.7	1,205.0	1,091.5	113.46	10.620		
10,900.0	6,913.3	6,873.9	6,873.1	113.8	1.7	89.00	-1,174.0	3,007.7	1,251.4	1,135.9	115.50	10.835		
10,925.2	6,913.1	6,873.7	6,872.9	114.5	1.7	88.99	-1,174.0	3,007.7	1,268.0	1,151.8	116.20	10.912		
11,000.0	6,912.4	6,873.1	6,872.3	116.6	1.7	88.95	-1,174.0	3,007.7	1,318.8	1,200.5	118.28	11.149		
11,023.6	6,912.2	6,872.9	6,872.1	117.3	1.7	88.94	-1,174.0	3,007.7	1,335.2	1,216.3	118.94	11.227		
11,100.0	6,911.5	6,872.3	6,871.4	119.4	1.7	88.90	-1,174.0	3,007.7	1,390.0	1,269.0	121.06	11.482		
11,122.0	6,911.3	6,872.1	6,871.3	120.0	1.7	88.89	-1,174.0	3,007.7	1,406.2	1,284.5	121.67	11.557		
11,200.0	6,910.6	6,871.4	6,870.6	122.2	1.7	88.85	-1,174.0	3,007.7	1,464.6	1,340.8	123.84	11.827		
11,220.4	6,910.4	6,871.3	6,870.5	122.7	1.7	88.84	-1,174.0	3,007.7	1,480.3	1,355.9	124.41	11.898		
11,300.0	6,909.7	6,870.6	6,869.8	125.0	1.7	88.80	-1,174.0	3,007.7	1,542.1	1,415.5	126.63	12.179		
11,318.9	6,909.5	6,870.5	6,869.6	125.5	1.7	88.79	-1,174.0	3,007.7	1,557.1	1,429.9	127.15	12.246		
11,400.0	6,908.8	6,869.8	6,869.0	127.7	1.7	88.75	-1,174.0	3,007.7	1,622.1	1,492.7	129.41	12.535		
11,417.3	6,908.6	6,869.6	6,868.8	128.2	1.7	88.74	-1,174.0	3,007.7	1,636.2	1,506.3	129.89	12.596		
11,500.0	6,907.9	6,869.0	6,868.1	130.5	1.7	88.70	-1,174.0	3,007.7	1,704.2	1,572.0	132.19	12.892		
11,515.7	6,907.7	6,868.8	6,868.0	131.0	1.7	88.69	-1,174.0	3,007.7	1,717.3	1,584.6	132.63	12.948		
11,600.0	6,907.0	6,868.1	6,867.3	133.3	1.7	88.65	-1,174.0	3,007.7	1,788.1	1,653.1	134.98	13.247		
11,614.1	6,906.8	6,868.0	6,867.2	133.7	1.7	88.64	-1,174.0	3,007.7	1,800.1	1,664.7	135.37	13.297		
11,700.0	6,906.0	6,867.3	6,866.4	136.1	1.7	88.60	-1,174.0	3,007.7	1,873.6	1,735.8	137.77	13.600		
11,712.6	6,905.9	6,867.2	6,866.3	136.5	1.7	88.59	-1,174.0	3,007.7	1,884.4	1,746.3	138.12	13.644		
11,800.0	6,905.1	6,866.4	6,865.6	138.9	1.7	88.55	-1,174.0	3,007.7	1,960.5	1,819.9	140.55	13.948		
11,811.0	6,905.0	6,866.3	6,865.5	139.2	1.7	88.54	-1,174.0	3,007.7	1,970.1	1,829.2	140.86	13.986		
11,900.0	6,904.2	6,865.6	6,864.7	141.7	1.7	88.50	-1,174.0	3,007.7	2,048.5	1,905.2	143.34	14.291		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						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	6,904.2	6,865.5	6,864.7	141.9	1.7	88.49	-1,174.0	3,007.7	2,056.9	1,913.3	143.60	14.323		
12,000.0	6,903.3	6,864.7	6,863.9	144.5	1.7	88.44	-1,173.9	3,007.7	2,137.6	1,991.5	146.13	14.628		
12,007.8	6,903.3	6,864.6	6,863.8	144.7	1.7	88.44	-1,173.9	3,007.7	2,144.7	1,998.3	146.35	14.655		
12,100.0	6,902.4	6,863.8	6,863.0	147.3	1.7	88.39	-1,173.9	3,007.7	2,227.7	2,078.7	148.92	14.959		
12,106.3	6,902.4	6,863.8	6,863.0	147.4	1.7	88.39	-1,173.9	3,007.7	2,233.3	2,084.2	149.09	14.980		
12,200.0	6,901.5	6,863.0	6,862.1	150.1	1.7	88.34	-1,173.9	3,007.7	2,318.5	2,166.8	151.71	15.283		
12,204.7	6,901.5	6,862.9	6,862.1	150.2	1.7	88.34	-1,173.9	3,007.7	2,322.8	2,171.0	151.84	15.298		
12,300.0	6,900.6	6,862.1	6,861.3	152.9	1.7	88.29	-1,173.9	3,007.7	2,410.1	2,255.6	154.50	15.600		
12,303.1	6,900.6	6,862.0	6,861.2	152.9	1.7	88.28	-1,173.9	3,007.7	2,413.0	2,258.4	154.58	15.609		
12,400.0	6,899.7	6,861.2	6,860.4	155.6	1.7	88.23	-1,173.9	3,007.7	2,502.3	2,345.0	157.28	15.909		
12,401.5	6,899.7	6,861.2	6,860.4	155.7	1.7	88.23	-1,173.9	3,007.7	2,503.7	2,346.4	157.33	15.914		
12,500.0	6,898.8	6,860.3	6,859.5	158.4	1.7	88.18	-1,173.9	3,007.7	2,595.1	2,435.0	160.07	16.212		
12,598.4	6,897.9	6,859.4	6,858.6	161.2	1.7	88.13	-1,173.9	3,007.7	2,686.9	2,524.1	162.82	16.502		
12,600.0	6,897.9	6,859.4	6,858.6	161.2	1.7	88.13	-1,173.9	3,007.7	2,688.4	2,525.5	162.86	16.507		
12,696.8	6,897.0	6,858.5	6,857.7	163.9	1.7	88.07	-1,173.9	3,007.7	2,779.2	2,613.6	165.57	16.786		
12,700.0	6,897.0	6,858.5	6,857.7	164.0	1.7	88.07	-1,173.9	3,007.7	2,782.2	2,616.5	165.66	16.795		
12,795.2	6,896.1	6,857.6	6,856.8	166.7	1.7	88.02	-1,173.9	3,007.7	2,871.9	2,703.6	168.31	17.063		
12,800.0	6,896.1	6,857.6	6,856.8	166.8	1.7	88.02	-1,173.9	3,007.7	2,876.4	2,707.9	168.45	17.076		
12,893.7	6,895.3	6,856.7	6,855.9	169.4	1.7	87.96	-1,173.9	3,007.7	2,965.0	2,793.9	171.06	17.333		
12,900.0	6,895.2	6,856.7	6,855.8	169.6	1.7	87.96	-1,173.9	3,007.7	2,971.0	2,799.7	171.24	17.350		
12,992.1	6,894.4	6,855.8	6,855.0	172.2	1.7	87.91	-1,173.8	3,007.7	3,058.4	2,884.6	173.81	17.596		
13,000.0	6,894.3	6,855.7	6,854.9	172.4	1.7	87.91	-1,173.8	3,007.7	3,065.9	2,891.9	174.03	17.617		
13,090.5	6,893.5	6,854.9	6,854.1	175.0	1.7	87.85	-1,173.8	3,007.7	3,152.1	2,975.5	176.55	17.853		
13,100.0	6,893.4	6,854.8	6,854.0	175.2	1.7	87.85	-1,173.8	3,007.7	3,161.1	2,984.3	176.82	17.878		
13,188.9	6,892.6	6,854.0	6,853.2	177.7	1.7	87.80	-1,173.8	3,007.7	3,246.1	3,066.8	179.30	18.104		
13,200.0	6,892.5	6,853.9	6,853.1	178.0	1.7	87.79	-1,173.8	3,007.7	3,256.6	3,077.0	179.61	18.132		
13,287.4	6,891.7	6,853.1	6,852.2	180.5	1.7	87.74	-1,173.8	3,007.7	3,340.3	3,158.3	182.05	18.349		
13,300.0	6,891.6	6,852.9	6,852.1	180.8	1.7	87.74	-1,173.8	3,007.7	3,352.4	3,170.0	182.40	18.380		
13,385.8	6,890.8	6,852.1	6,851.3	183.2	1.7	87.69	-1,173.8	3,007.7	3,434.8	3,250.0	184.79	18.587		
13,400.0	6,890.7	6,852.0	6,851.2	183.6	1.7	87.68	-1,173.8	3,007.7	3,448.4	3,263.2	185.19	18.621		
13,484.2	6,889.9	6,851.2	6,850.4	186.0	1.7	87.63	-1,173.8	3,007.7	3,529.5	3,341.9	187.54	18.820		
13,500.0	6,889.8	6,851.0	6,850.2	186.4	1.7	87.62	-1,173.8	3,007.7	3,544.7	3,356.7	187.98	18.857		
13,582.6	6,889.0	6,850.2	6,849.4	188.7	1.7	87.57	-1,173.8	3,007.7	3,624.4	3,434.1	190.29	19.047		
13,600.0	6,888.9	6,850.1	6,849.3	189.2	1.7	87.56	-1,173.8	3,007.7	3,641.1	3,450.3	190.77	19.086		
13,681.1	6,888.1	6,849.3	6,848.5	191.5	1.7	87.52	-1,173.8	3,007.7	3,719.4	3,526.4	193.03	19.268		
13,700.0	6,888.0	6,849.1	6,848.3	192.0	1.7	87.51	-1,173.8	3,007.7	3,737.7	3,544.2	193.56	19.310		
13,779.5	6,887.3	6,848.3	6,847.5	194.2	1.7	87.46	-1,173.8	3,007.7	3,814.7	3,618.9	195.78	19.485		
13,800.0	6,887.1	6,848.1	6,847.3	194.8	1.7	87.45	-1,173.8	3,007.7	3,834.5	3,638.2	196.35	19.529		
13,877.9	6,886.4	6,847.4	6,846.5	197.0	1.7	87.40	-1,173.7	3,007.7	3,910.1	3,711.6	198.53	19.696		
13,900.0	6,886.2	6,847.1	6,846.3	197.6	1.7	87.39	-1,173.7	3,007.7	3,931.5	3,732.4	199.14	19.742		
13,976.3	6,885.5	6,846.4	6,845.6	199.7	1.7	87.34	-1,173.7	3,007.7	4,005.6	3,804.4	201.27	19.902		
14,000.0	6,885.3	6,846.2	6,845.3	200.4	1.7	87.33	-1,173.7	3,007.7	4,028.6	3,826.7	201.93	19.950		
14,074.8	6,884.6	6,845.4	6,844.6	202.5	1.7	87.28	-1,173.7	3,007.7	4,101.3	3,897.3	204.02	20.103		
14,100.0	6,884.4	6,845.2	6,844.3	203.2	1.7	87.27	-1,173.7	3,007.7	4,125.9	3,921.1	204.72	20.153		
14,173.2	6,883.7	6,844.4	6,843.6	205.3	1.7	87.23	-1,173.7	3,007.7	4,197.1	3,990.4	206.76	20.299		
14,200.0	6,883.5	6,844.2	6,843.3	206.0	1.7	87.21	-1,173.7	3,007.7	4,223.2	4,015.7	207.51	20.352		
14,271.6	6,882.8	6,843.4	6,842.6	208.0	1.7	87.17	-1,173.7	3,007.7	4,293.0	4,083.5	209.51	20.491		
14,300.0	6,882.6	6,843.1	6,842.3	208.8	1.7	87.15	-1,173.7	3,007.7	4,320.7	4,110.4	210.30	20.545		
14,370.0	6,881.9	6,842.4	6,841.6	210.8	1.7	87.11	-1,173.7	3,007.7	4,389.1	4,176.8	212.25	20.678		
14,400.0	6,881.7	6,842.1	6,841.3	211.6	1.7	87.09	-1,173.7	3,007.7	4,418.3	4,205.2	213.09	20.735		
14,468.5	6,881.0	6,841.4	6,840.6	213.5	1.7	87.05	-1,173.7	3,007.7	4,485.2	4,270.2	215.00	20.862		
14,500.0	6,880.8	6,841.1	6,840.3	214.4	1.7	87.03	-1,173.7	3,007.7	4,516.0	4,300.2	215.88	20.919		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,566.9	6,880.2	6,840.4	6,839.6	216.3	1.7	86.98	-1,173.7	3,007.7	4,581.5	4,363.7	217.74	21.041	
14,584.2	6,880.0	6,840.2	6,839.4	216.8	1.7	86.97	-1,173.7	3,007.7	4,598.3	4,380.1	218.22	21.072	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
0.0	0.0	0.0	0.0	0.0	0.0	81.24	444.6	2,884.0	2,918.2				
98.4	98.4	78.9	78.9	0.1	0.0	81.24	444.3	2,884.0	2,918.0	2,917.9	0.13	N/A	
100.0	100.0	80.6	80.6	0.1	0.0	81.24	444.3	2,884.0	2,918.0	2,917.9	0.13	N/A	
196.8	196.8	184.0	184.0	0.3	0.2	81.26	443.5	2,883.7	2,917.6	2,917.1	0.49	5,904.692	
200.0	200.0	187.3	187.3	0.3	0.2	81.26	443.5	2,883.7	2,917.6	2,917.1	0.51	5,758.732	
295.3	295.3	275.7	275.7	0.5	0.3	81.26	443.1	2,883.4	2,917.2	2,916.4	0.81	3,601.691	
300.0	300.0	280.0	279.9	0.5	0.3	81.26	443.0	2,883.4	2,917.2	2,916.4	0.82	3,538.301	
393.7	393.7	374.6	374.6	0.7	0.4	81.27	442.8	2,883.2	2,917.0	2,915.9	1.11	2,635.480	
400.0	400.0	381.2	381.2	0.8	0.4	81.27	442.8	2,883.2	2,917.0	2,915.9	1.13	2,591.263	
492.1	492.1	472.4	472.4	1.0	0.4	81.27	442.7	2,882.9	2,916.7	2,915.4	1.37	2,132.888	
500.0	500.0	480.1	480.1	1.0	0.4	81.27	442.7	2,882.9	2,916.7	2,915.3	1.39	2,102.192	
590.5	590.5	574.0	574.0	1.2	0.4	81.26	443.0	2,882.6	2,916.5	2,914.8	1.63	1,787.306	
600.0	600.0	584.0	584.0	1.2	0.5	81.26	443.1	2,882.6	2,916.4	2,914.8	1.66	1,759.304	
689.0	689.0	686.0	686.0	1.4	0.5	81.25	443.6	2,881.9	2,915.9	2,914.0	1.90	1,534.597	
700.0	700.0	698.9	698.9	1.4	0.5	81.25	443.6	2,881.8	2,915.8	2,913.9	1.93	1,510.701	
787.4	787.4	784.3	784.2	1.6	0.5	81.24	443.8	2,881.0	2,915.1	2,912.9	2.16	1,347.592	
800.0	800.0	796.5	796.5	1.7	0.6	81.24	443.8	2,880.9	2,915.0	2,912.8	2.20	1,326.937	
885.8	885.8	881.0	880.9	1.9	0.6	81.24	444.0	2,880.2	2,914.3	2,911.9	2.42	1,202.711	
900.0	900.0	894.9	894.9	1.9	0.6	81.24	444.0	2,880.1	2,914.2	2,911.7	2.46	1,184.402	
984.2	984.2	981.7	981.7	2.1	0.6	81.23	444.0	2,879.4	2,913.5	2,910.9	2.68	1,085.638	
1,000.0	1,000.0	998.0	997.9	2.1	0.6	81.23	444.0	2,879.3	2,913.4	2,910.7	2.73	1,068.961	
1,082.7	1,082.7	1,081.7	1,081.6	2.3	0.7	81.23	443.9	2,878.5	2,912.7	2,909.7	2.94	989.944	
1,100.0	1,100.0	1,099.2	1,099.2	2.3	0.7	81.23	443.8	2,878.4	2,912.5	2,909.5	2.99	974.839	
1,181.1	1,181.1	1,180.5	1,180.4	2.5	0.7	81.24	443.6	2,877.7	2,911.8	2,908.6	3.20	909.867	
1,200.0	1,200.0	1,199.4	1,199.4	2.6	0.7	81.24	443.5	2,877.5	2,911.6	2,908.4	3.25	895.942	
1,279.5	1,279.5	1,277.7	1,277.7	2.7	0.8	81.24	443.2	2,876.9	2,910.9	2,907.5	3.46	842.072	
1,300.0	1,300.0	1,297.9	1,297.9	2.8	0.8	81.24	443.2	2,876.7	2,910.7	2,907.2	3.51	829.229	
1,377.9	1,377.9	1,368.5	1,368.5	3.0	0.8	81.25	442.8	2,876.2	2,910.2	2,906.5	3.71	784.644	
1,400.0	1,400.0	1,388.4	1,388.4	3.0	0.8	81.25	442.7	2,876.1	2,910.0	2,906.3	3.77	772.896	
1,476.4	1,476.4	1,456.3	1,456.3	3.2	0.8	81.26	442.1	2,876.0	2,909.8	2,905.8	3.96	734.736	
1,500.0	1,500.0	1,477.2	1,477.2	3.2	0.8	81.27	441.9	2,876.0	2,909.7	2,905.7	4.02	723.684	
1,574.8	1,574.8	1,550.4	1,550.4	3.4	0.9	81.28	441.0	2,876.0	2,909.7	2,905.4	4.22	690.294	
1,600.0	1,600.0	1,576.3	1,576.3	3.5	0.9	81.29	440.6	2,876.1	2,909.6	2,905.3	4.28	679.637	
1,650.0	1,650.0	1,629.4	1,629.3	3.6	0.9	81.31	439.8	2,876.1	2,909.6	2,905.1	4.41	659.352	
1,657.3	1,657.3	1,637.4	1,637.3	3.6	0.9	-159.11	439.7	2,876.1	2,909.5	2,905.1	4.46	652.005	
1,673.2	1,673.2	1,654.7	1,654.6	3.6	0.9	-159.10	439.5	2,876.1	2,909.6	2,905.1	4.50	646.655	
1,700.0	1,700.0	1,683.8	1,683.8	3.7	0.9	-159.10	439.0	2,876.1	2,909.8	2,905.2	4.56	637.856	
1,771.6	1,771.6	1,758.0	1,757.9	3.8	0.9	-159.08	437.9	2,875.9	2,911.5	2,906.8	4.72	617.376	
1,800.0	1,799.9	1,786.9	1,786.8	3.9	0.9	-159.07	437.6	2,875.8	2,912.6	2,907.9	4.78	609.736	
1,870.1	1,869.9	1,857.6	1,857.5	4.0	1.0	-159.06	436.8	2,875.6	2,916.5	2,911.6	4.93	591.307	
1,900.0	1,899.7	1,887.7	1,887.6	4.1	1.0	-159.06	436.5	2,875.5	2,918.7	2,913.7	5.00	583.889	
1,968.5	1,967.8	1,954.4	1,954.4	4.2	1.0	-159.05	435.9	2,875.2	2,924.7	2,919.5	5.15	567.363	
2,000.0	1,999.1	1,984.9	1,984.8	4.3	1.0	-159.05	435.7	2,875.1	2,927.9	2,922.7	5.23	560.234	
2,066.9	2,065.5	2,048.4	2,048.3	4.4	1.0	-159.04	435.1	2,875.0	2,936.0	2,930.7	5.38	545.442	
2,100.0	2,098.2	2,079.5	2,079.4	4.5	1.0	-159.04	434.9	2,874.9	2,940.6	2,935.1	5.46	538.604	
2,165.3	2,162.6	2,133.7	2,133.6	4.7	1.0	-159.02	434.4	2,874.9	2,950.8	2,945.1	5.61	525.570	
2,200.0	2,196.6	2,160.4	2,160.3	4.7	1.1	-159.00	434.1	2,875.0	2,956.8	2,951.1	5.69	519.277	
2,249.9	2,245.5	2,200.0	2,199.9	4.9	1.1	-158.98	433.7	2,875.3	2,966.4	2,960.5	5.82	510.029	
2,263.8	2,259.1	2,211.9	2,211.8	4.9	1.1	-159.00	433.6	2,875.4	2,969.2	2,963.3	5.85	507.601	
2,300.0	2,294.5	2,247.0	2,246.9	5.0	1.1	-159.04	433.3	2,875.7	2,976.5	2,970.5	5.94	501.367	
2,362.2	2,355.4	2,307.1	2,307.0	5.2	1.1	-159.11	432.7	2,876.2	2,989.0	2,982.9	6.09	490.646	
2,400.0	2,392.3	2,342.6	2,342.5	5.4	1.1	-159.16	432.4	2,876.5	2,996.6	2,990.4	6.18	484.653	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,400.0	2,399.9	5.6	1.1	-159.23	431.7	2,877.1	3,008.9	3,002.6	6.33	475.038	
2,500.0	2,490.2	2,434.3	2,434.2	5.7	1.1	-159.27	431.4	2,877.5	3,016.9	3,010.5	6.43	468.891	
2,559.0	2,547.9	2,486.6	2,486.4	5.9	1.1	-159.33	430.9	2,878.1	3,029.1	3,022.5	6.59	459.943	
2,600.0	2,588.0	2,523.6	2,523.4	6.1	1.1	-159.38	430.6	2,878.6	3,037.5	3,030.8	6.69	453.945	
2,657.5	2,644.2	2,576.1	2,576.0	6.3	1.1	-159.44	430.3	2,879.3	3,049.5	3,042.6	6.84	445.669	
2,700.0	2,685.8	2,616.5	2,616.4	6.4	1.1	-159.49	430.0	2,879.9	3,058.4	3,051.4	6.95	439.778	
2,755.9	2,740.5	2,672.8	2,672.7	6.6	1.2	-159.56	429.6	2,880.8	3,070.0	3,062.9	7.10	432.147	
2,800.0	2,783.6	2,712.9	2,712.7	6.8	1.2	-159.60	429.2	2,881.4	3,079.2	3,072.0	7.22	426.359	
2,854.3	2,836.7	2,753.6	2,753.5	7.0	1.2	-159.65	428.7	2,882.1	3,090.7	3,083.3	7.37	419.371	
2,900.0	2,881.4	2,787.8	2,787.7	7.2	1.2	-159.69	428.3	2,882.9	3,100.5	3,093.0	7.49	413.736	
2,952.7	2,933.0	2,834.2	2,834.0	7.4	1.2	-159.73	427.6	2,884.1	3,112.0	3,104.3	7.64	407.266	
3,000.0	2,979.2	2,878.5	2,878.3	7.6	1.2	-159.77	426.8	2,885.3	3,122.3	3,114.5	7.77	401.649	
3,051.2	3,029.3	2,926.7	2,926.4	7.8	1.2	-159.82	425.9	2,886.6	3,133.5	3,125.6	7.92	395.734	
3,100.0	3,077.1	2,972.8	2,972.5	8.0	1.2	-159.86	425.2	2,887.9	3,144.2	3,136.2	8.06	390.336	
3,149.6	3,125.6	3,022.8	3,022.5	8.2	1.2	-159.91	424.4	2,889.3	3,155.1	3,147.0	8.20	384.963	
3,200.0	3,174.9	3,078.0	3,077.7	8.4	1.2	-159.97	423.7	2,890.7	3,166.2	3,157.8	8.34	379.686	
3,248.0	3,221.8	3,131.4	3,131.0	8.6	1.2	-160.02	423.2	2,891.9	3,176.6	3,168.1	8.48	374.777	
3,300.0	3,272.7	3,189.8	3,189.5	8.9	1.3	-160.09	422.7	2,893.1	3,187.7	3,179.1	8.62	369.651	
3,346.4	3,318.1	3,241.9	3,241.6	9.0	1.3	-160.14	422.3	2,894.1	3,197.6	3,188.8	8.76	365.153	
3,400.0	3,370.5	3,300.0	3,299.6	9.3	1.3	-160.21	421.7	2,895.0	3,208.8	3,199.9	8.91	360.133	
3,444.9	3,414.4	3,341.7	3,341.3	9.5	1.3	-160.25	421.2	2,895.7	3,218.2	3,209.2	9.04	355.987	
3,500.0	3,468.3	3,390.9	3,390.5	9.7	1.3	-160.30	420.6	2,896.6	3,229.8	3,220.6	9.20	351.080	
3,543.3	3,510.7	3,426.4	3,426.0	9.9	1.3	-160.33	420.2	2,897.2	3,239.0	3,229.7	9.33	347.300	
3,600.0	3,566.1	3,471.7	3,471.3	10.1	1.3	-160.38	419.7	2,898.2	3,251.2	3,241.8	9.49	342.509	
3,641.7	3,606.9	3,506.2	3,505.8	10.3	1.3	-160.41	419.3	2,899.1	3,260.3	3,250.7	9.62	339.065	
3,700.0	3,664.0	3,564.7	3,564.2	10.6	1.3	-160.47	418.9	2,900.5	3,273.1	3,263.3	9.79	334.347	
3,740.1	3,703.2	3,604.8	3,604.4	10.7	1.4	-160.52	418.8	2,901.4	3,281.8	3,271.9	9.91	331.204	
3,800.0	3,761.8	3,663.7	3,663.2	11.0	1.4	-160.58	418.7	2,902.7	3,294.9	3,284.8	10.09	326.678	
3,837.4	3,798.3	3,700.0	3,699.5	11.2	1.4	-160.62	418.6	2,903.5	3,303.0	3,292.8	10.20	323.930	
3,838.6	3,799.5	3,700.0	3,699.5	11.2	1.4	-160.63	418.6	2,903.5	3,303.3	3,293.1	10.20	323.869	
3,900.0	3,859.7	3,758.9	3,758.4	11.4	1.4	-160.77	418.5	2,904.9	3,316.0	3,305.7	10.35	320.444	
3,937.0	3,896.1	3,793.6	3,793.1	11.5	1.4	-160.86	418.5	2,905.7	3,323.2	3,312.7	10.43	318.692	
4,000.0	3,958.3	3,860.6	3,860.1	11.7	1.4	-160.99	418.6	2,907.2	3,334.3	3,323.7	10.56	315.665	
4,035.4	3,993.3	3,898.9	3,898.4	11.8	1.4	-161.06	418.8	2,908.0	3,339.9	3,329.2	10.63	314.053	
4,100.0	4,057.4	3,954.9	3,954.4	12.0	1.4	-161.17	419.4	2,909.1	3,349.1	3,338.4	10.76	311.167	
4,133.8	4,091.0	3,984.2	3,983.7	12.1	1.4	-161.22	419.9	2,909.7	3,353.5	3,342.7	10.83	309.743	
4,200.0	4,156.8	4,053.5	4,052.9	12.2	1.4	-161.33	421.6	2,911.0	3,361.0	3,350.0	10.95	306.870	
4,232.3	4,189.0	4,089.6	4,089.0	12.3	1.4	-161.38	422.8	2,911.6	3,364.0	3,353.0	11.01	305.529	
4,300.0	4,256.6	4,190.2	4,189.5	12.4	1.4	-161.51	426.8	2,912.6	3,369.0	3,357.9	11.13	302.586	
4,330.7	4,287.3	4,216.3	4,215.6	12.5	1.4	-161.54	428.0	2,912.7	3,370.6	3,359.5	11.19	301.351	
4,400.0	4,356.6	4,262.9	4,262.1	12.6	1.4	-161.60	430.0	2,913.0	3,373.4	3,362.1	11.30	298.559	
4,429.1	4,385.7	4,282.5	4,281.7	12.6	1.4	-161.62	430.9	2,913.3	3,374.3	3,362.9	11.35	297.409	
4,437.2	4,393.8	4,300.0	4,299.2	12.7	1.4	78.78	431.7	2,913.6	3,374.5	3,360.7	13.82	244.191	
4,500.0	4,456.6	4,344.5	4,343.6	12.7	1.4	78.75	433.8	2,914.3	3,376.1	3,362.1	13.92	242.546	
4,527.5	4,484.1	4,371.9	4,371.0	12.8	1.4	78.73	435.1	2,914.7	3,376.8	3,362.8	13.97	241.782	
4,600.0	4,556.6	4,460.3	4,459.3	12.9	1.4	78.66	439.6	2,916.0	3,378.5	3,364.4	14.09	239.760	
4,626.0	4,582.6	4,495.8	4,494.8	12.9	1.4	78.63	441.5	2,916.3	3,379.0	3,364.9	14.14	239.019	
4,700.0	4,656.6	4,582.6	4,581.4	13.1	1.5	78.55	446.3	2,916.8	3,380.2	3,365.9	14.27	236.938	
4,724.4	4,681.0	4,608.2	4,607.0	13.1	1.5	78.53	447.7	2,916.9	3,380.5	3,366.2	14.31	236.254	
4,800.0	4,756.6	4,674.3	4,672.9	13.2	1.5	78.47	451.1	2,917.2	3,381.7	3,367.3	14.44	234.190	
4,822.8	4,779.4	4,700.0	4,698.6	13.3	1.5	78.45	452.5	2,917.4	3,382.1	3,367.6	14.48	233.563	
4,900.0	4,856.6	4,805.0	4,803.6	13.4	1.5	78.37	457.1	2,917.8	3,383.1	3,368.5	14.62	231.432	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
4,921.2	4,877.8	4,828.2	4,826.7	13.4	1.5	78.36	457.9	2,917.8	3,383.2	3,368.6	14.66	230.845	
5,000.0	4,956.6	4,915.0	4,913.5	13.6	1.5	78.32	460.5	2,917.8	3,383.7	3,368.9	14.80	228.689	
5,019.7	4,976.3	4,938.1	4,936.5	13.6	1.5	78.31	461.0	2,917.8	3,383.8	3,369.0	14.83	228.146	
5,100.0	5,056.6	5,028.8	5,027.3	13.7	1.5	78.28	462.8	2,917.6	3,384.0	3,369.0	14.98	225.944	
5,118.1	5,074.7	5,047.8	5,046.3	13.8	1.5	78.27	463.0	2,917.5	3,384.0	3,369.0	15.01	225.449	
5,200.0	5,156.6	5,136.7	5,135.2	13.9	1.5	78.26	463.8	2,917.4	3,383.9	3,368.8	15.16	223.255	
5,216.5	5,173.1	5,155.6	5,154.1	13.9	1.5	78.26	463.9	2,917.3	3,383.9	3,368.7	15.19	222.820	
5,300.0	5,256.6	5,255.0	5,253.4	14.1	1.5	78.26	463.7	2,916.9	3,383.5	3,368.2	15.34	220.534	
5,314.9	5,271.5	5,273.4	5,271.8	14.1	1.5	78.26	463.6	2,916.8	3,383.4	3,368.1	15.37	220.108	
5,400.0	5,356.6	5,363.4	5,361.8	14.2	1.5	78.27	462.8	2,916.1	3,382.6	3,367.1	15.54	217.726	
5,413.4	5,370.0	5,376.7	5,375.1	14.3	1.5	78.27	462.7	2,916.0	3,382.5	3,366.9	15.56	217.355	
5,500.0	5,456.6	5,464.6	5,463.0	14.4	1.5	78.29	461.6	2,915.3	3,381.7	3,365.9	15.73	214.967	
5,511.8	5,468.4	5,476.7	5,475.1	14.4	1.5	78.29	461.4	2,915.3	3,381.6	3,365.8	15.75	214.643	
5,600.0	5,556.6	5,570.9	5,569.3	14.6	1.6	78.32	459.7	2,914.6	3,380.6	3,364.7	15.93	212.234	
5,610.2	5,566.8	5,582.0	5,580.4	14.6	1.6	78.32	459.5	2,914.5	3,380.5	3,364.5	15.95	211.955	
5,700.0	5,656.6	5,672.8	5,671.2	14.8	1.6	78.34	458.2	2,913.6	3,379.4	3,363.2	16.13	209.552	
5,708.6	5,665.2	5,681.4	5,679.8	14.8	1.6	78.34	458.0	2,913.5	3,379.3	3,363.1	16.14	209.322	
5,800.0	5,756.6	5,765.2	5,763.5	14.9	1.6	78.36	456.6	2,912.8	3,378.2	3,361.9	16.32	206.940	
5,807.1	5,763.7	5,771.5	5,769.9	14.9	1.6	78.37	456.5	2,912.8	3,378.2	3,361.8	16.34	206.757	
5,900.0	5,856.6	5,858.1	5,856.4	15.1	1.6	78.39	454.8	2,912.4	3,377.3	3,360.8	16.52	204.380	
5,905.5	5,862.1	5,863.3	5,861.6	15.1	1.6	78.39	454.7	2,912.4	3,377.3	3,360.8	16.54	204.240	
6,000.0	5,956.6	5,943.4	5,941.7	15.3	1.6	78.42	452.8	2,912.2	3,376.7	3,360.0	16.73	201.893	
6,003.9	5,960.5	5,946.4	5,944.8	15.3	1.6	78.43	452.8	2,912.2	3,376.7	3,360.0	16.73	201.798	
6,100.0	6,056.6	6,039.9	6,038.2	15.5	1.7	78.47	450.4	2,912.6	3,376.6	3,359.7	16.93	199.453	
6,102.3	6,058.9	6,043.3	6,041.6	15.5	1.7	78.47	450.3	2,912.6	3,376.6	3,359.7	16.93	199.393	
6,200.0	6,156.6	6,144.3	6,142.6	15.7	1.7	78.52	447.1	2,912.7	3,376.0	3,358.9	17.14	197.007	
6,200.8	6,157.4	6,144.9	6,143.1	15.7	1.7	78.52	447.1	2,912.7	3,376.0	3,358.9	17.14	196.988	
6,251.8	6,208.4	6,183.2	6,181.4	15.8	1.7	78.54	445.8	2,912.9	3,375.9	3,358.7	17.24	195.804	
6,272.2	6,228.8	6,200.0	6,198.2	15.8	1.7	78.56	445.1	2,913.0	3,375.9	3,358.7	17.28	195.334	
6,299.2	6,255.8	6,230.1	6,228.3	15.8	1.7	-11.43	444.0	2,913.3	3,375.5	3,360.1	15.34	219.978	
6,300.0	6,256.6	6,231.1	6,229.3	15.8	1.7	-11.43	444.0	2,913.3	3,375.4	3,360.1	15.35	219.959	
6,350.0	6,306.4	6,291.4	6,289.5	15.9	1.7	-11.47	441.5	2,913.7	3,371.8	3,356.3	15.44	218.361	
6,397.6	6,353.6	6,331.6	6,329.7	15.9	1.7	-11.56	439.8	2,913.9	3,365.1	3,349.5	15.56	216.196	
6,400.0	6,355.9	6,333.5	6,331.6	15.9	1.7	-11.57	439.7	2,914.0	3,364.6	3,349.1	15.57	216.076	
6,450.0	6,404.8	6,372.1	6,370.2	15.9	1.7	-11.74	438.0	2,914.3	3,354.3	3,338.6	15.72	213.441	
6,496.0	6,449.0	6,400.0	6,398.0	16.0	1.7	-11.95	436.7	2,914.7	3,342.0	3,326.1	15.84	210.998	
6,500.0	6,452.8	6,400.0	6,398.0	16.0	1.7	-11.97	436.7	2,914.7	3,340.8	3,325.0	15.85	210.806	
6,550.0	6,499.7	6,444.6	6,442.5	15.9	1.7	-12.29	434.7	2,915.4	3,324.2	3,308.2	15.96	208.219	
6,594.5	6,540.3	6,475.0	6,472.9	15.9	1.8	-12.63	433.3	2,916.0	3,306.9	3,290.9	16.04	206.153	
6,600.0	6,545.3	6,478.7	6,476.6	15.9	1.8	-12.68	433.1	2,916.1	3,304.6	3,288.5	16.05	205.910	
6,650.0	6,589.3	6,521.1	6,518.9	15.9	1.8	-13.18	431.1	2,917.1	3,282.0	3,265.9	16.11	203.755	
6,692.9	6,625.7	6,569.7	6,567.5	15.9	1.8	-13.72	428.7	2,918.1	3,260.2	3,244.1	16.15	201.911	
6,700.0	6,631.6	6,577.6	6,575.4	15.9	1.8	-13.82	428.3	2,918.3	3,256.4	3,240.2	16.15	201.617	
6,750.0	6,671.9	6,624.1	6,621.8	15.9	1.8	-14.60	425.9	2,919.2	3,227.8	3,211.6	16.17	199.674	
6,791.3	6,703.6	6,656.6	6,654.3	15.9	1.8	-15.36	424.2	2,919.7	3,202.0	3,185.9	16.16	198.147	
6,800.0	6,710.1	6,663.3	6,660.9	15.9	1.8	-15.54	423.9	2,919.9	3,196.4	3,180.3	16.16	197.831	
6,850.0	6,745.9	6,700.1	6,697.7	16.0	1.8	-16.69	421.9	2,920.5	3,162.5	3,146.4	16.14	195.889	
6,889.7	6,772.6	6,728.1	6,725.7	16.1	1.8	-17.79	420.4	2,921.0	3,133.9	3,117.7	16.15	194.107	
6,900.0	6,779.2	6,735.1	6,732.6	16.1	1.8	-18.10	420.1	2,921.2	3,126.3	3,110.1	16.15	193.614	
6,950.0	6,809.8	6,767.4	6,764.9	16.3	1.8	-19.86	418.2	2,921.7	3,087.8	3,071.6	16.19	190.706	
6,988.2	6,831.3	6,790.1	6,787.5	16.4	1.8	-21.49	416.9	2,922.1	3,057.1	3,040.8	16.28	187.785	
7,000.0	6,837.6	6,796.8	6,794.2	16.5	1.8	-22.05	416.5	2,922.3	3,047.3	3,031.0	16.32	186.760	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,050.0	6,862.5	6,823.4	6,820.8	16.9	1.8	-24.85	414.9	2,922.8	3,005.0	2,988.5	16.58	181.282	
7,086.6	6,878.7	6,840.9	6,838.3	17.2	1.8	-27.39	413.8	2,923.1	2,973.1	2,956.2	16.89	175.997	
7,100.0	6,884.2	6,846.9	6,844.2	17.3	1.8	-28.45	413.4	2,923.2	2,961.2	2,944.1	17.04	173.823	
7,150.0	6,902.7	6,867.1	6,864.4	17.8	1.9	-33.19	412.1	2,923.6	2,915.9	2,898.2	17.77	164.128	
7,185.0	6,913.8	6,879.2	6,876.5	18.3	1.9	-37.43	411.3	2,923.8	2,883.5	2,865.1	18.48	156.046	
7,200.0	6,918.0	6,883.9	6,881.2	18.5	1.9	-39.53	411.0	2,923.9	2,869.5	2,850.7	18.83	152.413	
7,250.0	6,929.9	6,897.3	6,894.5	19.2	1.9	-48.10	410.0	2,924.2	2,822.3	2,802.1	20.21	139.667	
7,283.4	6,936.0	6,905.6	6,902.8	19.7	1.9	-55.49	409.4	2,924.3	2,790.2	2,769.0	21.23	131.402	
7,300.0	6,938.4	6,909.3	6,906.5	20.0	1.9	-59.70	409.2	2,924.4	2,774.3	2,752.6	21.72	127.752	
7,350.0	6,943.4	6,917.4	6,914.6	20.9	1.9	-74.42	408.6	2,924.5	2,725.9	2,703.0	22.87	119.217	
7,381.9	6,944.8	6,920.1	6,917.3	21.4	1.9	-84.88	408.4	2,924.6	2,695.0	2,671.6	23.32	115.564	
7,403.7	6,945.0	6,920.8	6,918.0	21.8	1.9	-92.13	408.4	2,924.6	2,673.7	2,650.0	23.69	112.843	
7,480.3	6,944.3	6,921.7	6,918.9	23.3	1.9	-92.21	408.3	2,924.6	2,599.4	2,574.2	25.18	103.223	
7,500.0	6,944.1	6,921.9	6,919.1	23.7	1.9	-92.23	408.3	2,924.6	2,580.3	2,554.7	25.57	100.930	
7,578.7	6,943.4	6,922.8	6,920.0	25.4	1.9	-92.32	408.2	2,924.6	2,504.0	2,476.8	27.21	92.019	
7,600.0	6,943.2	6,923.1	6,920.2	25.8	1.9	-92.34	408.2	2,924.6	2,483.5	2,455.8	27.66	89.795	
7,677.1	6,942.5	6,924.0	6,921.1	27.5	1.9	-92.42	408.1	2,924.6	2,408.9	2,379.6	29.37	82.028	
7,700.0	6,942.3	6,924.2	6,921.3	28.0	1.9	-92.44	408.1	2,924.7	2,386.9	2,357.0	29.87	79.899	
7,775.6	6,941.6	6,925.1	6,922.2	29.8	1.9	-92.51	408.0	2,924.7	2,314.1	2,282.5	31.63	73.166	
7,800.0	6,941.4	6,925.3	6,922.4	30.3	1.9	-92.54	408.0	2,924.7	2,290.6	2,258.5	32.20	71.149	
7,874.0	6,940.7	6,926.1	6,923.2	32.1	1.9	-92.61	408.0	2,924.7	2,219.6	2,185.7	33.97	65.342	
7,900.0	6,940.5	6,926.4	6,923.5	32.7	1.9	-92.64	407.9	2,924.7	2,194.7	2,160.1	34.59	63.445	
7,972.4	6,939.8	6,927.2	6,924.3	34.5	1.9	-92.71	407.9	2,924.7	2,125.5	2,089.1	36.37	58.437	
8,000.0	6,939.6	6,927.5	6,924.6	35.2	1.9	-92.73	407.9	2,924.7	2,099.2	2,062.1	37.05	56.658	
8,070.8	6,938.9	6,928.2	6,925.3	37.0	1.9	-92.80	407.8	2,924.7	2,031.7	1,992.9	38.83	52.330	
8,100.0	6,938.7	6,928.5	6,925.6	37.7	1.9	-92.83	407.8	2,924.7	2,004.1	1,964.5	39.56	50.664	
8,169.3	6,938.0	6,929.2	6,926.3	39.5	1.9	-92.89	407.7	2,924.7	1,938.5	1,897.1	41.32	46.914	
8,200.0	6,937.7	6,929.5	6,926.7	40.3	1.9	-92.92	407.7	2,924.7	1,909.4	1,867.3	42.10	45.354	
8,267.7	6,937.1	6,930.2	6,927.3	42.0	1.9	-92.98	407.7	2,924.8	1,845.7	1,801.9	43.85	42.095	
8,300.0	6,936.8	6,930.5	6,927.7	42.8	1.9	-93.01	407.6	2,924.8	1,815.4	1,770.7	44.68	40.633	
8,366.1	6,936.2	6,931.2	6,928.3	44.6	1.9	-93.07	407.6	2,924.8	1,753.6	1,707.2	46.40	37.792	
8,400.0	6,935.9	6,931.5	6,928.6	45.5	1.9	-93.10	407.6	2,924.8	1,722.0	1,674.8	47.28	36.420	
8,464.5	6,935.3	6,932.2	6,929.3	47.2	1.9	-93.16	407.5	2,924.8	1,662.2	1,613.2	48.98	33.937	
8,500.0	6,935.0	6,932.5	6,929.6	48.1	1.9	-93.19	407.5	2,924.8	1,629.5	1,579.6	49.91	32.649	
8,563.0	6,934.5	6,933.1	6,930.2	49.8	1.9	-93.24	407.5	2,924.8	1,571.6	1,520.0	51.57	30.473	
8,600.0	6,934.1	6,933.5	6,930.6	50.7	1.9	-93.27	407.4	2,924.8	1,537.8	1,485.3	52.55	29.262	
8,661.4	6,933.6	6,934.0	6,931.1	52.4	1.9	-93.33	407.4	2,924.8	1,482.1	1,427.9	54.19	27.351	
8,700.0	6,933.2	6,934.4	6,931.5	53.4	1.9	-93.36	407.4	2,924.8	1,447.3	1,392.0	55.21	26.212	
8,759.8	6,932.7	6,935.0	6,932.1	55.0	1.9	-93.41	407.3	2,924.8	1,393.7	1,336.9	56.81	24.531	
8,800.0	6,932.3	6,935.3	6,932.4	56.1	1.9	-93.44	407.3	2,924.8	1,358.0	1,300.2	57.89	23.460	
8,858.2	6,931.8	6,935.9	6,933.0	57.7	1.9	-93.49	407.2	2,924.9	1,306.8	1,247.3	59.45	21.980	
8,900.0	6,931.4	6,936.2	6,933.3	58.8	1.9	-93.52	407.2	2,924.9	1,270.4	1,209.9	60.57	20.973	
8,956.7	6,930.9	6,936.7	6,933.8	60.3	1.9	-93.57	407.2	2,924.9	1,221.6	1,159.5	62.10	19.671	
9,000.0	6,930.5	6,937.1	6,934.2	61.5	1.9	-93.61	407.2	2,924.9	1,184.8	1,121.5	63.27	18.726	
9,055.1	6,930.0	6,937.6	6,934.7	63.0	1.9	-93.65	407.1	2,924.9	1,138.6	1,073.8	64.76	17.582	
9,100.0	6,929.6	6,938.0	6,935.1	64.2	1.9	-93.68	407.1	2,924.9	1,101.6	1,035.6	65.97	16.697	
9,153.5	6,929.1	6,938.5	6,935.6	65.6	1.9	-93.73	407.1	2,924.9	1,058.2	990.8	67.43	15.694	
9,200.0	6,928.7	6,938.9	6,936.0	66.9	1.9	-93.76	407.0	2,924.9	1,021.3	952.7	68.69	14.870	
9,251.9	6,928.2	6,939.3	6,936.4	68.3	1.9	-93.80	407.0	2,924.9	981.1	911.0	70.10	13.996	
9,300.0	6,927.8	6,939.7	6,936.8	69.6	1.9	-93.84	407.0	2,924.9	944.9	873.5	71.41	13.233	
9,350.4	6,927.3	6,940.1	6,937.2	71.0	1.9	-93.88	406.9	2,924.9	908.1	835.4	72.78	12.478	
9,400.0	6,926.9	6,940.6	6,937.6	72.4	1.9	-93.92	406.9	2,924.9	873.2	799.1	74.13	11.780	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,926.4	6,941.0	6,938.0	73.7	1.9	-93.95	406.9	2,924.9	840.4	764.9	75.46	11.136	
9,500.0	6,926.0	6,941.4	6,938.5	75.1	1.9	-93.99	406.8	2,924.9	807.6	730.8	76.86	10.508	
9,547.2	6,925.5	6,941.8	6,938.8	76.4	1.9	-94.02	406.8	2,924.9	779.2	701.0	78.15	9.970	
9,600.0	6,925.1	6,942.2	6,939.3	77.9	1.9	-94.06	406.8	2,925.0	749.6	670.0	79.59	9.418	
9,645.6	6,924.6	6,942.6	6,939.6	79.1	1.9	-94.10	406.7	2,925.0	726.2	645.4	80.84	8.983	
9,700.0	6,924.1	6,943.0	6,940.1	80.6	1.9	-94.14	406.7	2,925.0	701.2	618.9	82.33	8.517	
9,744.1	6,923.7	6,943.3	6,940.4	81.8	1.9	-94.17	406.7	2,925.0	683.4	599.9	83.54	8.181	
9,800.0	6,923.2	6,943.8	6,940.9	83.4	1.9	-94.21	406.7	2,925.0	664.4	579.3	85.07	7.809	
9,842.5	6,922.9	6,944.1	6,941.2	84.5	1.9	-94.24	406.6	2,925.0	652.7	566.5	86.24	7.569	
9,900.0	6,922.3	6,944.6	6,941.6	86.1	1.9	-94.28	406.6	2,925.0	641.1	553.3	87.82	7.301	
9,940.9	6,922.0	6,944.9	6,941.9	87.2	1.9	-94.30	406.6	2,925.0	636.0	547.0	88.94	7.150	
10,000.0	6,921.4	6,945.3	6,942.4	88.9	1.9	-94.35	406.5	2,925.0	633.1	542.5	90.56	6.990	
10,001.5	6,921.4	6,945.3	6,942.4	88.9	1.9	-94.35	406.5	2,925.0	633.1	542.5	90.61	6.987 CC, ES	
10,039.3	6,921.1	6,945.6	6,942.7	90.0	1.9	-94.37	406.5	2,925.0	634.2	542.5	91.65	6.920	
10,100.0	6,920.5	6,946.1	6,943.1	91.6	1.9	-94.41	406.5	2,925.0	640.7	547.4	93.32	6.866	
10,137.8	6,920.2	6,946.3	6,943.4	92.7	1.9	-94.44	406.5	2,925.0	647.6	553.2	94.35	6.863 SF	
10,200.0	6,919.6	6,946.8	6,943.9	94.4	1.9	-94.48	406.4	2,925.0	663.4	567.4	96.07	6.906	
10,236.2	6,919.3	6,947.1	6,944.1	95.4	1.9	-94.50	406.4	2,925.0	675.2	578.1	97.06	6.956	
10,300.0	6,918.7	6,947.5	6,944.6	97.2	1.9	-94.55	406.4	2,925.0	699.9	601.1	98.82	7.082	
10,334.6	6,918.4	6,947.8	6,944.8	98.1	1.9	-94.57	406.3	2,925.0	715.4	615.6	99.78	7.170	
10,400.0	6,917.8	6,948.2	6,945.3	99.9	1.9	-94.61	406.3	2,925.1	748.0	646.5	101.58	7.364	
10,433.0	6,917.5	6,948.5	6,945.5	100.9	1.9	-94.63	406.3	2,925.1	766.2	663.7	102.49	7.475	
10,500.0	6,916.9	6,948.9	6,946.0	102.7	1.9	-94.67	406.3	2,925.1	805.8	701.4	104.34	7.723	
10,531.5	6,916.6	6,949.2	6,946.2	103.6	1.9	-94.69	406.2	2,925.1	825.6	720.4	105.20	7.848	
10,600.0	6,916.0	6,949.6	6,946.7	105.5	1.9	-94.74	406.2	2,925.1	871.2	764.1	107.10	8.135	
10,629.9	6,915.7	6,949.9	6,946.9	106.3	1.9	-94.76	406.2	2,925.1	892.0	784.1	107.92	8.265	
10,700.0	6,915.1	6,950.3	6,947.4	108.3	1.9	-94.80	406.2	2,925.1	942.7	832.8	109.86	8.581	
10,728.3	6,914.8	6,950.5	6,947.6	109.1	1.9	-94.82	406.1	2,925.1	963.9	853.2	110.64	8.712	
10,800.0	6,914.2	6,950.0	6,947.1	111.0	1.9	-94.77	406.2	2,925.1	1,019.0	906.4	112.63	9.047	
10,826.7	6,913.9	6,950.0	6,947.1	111.8	1.9	-94.77	406.2	2,925.1	1,040.1	926.7	113.37	9.174	
10,900.0	6,913.3	6,950.0	6,947.1	113.8	1.9	-94.77	406.2	2,925.1	1,099.1	983.7	115.40	9.524	
10,925.2	6,913.1	6,950.0	6,947.1	114.5	1.9	-94.77	406.2	2,925.1	1,119.8	1,003.7	116.10	9.645	
11,000.0	6,912.4	6,950.0	6,947.1	116.6	1.9	-94.77	406.2	2,925.1	1,182.3	1,064.1	118.17	10.005	
11,023.6	6,912.2	6,950.0	6,947.1	117.3	1.9	-94.77	406.2	2,925.1	1,202.2	1,083.4	118.82	10.118	
11,100.0	6,911.5	6,950.0	6,947.1	119.4	1.9	-94.77	406.2	2,925.1	1,267.8	1,146.9	120.94	10.483	
11,122.0	6,911.3	6,950.0	6,947.1	120.0	1.9	-94.77	406.2	2,925.1	1,287.0	1,165.4	121.55	10.588	
11,200.0	6,910.6	6,950.0	6,947.1	122.2	1.9	-94.77	406.2	2,925.1	1,355.4	1,231.7	123.72	10.956	
11,220.4	6,910.4	6,950.0	6,947.1	122.7	1.9	-94.77	406.2	2,925.1	1,373.5	1,249.2	124.29	11.051	
11,300.0	6,909.7	6,950.0	6,947.1	125.0	1.9	-94.77	406.2	2,925.1	1,444.6	1,318.1	126.49	11.420	
11,318.9	6,909.5	6,950.0	6,947.1	125.5	1.9	-94.77	406.2	2,925.1	1,461.6	1,334.5	127.02	11.507	
11,400.0	6,908.8	6,950.0	6,947.1	127.7	1.9	-94.77	406.2	2,925.1	1,535.1	1,405.8	129.27	11.875	
11,417.3	6,908.6	6,950.0	6,947.1	128.2	1.9	-94.77	406.2	2,925.1	1,550.9	1,421.1	129.75	11.953	
11,500.0	6,907.9	6,950.0	6,947.1	130.5	1.9	-94.77	406.2	2,925.1	1,626.7	1,494.7	132.05	12.319	
11,515.7	6,907.7	6,950.0	6,947.1	131.0	1.9	-94.77	406.2	2,925.1	1,641.2	1,508.7	132.48	12.388	
11,600.0	6,907.0	6,950.0	6,947.1	133.3	1.9	-94.77	406.2	2,925.1	1,719.3	1,584.4	134.83	12.752	
11,614.1	6,906.8	6,950.0	6,947.1	133.7	1.9	-94.77	406.2	2,925.1	1,732.4	1,597.2	135.22	12.812	
11,700.0	6,906.0	6,950.0	6,947.1	136.1	1.9	-94.77	406.2	2,925.1	1,812.6	1,675.0	137.61	13.173	
11,712.6	6,905.9	6,950.0	6,947.1	136.5	1.9	-94.77	406.2	2,925.1	1,824.4	1,686.4	137.96	13.225	
11,800.0	6,905.1	6,950.0	6,947.1	138.9	1.9	-94.77	406.2	2,925.1	1,906.6	1,766.3	140.39	13.581	
11,811.0	6,905.0	6,950.0	6,947.1	139.2	1.9	-94.77	406.2	2,925.1	1,917.0	1,776.3	140.69	13.626	
11,900.0	6,904.2	6,950.0	6,947.1	141.7	1.9	-94.77	406.2	2,925.1	2,001.2	1,858.1	143.17	13.978	
11,909.4	6,904.2	6,950.0	6,947.1	141.9	1.9	-94.77	406.2	2,925.1	2,010.2	1,866.8	143.43	14.015	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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)	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
12,000.0	6,903.3	6,950.0	6,947.1	144.5	1.9	-94.77	406.2	2,925.1	2,096.3	1,950.4	145.95	14.364	
12,007.8	6,903.3	6,950.0	6,947.1	144.7	1.9	-94.77	406.2	2,925.1	2,103.8	1,957.7	146.17	14.393	
12,100.0	6,902.4	6,950.0	6,947.1	147.3	1.9	-94.77	406.2	2,925.1	2,191.9	2,043.2	148.73	14.737	
12,106.3	6,902.4	6,950.0	6,947.1	147.4	1.9	-94.77	406.2	2,925.1	2,197.9	2,049.0	148.91	14.760	
12,200.0	6,901.5	6,950.0	6,947.1	150.1	1.9	-94.77	406.2	2,925.1	2,287.8	2,136.3	151.51	15.100	
12,204.7	6,901.5	6,950.0	6,947.1	150.2	1.9	-94.77	406.2	2,925.1	2,292.3	2,140.7	151.65	15.116	
12,300.0	6,900.6	6,950.0	6,947.1	152.9	1.9	-94.77	406.2	2,925.1	2,384.1	2,229.8	154.30	15.451	
12,303.1	6,900.6	6,950.0	6,947.1	152.9	1.9	-94.77	406.2	2,925.1	2,387.1	2,232.7	154.39	15.462	
12,400.0	6,899.7	6,950.0	6,947.1	155.6	1.9	-94.77	406.2	2,925.1	2,480.6	2,323.5	157.08	15.792	
12,401.5	6,899.7	6,950.0	6,947.1	155.7	1.9	-94.77	406.2	2,925.1	2,482.1	2,325.0	157.13	15.797	
12,500.0	6,898.8	6,950.0	6,947.1	158.4	1.9	-94.77	406.2	2,925.1	2,577.4	2,417.6	159.87	16.122	
12,598.4	6,897.9	6,950.0	6,947.1	161.2	1.9	-94.77	406.2	2,925.1	2,672.9	2,510.3	162.61	16.438	
12,600.0	6,897.9	6,950.0	6,947.1	161.2	1.9	-94.77	406.2	2,925.1	2,674.5	2,511.8	162.65	16.443	
12,696.8	6,897.0	6,950.0	6,947.1	163.9	1.9	-94.77	406.2	2,925.1	2,768.6	2,603.3	165.35	16.744	
12,700.0	6,897.0	6,950.0	6,947.1	164.0	1.9	-94.77	406.2	2,925.1	2,771.7	2,606.3	165.44	16.754	
12,795.2	6,896.1	6,950.0	6,947.1	166.7	1.9	-94.77	406.2	2,925.1	2,864.5	2,696.5	168.09	17.041	
12,800.0	6,896.1	6,950.0	6,947.1	166.8	1.9	-94.77	406.2	2,925.1	2,869.2	2,701.0	168.23	17.056	
12,893.7	6,895.3	6,950.0	6,947.1	169.4	1.9	-94.77	406.2	2,925.1	2,960.6	2,789.8	170.84	17.330	
12,900.0	6,895.2	6,950.0	6,947.1	169.6	1.9	-94.77	406.2	2,925.1	2,966.8	2,795.8	171.01	17.348	
12,992.1	6,894.4	6,950.0	6,947.1	172.2	1.9	-94.77	406.2	2,925.1	3,056.8	2,883.3	173.58	17.611	
13,000.0	6,894.3	6,950.0	6,947.1	172.4	1.9	-94.77	406.2	2,925.1	3,064.6	2,890.8	173.80	17.633	
13,090.5	6,893.5	6,950.0	6,947.1	175.0	1.9	-94.77	406.2	2,925.1	3,153.2	2,976.9	176.32	17.883	
13,100.0	6,893.4	6,950.0	6,947.1	175.2	1.9	-94.77	406.2	2,925.1	3,162.5	2,985.9	176.59	17.909	
13,188.9	6,892.6	6,950.0	6,947.1	177.7	1.9	-94.77	406.2	2,925.1	3,249.7	3,070.6	179.07	18.148	
13,200.0	6,892.5	6,950.0	6,947.1	178.0	1.9	-94.77	406.2	2,925.1	3,260.5	3,081.1	179.38	18.177	
13,287.4	6,891.7	6,950.0	6,947.1	180.5	1.9	-94.77	406.2	2,925.1	3,346.3	3,164.5	181.81	18.405	
13,300.0	6,891.6	6,950.0	6,947.1	180.8	1.9	-94.77	406.2	2,925.1	3,358.7	3,176.5	182.16	18.438	
13,385.8	6,890.8	6,950.0	6,947.1	183.2	1.9	-94.77	406.2	2,925.1	3,443.0	3,258.4	184.56	18.655	
13,400.0	6,890.7	6,950.0	6,947.1	183.6	1.9	-94.77	406.2	2,925.1	3,456.9	3,272.0	184.95	18.691	
13,484.2	6,889.9	6,950.0	6,947.1	186.0	1.9	-94.77	406.2	2,925.1	3,539.8	3,352.5	187.30	18.899	
13,500.0	6,889.8	6,950.0	6,947.1	186.4	1.9	-94.77	406.2	2,925.1	3,555.3	3,367.5	187.74	18.937	
13,582.6	6,889.0	6,950.0	6,947.1	188.7	1.9	-94.77	406.2	2,925.1	3,636.6	3,446.6	190.05	19.135	
13,600.0	6,888.9	6,950.0	6,947.1	189.2	1.9	-94.77	406.2	2,925.1	3,653.7	3,463.2	190.53	19.176	
13,681.1	6,888.1	6,950.0	6,947.1	191.5	1.9	-94.77	406.2	2,925.1	3,733.6	3,540.8	192.79	19.366	
13,700.0	6,888.0	6,950.0	6,947.1	192.0	1.9	-94.77	406.2	2,925.1	3,752.3	3,558.9	193.32	19.409	
13,779.5	6,887.3	6,950.0	6,947.1	194.2	1.9	-94.77	406.2	2,925.1	3,830.6	3,635.1	195.54	19.590	
13,800.0	6,887.1	6,950.0	6,947.1	194.8	1.9	-94.77	406.2	2,925.1	3,850.9	3,654.7	196.11	19.636	
13,877.9	6,886.4	6,950.0	6,947.1	197.0	1.9	-94.77	406.2	2,925.1	3,927.7	3,729.5	198.29	19.808	
13,900.0	6,886.2	6,950.0	6,947.1	197.6	1.9	-94.77	406.2	2,925.1	3,949.5	3,750.6	198.90	19.857	
13,976.3	6,885.5	6,950.0	6,947.1	199.7	1.9	-94.77	406.2	2,925.1	4,024.9	3,823.9	201.03	20.021	
14,000.0	6,885.3	6,950.0	6,947.1	200.4	1.9	-94.78	406.2	2,925.1	4,048.3	3,846.6	201.69	20.071	
14,074.8	6,884.6	6,950.0	6,947.1	202.5	1.9	-94.78	406.2	2,925.1	4,122.1	3,918.4	203.78	20.228	
14,100.0	6,884.4	6,950.0	6,947.1	203.2	1.9	-94.78	406.2	2,925.1	4,147.1	3,942.6	204.48	20.281	
14,173.2	6,883.7	6,950.0	6,947.1	205.3	1.9	-94.78	406.2	2,925.1	4,219.4	4,012.9	206.53	20.430	
14,200.0	6,883.5	6,950.0	6,947.1	206.0	1.9	-94.78	406.2	2,925.1	4,245.9	4,038.7	207.28	20.484	
14,271.6	6,882.8	6,950.0	6,947.1	208.0	1.9	-94.78	406.2	2,925.1	4,316.8	4,107.5	209.28	20.627	
14,300.0	6,882.6	6,950.0	6,947.1	208.8	1.9	-94.78	406.2	2,925.1	4,344.8	4,134.8	210.07	20.683	
14,370.0	6,881.9	6,950.0	6,947.1	210.8	1.9	-94.78	406.2	2,925.1	4,414.2	4,202.1	212.02	20.819	
14,400.0	6,881.7	6,950.0	6,947.1	211.6	1.9	-94.78	406.2	2,925.1	4,443.8	4,230.9	212.86	20.877	
14,468.5	6,881.0	6,950.0	6,947.1	213.5	1.9	-94.78	406.2	2,925.1	4,511.6	4,296.8	214.77	21.007	
14,500.0	6,880.8	6,950.0	6,947.1	214.4	1.9	-94.78	406.2	2,925.1	4,542.8	4,327.1	215.65	21.066	
14,566.9	6,880.2	6,950.0	6,947.1	216.3	1.9	-94.78	406.2	2,925.1	4,609.1	4,391.5	217.52	21.189	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,584.2	6,880.0	6,950.0	6,947.1	216.8	1.9	-94.78	406.2	2,925.1	4,626.1	4,408.1	218.00	21.221	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	95.37	-338.5	3,603.1	3,619.0				
98.4	98.4	68.4	68.4	0.1	0.0	95.37	-338.5	3,603.1	3,619.0	3,618.8	0.12	N/A	
100.0	100.0	69.9	69.9	0.1	0.0	95.37	-338.5	3,603.1	3,619.0	3,618.8	0.12	N/A	
196.8	196.8	160.9	160.9	0.3	0.1	95.37	-338.5	3,603.2	3,619.1	3,618.7	0.45	8,000.942	
200.0	200.0	163.8	163.8	0.3	0.2	95.37	-338.5	3,603.2	3,619.1	3,618.7	0.46	7,796.316	
295.3	295.3	277.3	277.3	0.5	0.2	95.37	-338.5	3,603.4	3,619.3	3,618.5	0.75	4,856.438	
300.0	300.0	283.8	283.8	0.5	0.2	95.37	-338.4	3,603.4	3,619.2	3,618.5	0.76	4,784.018	
393.7	393.7	451.6	451.5	0.7	0.3	95.36	-337.8	3,601.1	3,617.9	3,616.8	1.08	3,347.722	
400.0	400.0	460.2	460.2	0.8	0.3	95.36	-337.8	3,600.9	3,617.7	3,616.6	1.10	3,287.051	
492.1	492.1	559.1	559.1	1.0	0.4	95.36	-337.7	3,598.3	3,615.3	3,613.9	1.37	2,644.573	
500.0	500.0	566.5	566.4	1.0	0.4	95.36	-337.7	3,598.1	3,615.1	3,613.7	1.39	2,602.818	
590.5	590.5	662.0	661.9	1.2	0.5	95.37	-337.7	3,595.6	3,612.7	3,611.1	1.64	2,199.642	
600.0	600.0	672.7	672.6	1.2	0.5	95.37	-337.7	3,595.3	3,612.5	3,610.8	1.67	2,164.419	
689.0	689.0	781.2	781.0	1.4	0.5	95.37	-337.7	3,592.0	3,609.8	3,607.9	1.92	1,879.711	
700.0	700.0	794.9	794.8	1.4	0.5	95.37	-337.7	3,591.6	3,609.5	3,607.5	1.95	1,849.486	
787.4	787.4	882.2	882.0	1.6	0.6	95.37	-337.6	3,588.6	3,606.5	3,604.3	2.19	1,650.147	
800.0	800.0	894.7	894.5	1.7	0.6	95.37	-337.5	3,588.2	3,606.1	3,603.8	2.22	1,624.948	
885.8	885.8	983.3	983.0	1.9	0.6	95.38	-337.4	3,585.2	3,603.1	3,600.7	2.45	1,471.906	
900.0	900.0	997.9	997.7	1.9	0.6	95.38	-337.3	3,584.7	3,602.7	3,600.2	2.49	1,449.339	
984.2	984.2	1,088.8	1,088.5	2.1	0.7	95.38	-337.3	3,581.4	3,599.7	3,597.0	2.71	1,328.096	
1,000.0	1,000.0	1,105.0	1,104.6	2.1	0.7	95.38	-337.3	3,580.8	3,599.1	3,596.3	2.75	1,307.805	
1,082.7	1,082.7	1,181.2	1,180.8	2.3	0.7	95.39	-337.6	3,578.1	3,596.1	3,593.2	2.97	1,212.260	
1,100.0	1,100.0	1,200.0	1,199.6	2.3	0.7	95.39	-337.7	3,577.4	3,595.5	3,592.5	3.01	1,193.546	
1,181.1	1,181.1	1,279.9	1,279.4	2.5	0.7	95.40	-337.9	3,574.6	3,592.7	3,589.5	3.22	1,115.288	
1,200.0	1,200.0	1,299.2	1,298.7	2.6	0.8	95.40	-337.8	3,573.9	3,592.1	3,588.8	3.27	1,098.404	
1,279.5	1,279.5	1,366.8	1,366.3	2.7	0.8	95.40	-337.6	3,571.7	3,589.4	3,585.9	3.47	1,034.112	
1,300.0	1,300.0	1,384.2	1,383.7	2.8	0.8	95.40	-337.7	3,571.1	3,588.8	3,585.3	3.52	1,018.760	
1,377.9	1,377.9	1,453.6	1,453.1	3.0	0.8	95.41	-338.2	3,569.0	3,586.5	3,582.8	3.72	963.584	
1,400.0	1,400.0	1,473.6	1,473.0	3.0	0.8	95.42	-338.4	3,568.5	3,585.9	3,582.1	3.78	948.991	
1,476.4	1,476.4	1,541.9	1,541.3	3.2	0.8	95.43	-338.8	3,566.6	3,583.8	3,579.8	3.97	901.925	
1,500.0	1,500.0	1,562.9	1,562.3	3.2	0.9	95.43	-338.9	3,566.0	3,583.2	3,579.2	4.03	888.340	
1,574.8	1,574.8	1,634.5	1,633.9	3.4	0.9	95.44	-339.2	3,564.3	3,581.4	3,577.2	4.23	847.606	
1,600.0	1,600.0	1,660.8	1,660.1	3.5	0.9	95.44	-339.3	3,563.6	3,580.8	3,576.5	4.29	834.581	
1,650.0	1,650.0	1,711.4	1,710.7	3.6	0.9	95.44	-339.5	3,562.3	3,579.6	3,575.1	4.42	809.972	
1,673.2	1,673.2	1,732.8	1,732.1	3.6	0.9	-144.98	-339.6	3,561.8	3,579.1	3,574.5	4.54	788.243	
1,700.0	1,700.0	1,757.5	1,756.8	3.7	0.9	-144.98	-339.7	3,561.2	3,578.7	3,574.1	4.60	777.379	
1,729.6	1,729.6	1,784.8	1,784.1	3.7	0.9	-144.98	-339.8	3,560.6	3,578.6	3,573.9	4.67	766.625	
1,771.6	1,771.6	1,820.4	1,819.7	3.8	1.0	-144.99	-340.0	3,559.8	3,578.9	3,574.1	4.76	752.238	
1,800.0	1,799.9	1,843.0	1,842.3	3.9	1.0	-144.99	-340.0	3,559.3	3,579.4	3,574.6	4.82	743.011	
1,870.1	1,869.9	1,900.0	1,899.3	4.0	1.0	-145.00	-339.7	3,558.3	3,581.9	3,576.9	4.97	720.604	
1,900.0	1,899.7	1,925.3	1,924.6	4.1	1.0	-145.01	-339.5	3,558.0	3,583.5	3,578.4	5.04	711.454	
1,968.5	1,967.8	1,986.2	1,985.6	4.2	1.0	-145.01	-338.9	3,557.2	3,588.1	3,582.9	5.20	690.648	
2,000.0	1,999.1	2,017.3	2,016.6	4.3	1.0	-145.02	-338.6	3,556.9	3,590.7	3,585.5	5.27	681.469	
2,066.9	2,065.5	2,089.6	2,088.9	4.4	1.1	-145.04	-338.0	3,556.0	3,597.2	3,591.7	5.43	661.916	
2,100.0	2,098.2	2,118.1	2,117.4	4.5	1.1	-145.04	-337.9	3,555.6	3,600.8	3,595.3	5.51	653.041	
2,165.3	2,162.6	2,168.4	2,167.7	4.7	1.1	-145.03	-337.6	3,555.1	3,609.1	3,603.5	5.68	635.643	
2,200.0	2,196.6	2,200.0	2,199.3	4.7	1.1	-145.03	-337.4	3,554.8	3,614.2	3,608.4	5.77	626.712	
2,249.9	2,245.5	2,235.5	2,234.8	4.9	1.1	-145.00	-337.2	3,554.6	3,622.1	3,616.2	5.89	614.705	
2,263.8	2,259.1	2,246.9	2,246.2	4.9	1.1	-145.02	-337.2	3,554.6	3,624.4	3,618.5	5.93	611.389	
2,300.0	2,294.5	2,276.6	2,275.9	5.0	1.1	-145.08	-337.2	3,554.5	3,630.5	3,624.5	6.02	602.955	
2,362.2	2,355.4	2,325.8	2,325.1	5.2	1.1	-145.17	-337.4	3,554.4	3,641.1	3,635.0	6.18	588.723	
2,400.0	2,392.3	2,354.8	2,354.1	5.4	1.1	-145.23	-337.5	3,554.5	3,647.7	3,641.4	6.28	580.737	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,401.7	2,401.0	5.6	1.1	-145.31	-337.6	3,554.7	3,658.4	3,652.0	6.44	568.044	
2,500.0	2,490.2	2,442.8	2,442.1	5.7	1.1	-145.39	-337.7	3,555.0	3,665.5	3,658.9	6.55	559.815	
2,559.0	2,547.9	2,504.3	2,503.6	5.9	1.1	-145.50	-337.9	3,555.3	3,675.9	3,669.2	6.71	547.750	
2,600.0	2,588.0	2,546.5	2,545.8	6.1	1.1	-145.58	-338.1	3,555.4	3,683.2	3,676.4	6.82	539.664	
2,657.5	2,644.2	2,605.1	2,604.4	6.3	1.1	-145.68	-338.3	3,555.6	3,693.3	3,686.3	6.99	528.454	
2,700.0	2,685.8	2,644.5	2,643.7	6.4	1.1	-145.75	-338.4	3,555.8	3,700.8	3,693.7	7.11	520.480	
2,755.9	2,740.5	2,696.2	2,695.5	6.6	1.1	-145.85	-338.6	3,556.0	3,710.8	3,703.5	7.27	510.213	
2,800.0	2,783.6	2,736.1	2,735.4	6.8	1.1	-145.92	-338.7	3,556.2	3,718.6	3,711.2	7.40	502.397	
2,854.3	2,836.7	2,785.2	2,784.5	7.0	1.1	-146.01	-338.8	3,556.5	3,728.4	3,720.8	7.56	492.956	
2,900.0	2,881.4	2,830.9	2,830.2	7.2	1.1	-146.09	-338.9	3,556.8	3,736.6	3,728.9	7.70	485.305	
2,952.7	2,933.0	2,886.6	2,885.9	7.4	1.1	-146.18	-339.3	3,557.1	3,746.1	3,738.2	7.86	476.646	
3,000.0	2,979.2	2,930.5	2,929.8	7.6	1.1	-146.26	-339.6	3,557.3	3,754.6	3,746.6	8.00	469.189	
3,051.2	3,029.3	2,975.7	2,975.0	7.8	1.1	-146.33	-339.8	3,557.6	3,763.8	3,755.7	8.16	461.312	
3,100.0	3,077.1	3,020.6	3,019.9	8.0	1.2	-146.41	-339.9	3,558.0	3,772.7	3,764.4	8.31	454.059	
3,149.6	3,125.6	3,068.5	3,067.8	8.2	1.2	-146.49	-340.1	3,558.3	3,781.8	3,773.3	8.46	446.836	
3,200.0	3,174.9	3,116.4	3,115.6	8.4	1.2	-146.58	-340.2	3,558.7	3,791.0	3,782.3	8.62	439.791	
3,248.0	3,221.8	3,160.5	3,159.7	8.6	1.2	-146.65	-340.2	3,559.1	3,799.8	3,791.0	8.77	433.288	
3,300.0	3,272.7	3,200.0	3,199.3	8.9	1.2	-146.73	-340.1	3,559.5	3,809.4	3,800.4	8.93	426.529	
3,346.4	3,318.1	3,244.6	3,243.9	9.0	1.2	-146.81	-339.8	3,560.0	3,818.0	3,808.9	9.08	420.499	
3,400.0	3,370.5	3,287.7	3,287.0	9.3	1.2	-146.89	-339.6	3,560.6	3,828.1	3,818.9	9.25	413.848	
3,444.9	3,414.4	3,325.9	3,325.1	9.5	1.2	-146.96	-339.3	3,561.2	3,836.7	3,827.3	9.39	408.406	
3,500.0	3,468.3	3,374.0	3,373.3	9.7	1.2	-147.05	-339.0	3,562.1	3,847.3	3,837.7	9.57	401.945	
3,543.3	3,510.7	3,417.7	3,416.9	9.9	1.2	-147.13	-338.6	3,562.9	3,855.6	3,845.9	9.71	397.005	
3,600.0	3,566.1	3,491.5	3,490.7	10.1	1.2	-147.27	-337.7	3,564.0	3,866.5	3,856.6	9.90	390.746	
3,641.7	3,606.9	3,543.3	3,542.5	10.3	1.2	-147.37	-336.9	3,564.6	3,874.3	3,864.2	10.03	386.268	
3,700.0	3,664.0	3,612.4	3,611.6	10.6	1.2	-147.50	-335.8	3,565.2	3,885.0	3,874.8	10.22	380.190	
3,740.1	3,703.2	3,653.3	3,652.4	10.7	1.2	-147.58	-335.2	3,565.5	3,892.3	3,882.0	10.35	376.092	
3,800.0	3,761.8	3,711.2	3,710.4	11.0	1.2	-147.69	-334.2	3,565.9	3,903.2	3,892.7	10.54	370.163	
3,837.4	3,798.3	3,741.3	3,740.5	11.2	1.2	-147.75	-333.7	3,566.1	3,910.1	3,899.4	10.67	366.566	
3,838.6	3,799.5	3,742.3	3,741.5	11.2	1.2	-147.75	-333.7	3,566.1	3,910.3	3,899.7	10.67	366.477	
3,900.0	3,859.7	3,800.0	3,799.2	11.4	1.2	-147.97	-332.7	3,566.7	3,921.2	3,910.4	10.83	362.001	
3,937.0	3,896.1	3,819.1	3,818.3	11.5	1.2	-148.07	-332.4	3,566.9	3,927.3	3,916.4	10.91	359.862	
4,000.0	3,958.3	3,864.1	3,863.2	11.7	1.3	-148.24	-331.7	3,567.6	3,937.0	3,926.0	11.05	356.188	
4,035.4	3,993.3	3,900.0	3,899.1	11.8	1.3	-148.34	-331.3	3,568.3	3,942.1	3,931.0	11.13	354.244	
4,100.0	4,057.4	3,946.5	3,945.6	12.0	1.3	-148.48	-330.6	3,569.3	3,950.5	3,939.2	11.26	350.802	
4,133.8	4,091.0	3,978.1	3,977.3	12.1	1.3	-148.56	-330.1	3,570.0	3,954.5	3,943.1	11.33	349.121	
4,200.0	4,156.8	4,050.3	4,049.4	12.2	1.3	-148.71	-328.6	3,571.6	3,961.2	3,949.8	11.46	345.799	
4,232.3	4,189.0	4,088.3	4,087.3	12.3	1.3	-148.77	-327.6	3,572.4	3,964.0	3,952.5	11.51	344.298	
4,300.0	4,256.6	4,182.3	4,181.3	12.4	1.3	-148.89	-325.4	3,573.9	3,968.5	3,956.9	11.64	341.016	
4,330.7	4,287.3	4,216.8	4,215.8	12.5	1.3	-148.93	-324.8	3,574.3	3,970.0	3,958.3	11.69	339.636	
4,400.0	4,356.6	4,280.7	4,279.7	12.6	1.3	-148.98	-323.8	3,575.1	3,972.3	3,960.5	11.81	336.479	
4,429.1	4,385.7	4,300.0	4,299.0	12.6	1.3	-148.99	-323.6	3,575.4	3,972.8	3,961.0	11.85	335.215	
4,437.2	4,393.8	4,300.0	4,299.0	12.7	1.3	91.43	-323.6	3,575.4	3,973.0	3,959.7	13.25	299.746	
4,500.0	4,456.6	4,356.0	4,355.0	12.7	1.3	91.42	-323.1	3,576.3	3,974.0	3,960.6	13.36	297.359	
4,527.5	4,484.1	4,375.5	4,374.5	12.8	1.3	91.42	-323.0	3,576.7	3,974.5	3,961.1	13.41	296.298	
4,600.0	4,556.6	4,469.5	4,468.5	12.9	1.3	91.41	-322.7	3,578.6	3,976.0	3,962.5	13.55	293.397	
4,626.0	4,582.6	4,500.0	4,499.0	12.9	1.4	91.41	-322.7	3,579.0	3,976.4	3,962.8	13.60	292.360	
4,700.0	4,656.6	4,566.0	4,565.0	13.1	1.4	91.41	-322.4	3,579.9	3,977.4	3,963.7	13.74	289.528	
4,724.4	4,681.0	4,585.4	4,584.3	13.1	1.4	91.41	-322.2	3,580.2	3,977.9	3,964.1	13.78	288.610	
4,800.0	4,756.6	4,641.1	4,640.0	13.2	1.4	91.39	-321.4	3,581.4	3,979.4	3,965.4	13.92	285.796	
4,822.8	4,779.4	4,657.5	4,656.5	13.3	1.4	91.39	-321.1	3,581.8	3,979.9	3,965.9	13.97	284.953	
4,900.0	4,856.6	4,716.0	4,714.9	13.4	1.4	91.37	-319.8	3,583.4	3,981.9	3,967.8	14.11	282.141	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,734.6	4,733.5	13.4	1.4	91.36	-319.3	3,583.9	3,982.6	3,968.4	14.15	281.358	
5,000.0	4,956.6	4,805.1	4,803.9	13.6	1.4	91.33	-316.9	3,586.1	3,985.0	3,970.7	14.31	278.493	
5,019.7	4,976.3	4,828.2	4,826.9	13.6	1.4	91.31	-316.0	3,586.9	3,985.6	3,971.2	14.35	277.756	
5,100.0	5,056.6	4,925.3	4,923.9	13.7	1.4	91.26	-312.3	3,589.8	3,987.9	3,973.4	14.51	274.770	
5,118.1	5,074.7	4,949.3	4,948.0	13.8	1.4	91.25	-311.5	3,590.4	3,988.4	3,973.8	14.55	274.094	
5,200.0	5,156.6	5,050.4	5,048.9	13.9	1.5	91.20	-308.5	3,592.7	3,990.2	3,975.5	14.72	271.090	
5,216.5	5,173.1	5,069.4	5,068.0	13.9	1.5	91.20	-307.9	3,593.1	3,990.5	3,975.8	14.75	270.491	
5,300.0	5,256.6	5,204.7	5,203.2	14.1	1.5	91.14	-304.2	3,595.0	3,991.7	3,976.8	14.93	267.307	
5,314.9	5,271.5	5,218.7	5,217.1	14.1	1.5	91.14	-303.8	3,595.1	3,991.8	3,976.9	14.96	266.771	
5,400.0	5,356.6	5,300.0	5,298.4	14.2	1.5	91.10	-301.5	3,595.8	3,992.5	3,977.3	15.14	263.758	
5,413.4	5,370.0	5,316.0	5,314.4	14.3	1.5	91.10	-301.0	3,595.9	3,992.6	3,977.4	15.17	263.273	
5,500.0	5,456.6	5,429.0	5,427.3	14.4	1.6	91.04	-297.4	3,596.4	3,992.8	3,977.5	15.35	260.102	
5,511.8	5,468.4	5,441.3	5,439.6	14.4	1.6	91.04	-297.0	3,596.4	3,992.8	3,977.4	15.38	259.683	
5,600.0	5,556.6	5,523.9	5,522.2	14.6	1.6	91.00	-294.3	3,596.4	3,992.9	3,977.3	15.56	256.643	
5,610.2	5,566.8	5,531.6	5,529.9	14.6	1.6	91.00	-294.1	3,596.5	3,992.9	3,977.3	15.58	256.304	
5,700.0	5,656.6	5,600.0	5,598.3	14.8	1.6	90.97	-292.4	3,596.9	3,993.4	3,977.6	15.76	253.380	
5,708.6	5,665.2	5,607.4	5,605.7	14.8	1.6	90.97	-292.3	3,596.9	3,993.4	3,977.6	15.78	253.099	
5,800.0	5,756.6	5,703.1	5,701.4	14.9	1.6	90.95	-290.7	3,597.7	3,994.1	3,978.2	15.97	250.103	
5,807.1	5,763.7	5,720.7	5,718.9	14.9	1.6	90.94	-290.4	3,597.8	3,994.2	3,978.2	15.99	249.848	
5,900.0	5,856.6	5,891.1	5,889.4	15.1	1.6	90.92	-289.1	3,596.7	3,993.5	3,977.3	16.19	246.675	
5,905.5	5,862.1	5,899.4	5,897.6	15.1	1.6	90.92	-289.1	3,596.6	3,993.4	3,977.2	16.20	246.493	
6,000.0	5,956.6	5,980.6	5,978.8	15.3	1.7	90.92	-289.1	3,595.4	3,992.0	3,975.7	16.39	243.601	
6,003.9	5,960.5	5,983.9	5,982.2	15.3	1.7	90.92	-289.1	3,595.4	3,992.0	3,975.6	16.40	243.482	
6,100.0	6,056.6	6,073.4	6,071.7	15.5	1.7	90.93	-289.4	3,594.4	3,990.9	3,974.3	16.58	240.637	
6,102.3	6,058.9	6,075.7	6,073.9	15.5	1.7	90.93	-289.5	3,594.3	3,990.9	3,974.3	16.59	240.568	
6,200.0	6,156.6	6,162.0	6,160.2	15.7	1.7	90.94	-290.0	3,593.5	3,990.0	3,973.2	16.78	237.787	
6,200.8	6,157.4	6,162.7	6,160.9	15.7	1.7	90.94	-290.0	3,593.5	3,990.0	3,973.2	16.78	237.765	
6,272.2	6,228.8	6,231.1	6,229.3	15.8	1.7	90.95	-290.7	3,593.1	3,989.5	3,972.6	16.92	235.780	
6,299.2	6,255.8	6,261.0	6,259.2	15.8	1.7	0.95	-291.0	3,592.8	3,988.8	3,973.1	15.71	253.979	
6,300.0	6,256.6	6,261.9	6,260.1	15.8	1.7	0.95	-291.0	3,592.8	3,988.8	3,973.0	15.71	253.955	
6,350.0	6,306.4	6,329.4	6,327.7	15.9	1.7	0.97	-291.6	3,592.2	3,984.6	3,968.8	15.81	251.974	
6,397.6	6,353.6	6,350.0	6,348.2	15.9	1.7	0.98	-291.7	3,591.9	3,977.4	3,961.5	15.95	249.438	
6,400.0	6,355.9	6,350.0	6,348.2	15.9	1.7	0.98	-291.7	3,591.9	3,977.0	3,961.0	15.95	249.304	
6,450.0	6,404.8	6,350.0	6,348.2	15.9	1.7	1.00	-291.7	3,591.9	3,966.5	3,950.4	16.09	246.476	
6,496.0	6,449.0	6,350.0	6,348.2	16.0	1.7	1.01	-291.7	3,591.9	3,954.3	3,938.1	16.21	243.997	
6,500.0	6,452.8	6,350.0	6,348.2	16.0	1.7	1.02	-291.7	3,591.9	3,953.1	3,936.9	16.22	243.794	
6,550.0	6,499.7	6,350.0	6,348.2	15.9	1.7	1.04	-291.7	3,591.9	3,937.1	3,920.8	16.30	241.467	
6,594.5	6,540.3	6,350.0	6,348.2	15.9	1.7	1.07	-291.7	3,591.9	3,920.5	3,904.1	16.35	239.784	
6,600.0	6,545.3	6,350.0	6,348.2	15.9	1.7	1.07	-291.7	3,591.9	3,918.3	3,901.9	16.35	239.599	
6,650.0	6,589.3	6,350.0	6,348.2	15.9	1.7	1.11	-291.7	3,591.9	3,896.8	3,880.5	16.36	238.229	
6,692.9	6,625.7	6,350.0	6,348.2	15.9	1.7	1.14	-291.7	3,591.9	3,876.4	3,860.0	16.32	237.452	
6,700.0	6,631.6	6,350.0	6,348.2	15.9	1.7	1.15	-291.7	3,591.9	3,872.8	3,856.5	16.32	237.356	
6,750.0	6,671.9	6,350.0	6,348.2	15.9	1.7	1.20	-291.7	3,591.9	3,846.2	3,830.0	16.23	236.950	
6,791.3	6,703.6	6,350.0	6,348.2	15.9	1.7	1.25	-291.7	3,591.9	3,822.4	3,806.3	16.13	236.929	
6,800.0	6,710.1	6,350.0	6,348.2	15.9	1.7	1.26	-291.7	3,591.9	3,817.2	3,801.1	16.11	236.957	
6,850.0	6,745.9	6,350.0	6,348.2	16.0	1.7	1.34	-291.7	3,591.9	3,785.8	3,769.9	15.95	237.301	
6,889.7	6,772.6	6,350.0	6,348.2	16.1	1.7	1.40	-291.7	3,591.9	3,759.3	3,743.4	15.81	237.741	
6,900.0	6,779.2	6,350.0	6,348.2	16.1	1.7	1.42	-291.7	3,591.9	3,752.2	3,736.4	15.77	237.875	
6,950.0	6,809.8	6,350.0	6,348.2	16.3	1.7	1.53	-291.7	3,591.9	3,716.4	3,700.8	15.58	238.540	
6,988.2	6,831.3	6,350.0	6,348.2	16.4	1.7	1.63	-291.7	3,591.9	3,687.6	3,672.2	15.43	238.991	
7,000.0	6,837.6	6,350.0	6,348.2	16.5	1.7	1.66	-291.7	3,591.9	3,678.5	3,663.1	15.38	239.117	
7,050.0	6,862.5	6,350.0	6,348.2	16.9	1.7	1.82	-291.7	3,591.9	3,638.7	3,623.5	15.20	239.386	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,086.6	6,878.7	6,350.0	6,348.2	17.2	1.7	1.96	-291.7	3,591.9	3,608.4	3,593.3	15.08	239.226	
7,100.0	6,884.2	6,350.0	6,348.2	17.3	1.7	2.02	-291.7	3,591.9	3,597.1	3,582.1	15.04	239.090	
7,150.0	6,902.7	6,350.0	6,348.2	17.8	1.7	2.28	-291.7	3,591.9	3,553.9	3,538.9	14.94	237.954	
7,185.0	6,913.8	6,350.0	6,348.2	18.3	1.7	2.51	-291.7	3,591.9	3,522.7	3,507.8	14.90	236.495	
7,200.0	6,918.0	6,350.0	6,348.2	18.5	1.7	2.62	-291.7	3,591.9	3,509.1	3,494.3	14.89	235.712	
7,250.0	6,929.9	6,350.0	6,348.2	19.2	1.7	3.09	-291.7	3,591.9	3,463.1	3,448.2	14.92	232.145	
7,283.4	6,936.0	6,350.0	6,348.2	19.7	1.7	3.52	-291.7	3,591.9	3,431.6	3,416.6	14.99	228.917	
7,300.0	6,938.4	6,350.0	6,348.2	20.0	1.7	3.78	-291.7	3,591.9	3,415.9	3,400.8	15.04	227.088	
7,350.0	6,943.4	6,350.0	6,348.2	20.9	1.7	4.88	-291.7	3,591.9	3,367.7	3,352.4	15.28	220.360	
7,381.9	6,944.8	6,350.0	6,348.2	21.4	1.7	5.98	-291.7	3,591.9	3,336.5	3,321.0	15.52	214.957	
7,403.7	6,945.0	6,350.0	6,348.2	21.8	1.7	7.08	-291.7	3,591.9	3,315.0	3,299.3	15.74	210.566	
7,480.3	6,944.3	6,350.0	6,348.2	23.3	1.7	7.08	-291.7	3,591.9	3,239.5	3,223.4	16.11	201.066	
7,500.0	6,944.1	6,350.0	6,348.2	23.7	1.7	7.08	-291.7	3,591.9	3,220.1	3,203.9	16.21	198.691	
7,578.7	6,943.4	6,350.0	6,348.2	25.4	1.7	7.08	-291.7	3,591.9	3,142.5	3,125.9	16.62	189.121	
7,600.0	6,943.2	6,350.0	6,348.2	25.8	1.7	7.08	-291.7	3,591.9	3,121.6	3,104.9	16.73	186.614	
7,677.1	6,942.5	6,350.0	6,348.2	27.5	1.7	7.08	-291.7	3,591.9	3,045.7	3,028.5	17.16	177.524	
7,700.0	6,942.3	6,350.0	6,348.2	28.0	1.7	7.08	-291.7	3,591.9	3,023.2	3,005.9	17.28	174.918	
7,775.6	6,941.6	6,350.0	6,348.2	29.8	1.7	7.08	-291.7	3,591.9	2,948.9	2,931.1	17.73	166.357	
7,800.0	6,941.4	6,350.0	6,348.2	30.3	1.7	7.07	-291.7	3,591.9	2,924.9	2,907.0	17.87	163.681	
7,874.0	6,940.7	6,350.0	6,348.2	32.1	1.7	7.07	-291.7	3,591.9	2,852.2	2,833.9	18.32	155.673	
7,900.0	6,940.5	6,350.0	6,348.2	32.7	1.7	7.07	-291.7	3,591.9	2,826.7	2,808.2	18.48	152.952	
7,972.4	6,939.8	6,350.0	6,348.2	34.5	1.7	7.07	-291.7	3,591.9	2,755.6	2,736.7	18.94	145.499	
8,000.0	6,939.6	6,350.0	6,348.2	35.2	1.7	7.07	-291.7	3,591.9	2,728.6	2,709.5	19.11	142.756	
8,070.8	6,938.9	6,350.0	6,348.2	37.0	1.7	7.07	-291.7	3,591.9	2,659.2	2,639.6	19.58	135.845	
8,100.0	6,938.7	6,350.0	6,348.2	37.7	1.7	7.07	-291.7	3,591.9	2,630.7	2,610.9	19.77	133.095	
8,169.3	6,938.0	6,350.0	6,348.2	39.5	1.7	7.07	-291.7	3,591.9	2,563.0	2,542.7	20.23	126.704	
8,200.0	6,937.7	6,350.0	6,348.2	40.3	1.7	7.07	-291.7	3,591.9	2,532.9	2,512.5	20.43	123.962	
8,267.7	6,937.1	6,350.0	6,348.2	42.0	1.7	7.07	-291.7	3,591.9	2,466.9	2,446.0	20.89	118.064	
8,300.0	6,936.8	6,350.0	6,348.2	42.8	1.7	7.07	-291.7	3,591.9	2,435.4	2,414.3	21.11	115.341	
8,366.1	6,936.2	6,350.0	6,348.2	44.6	1.7	7.07	-291.7	3,591.9	2,371.0	2,349.4	21.57	109.905	
8,400.0	6,935.9	6,350.0	6,348.2	45.5	1.7	7.07	-291.7	3,591.9	2,338.0	2,316.2	21.81	107.210	
8,464.5	6,935.3	6,350.0	6,348.2	47.2	1.7	7.07	-291.7	3,591.9	2,275.3	2,253.0	22.26	102.205	
8,500.0	6,935.0	6,350.0	6,348.2	48.1	1.7	7.07	-291.7	3,591.9	2,240.9	2,218.4	22.51	99.544	
8,563.0	6,934.5	6,350.0	6,348.2	49.8	1.7	7.07	-291.7	3,591.9	2,179.8	2,156.9	22.96	94.940	
8,600.0	6,934.1	6,350.0	6,348.2	50.7	1.7	7.07	-291.7	3,591.9	2,144.0	2,120.8	23.22	92.318	
8,661.4	6,933.6	6,350.0	6,348.2	52.4	1.7	7.07	-291.7	3,591.9	2,084.7	2,061.0	23.67	88.085	
8,700.0	6,933.2	6,350.0	6,348.2	53.4	1.7	7.07	-291.7	3,591.9	2,047.4	2,023.5	23.94	85.507	
8,759.8	6,932.7	6,350.0	6,348.2	55.0	1.7	7.07	-291.7	3,591.9	1,989.8	1,965.5	24.38	81.617	
8,800.0	6,932.3	6,350.0	6,348.2	56.1	1.7	7.07	-291.7	3,591.9	1,951.2	1,926.6	24.67	79.085	
8,858.2	6,931.8	6,350.0	6,348.2	57.7	1.7	7.07	-291.7	3,591.9	1,895.4	1,870.3	25.10	75.513	
8,900.0	6,931.4	6,350.0	6,348.2	58.8	1.7	7.07	-291.7	3,591.9	1,855.4	1,830.0	25.41	73.029	
8,956.7	6,930.9	6,350.0	6,348.2	60.3	1.7	7.07	-291.7	3,591.9	1,801.3	1,775.5	25.83	69.750	
9,000.0	6,930.5	6,350.0	6,348.2	61.5	1.7	7.07	-291.7	3,591.9	1,760.0	1,733.9	26.15	67.317	
9,055.1	6,930.0	6,350.0	6,348.2	63.0	1.7	7.07	-291.7	3,591.9	1,707.7	1,681.2	26.56	64.308	
9,100.0	6,929.6	6,350.0	6,348.2	64.2	1.7	7.07	-291.7	3,591.9	1,665.2	1,638.3	26.89	61.928	
9,153.5	6,929.1	6,350.0	6,348.2	65.6	1.7	7.07	-291.7	3,591.9	1,614.7	1,587.5	27.29	59.169	
9,200.0	6,928.7	6,350.0	6,348.2	66.9	1.7	7.07	-291.7	3,591.9	1,571.1	1,543.4	27.64	56.844	
9,251.9	6,928.2	6,350.0	6,348.2	68.3	1.7	7.07	-291.7	3,591.9	1,522.4	1,494.4	28.03	54.317	
9,300.0	6,927.8	6,350.0	6,348.2	69.6	1.7	7.07	-291.7	3,591.9	1,477.7	1,449.3	28.39	52.048	
9,350.4	6,927.3	6,350.0	6,348.2	71.0	1.7	7.07	-291.7	3,591.9	1,431.0	1,402.2	28.77	49.735	
9,400.0	6,926.9	6,350.0	6,348.2	72.4	1.7	7.07	-291.7	3,591.9	1,385.2	1,356.0	29.15	47.525	
9,448.8	6,926.4	6,350.0	6,348.2	73.7	1.7	7.07	-291.7	3,591.9	1,340.4	1,310.9	29.52	45.413	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,500.0	6,926.0	6,350.0	6,348.2	75.1	1.7	7.07	-291.7	3,591.9	1,293.8	1,263.9	29.91	43.263	
9,547.2	6,925.5	6,350.0	6,348.2	76.4	1.7	7.07	-291.7	3,591.9	1,251.1	1,220.9	30.27	41.339	
9,600.0	6,925.1	6,350.0	6,348.2	77.9	1.7	7.07	-291.7	3,591.9	1,203.8	1,173.2	30.67	39.254	
9,645.6	6,924.6	6,350.0	6,348.2	79.1	1.7	7.07	-291.7	3,591.9	1,163.3	1,132.3	31.02	37.506	
9,700.0	6,924.1	6,350.0	6,348.2	80.6	1.7	7.07	-291.7	3,591.9	1,115.6	1,084.1	31.43	35.491	
9,744.1	6,923.7	6,350.0	6,348.2	81.8	1.7	7.07	-291.7	3,591.9	1,077.3	1,045.5	31.77	33.909	
9,800.0	6,923.2	6,350.0	6,348.2	83.4	1.7	7.07	-291.7	3,591.9	1,029.4	997.2	32.20	31.970	
9,842.5	6,922.9	6,350.0	6,348.2	84.5	1.7	7.07	-291.7	3,591.9	993.6	961.1	32.53	30.548	
9,900.0	6,922.3	6,350.0	6,348.2	86.1	1.7	7.07	-291.7	3,591.9	946.0	913.1	32.97	28.695	
9,940.9	6,922.0	6,350.0	6,348.2	87.2	1.7	7.07	-291.7	3,591.9	912.9	879.6	33.28	27.426	
10,000.0	6,921.4	6,350.0	6,348.2	88.9	1.7	7.07	-291.7	3,591.9	866.1	832.4	33.74	25.671	
10,039.3	6,921.1	6,350.0	6,348.2	90.0	1.7	7.07	-291.7	3,591.9	835.9	801.9	34.04	24.554	
10,100.0	6,920.5	6,350.0	6,348.2	91.6	1.7	7.07	-291.7	3,591.9	790.9	756.3	34.51	22.915	
10,137.8	6,920.2	6,350.0	6,348.2	92.7	1.7	7.07	-291.7	3,591.9	763.9	729.1	34.81	21.947	
10,200.0	6,919.6	6,350.0	6,348.2	94.4	1.7	7.07	-291.7	3,591.9	721.6	686.3	35.29	20.449	
10,236.2	6,919.3	6,350.0	6,348.2	95.4	1.7	7.07	-291.7	3,591.9	698.4	662.8	35.57	19.634	
10,300.0	6,918.7	6,350.0	6,348.2	97.2	1.7	7.07	-291.7	3,591.9	660.3	624.2	36.06	18.308	
10,334.6	6,918.4	6,350.0	6,348.2	98.1	1.7	7.07	-291.7	3,591.9	641.3	605.0	36.33	17.650	
10,400.0	6,917.8	6,350.0	6,348.2	99.9	1.7	7.07	-291.7	3,591.9	609.2	572.4	36.84	16.537	
10,433.0	6,917.5	6,350.0	6,348.2	100.9	1.7	7.07	-291.7	3,591.9	595.1	558.0	37.10	16.042	
10,500.0	6,916.9	6,350.0	6,348.2	102.7	1.7	7.07	-291.7	3,591.9	571.3	533.7	37.62	15.187	
10,531.5	6,916.6	6,350.0	6,348.2	103.6	1.7	7.07	-291.7	3,591.9	562.6	524.7	37.87	14.857	
10,600.0	6,916.0	6,350.0	6,348.2	105.5	1.7	7.07	-291.7	3,591.9	549.2	510.8	38.40	14.303	
10,629.9	6,915.7	6,350.0	6,348.2	106.3	1.7	7.07	-291.7	3,591.9	546.0	507.4	38.63	14.134	
10,673.8	6,915.3	6,350.0	6,348.2	107.5	1.7	7.07	-291.7	3,591.9	544.3	505.3	38.98	13.964 CC, ES	
10,700.0	6,915.1	6,350.0	6,348.2	108.3	1.7	7.07	-291.7	3,591.9	544.9	505.7	39.18	13.907	
10,728.3	6,914.8	6,350.0	6,348.2	109.1	1.7	7.07	-291.7	3,591.9	547.0	507.6	39.40	13.882 SF	
10,800.0	6,914.2	6,350.0	6,348.2	111.0	1.7	7.07	-291.7	3,591.9	558.7	518.7	39.96	13.980	
10,826.7	6,913.9	6,350.0	6,348.2	111.8	1.7	7.07	-291.7	3,591.9	565.4	525.2	40.17	14.073	
10,900.0	6,913.3	6,350.0	6,348.2	113.8	1.7	7.07	-291.7	3,591.9	589.4	548.7	40.75	14.465	
10,925.2	6,913.1	6,350.0	6,348.2	114.5	1.7	7.07	-291.7	3,591.9	599.5	558.6	40.94	14.642	
11,000.0	6,912.4	6,350.0	6,348.2	116.6	1.7	7.07	-291.7	3,591.9	634.5	593.0	41.53	15.279	
11,023.6	6,912.2	6,350.0	6,348.2	117.3	1.7	7.07	-291.7	3,591.9	647.0	605.3	41.72	15.509	
11,100.0	6,911.5	6,350.0	6,348.2	119.4	1.7	7.07	-291.7	3,591.9	691.3	649.0	42.32	16.336	
11,122.0	6,911.3	6,350.0	6,348.2	120.0	1.7	7.07	-291.7	3,591.9	705.1	662.6	42.49	16.594	
11,200.0	6,910.6	6,350.0	6,348.2	122.2	1.7	7.07	-291.7	3,591.9	757.1	714.0	43.10	17.564	
11,220.4	6,910.4	6,350.0	6,348.2	122.7	1.7	7.07	-291.7	3,591.9	771.4	728.2	43.26	17.831	
11,300.0	6,909.7	6,350.0	6,348.2	125.0	1.7	7.07	-291.7	3,591.9	829.7	785.8	43.89	18.904	
11,318.9	6,909.5	6,350.0	6,348.2	125.5	1.7	7.07	-291.7	3,591.9	844.0	800.0	44.04	19.166	
11,400.0	6,908.8	6,350.0	6,348.2	127.7	1.7	7.07	-291.7	3,591.9	907.5	862.9	44.68	20.313	
11,417.3	6,908.6	6,350.0	6,348.2	128.2	1.7	7.07	-291.7	3,591.9	921.4	876.6	44.81	20.562	
11,500.0	6,907.9	6,350.0	6,348.2	130.5	1.7	7.07	-291.7	3,591.9	989.4	943.9	45.47	21.761	
11,515.7	6,907.7	6,350.0	6,348.2	131.0	1.7	7.07	-291.7	3,591.9	1,002.6	957.0	45.59	21.991	
11,600.0	6,907.0	6,350.0	6,348.2	133.3	1.7	7.07	-291.7	3,591.9	1,074.3	1,028.0	46.25	23.226	
11,614.1	6,906.8	6,350.0	6,348.2	133.7	1.7	7.07	-291.7	3,591.9	1,086.5	1,040.2	46.37	23.434	
11,700.0	6,906.0	6,350.0	6,348.2	136.1	1.7	7.07	-291.7	3,591.9	1,161.6	1,114.6	47.04	24.693	
11,712.6	6,905.9	6,350.0	6,348.2	136.5	1.7	7.07	-291.7	3,591.9	1,172.7	1,125.6	47.14	24.877	
11,800.0	6,905.1	6,350.0	6,348.2	138.9	1.7	7.07	-291.7	3,591.9	1,250.8	1,203.0	47.83	26.150	
11,811.0	6,905.0	6,350.0	6,348.2	139.2	1.7	7.07	-291.7	3,591.9	1,260.8	1,212.8	47.92	26.310	
11,900.0	6,904.2	6,350.0	6,348.2	141.7	1.7	7.07	-291.7	3,591.9	1,341.6	1,293.0	48.62	27.592	
11,909.4	6,904.2	6,350.0	6,348.2	141.9	1.7	7.07	-291.7	3,591.9	1,350.2	1,301.5	48.70	27.726	
12,000.0	6,903.3	6,350.0	6,348.2	144.5	1.7	7.07	-291.7	3,591.9	1,433.6	1,384.2	49.41	29.011	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,007.8	6,903.3	6,350.0	6,348.2	144.7	1.7	7.07	-291.7	3,591.9	1,440.8	1,391.4	49.48	29.122	
12,100.0	6,902.4	6,350.0	6,348.2	147.3	1.7	7.07	-291.7	3,591.9	1,526.5	1,476.3	50.21	30.406	
12,106.3	6,902.4	6,350.0	6,348.2	147.4	1.7	7.07	-291.7	3,591.9	1,532.4	1,482.2	50.26	30.493	
12,200.0	6,901.5	6,350.0	6,348.2	150.1	1.7	7.07	-291.7	3,591.9	1,620.4	1,569.4	51.00	31.774	
12,204.7	6,901.5	6,350.0	6,348.2	150.2	1.7	7.07	-291.7	3,591.9	1,624.8	1,573.8	51.03	31.837	
12,300.0	6,900.6	6,350.0	6,348.2	152.9	1.7	7.07	-291.7	3,591.9	1,714.9	1,663.1	51.79	33.113	
12,303.1	6,900.6	6,350.0	6,348.2	152.9	1.7	7.07	-291.7	3,591.9	1,717.9	1,666.0	51.81	33.154	
12,400.0	6,899.7	6,350.0	6,348.2	155.6	1.7	7.07	-291.7	3,591.9	1,810.0	1,757.4	52.58	34.422	
12,401.5	6,899.7	6,350.0	6,348.2	155.7	1.7	7.07	-291.7	3,591.9	1,811.5	1,758.9	52.59	34.443	
12,500.0	6,898.8	6,350.0	6,348.2	158.4	1.7	7.07	-291.7	3,591.9	1,905.6	1,852.2	53.37	35.702	
12,598.4	6,897.9	6,350.0	6,348.2	161.2	1.7	7.07	-291.7	3,591.9	2,000.1	1,946.0	54.16	36.933	
12,600.0	6,897.9	6,350.0	6,348.2	161.2	1.7	7.07	-291.7	3,591.9	2,001.6	1,947.5	54.17	36.952	
12,696.8	6,897.0	6,350.0	6,348.2	163.9	1.7	7.07	-291.7	3,591.9	2,095.0	2,040.1	54.94	38.135	
12,700.0	6,897.0	6,350.0	6,348.2	164.0	1.7	7.07	-291.7	3,591.9	2,098.1	2,043.1	54.96	38.173	
12,795.2	6,896.1	6,350.0	6,348.2	166.7	1.7	7.07	-291.7	3,591.9	2,190.2	2,134.5	55.72	39.308	
12,800.0	6,896.1	6,350.0	6,348.2	166.8	1.7	7.07	-291.7	3,591.9	2,194.8	2,139.0	55.76	39.364	
12,893.7	6,895.3	6,350.0	6,348.2	169.4	1.7	7.07	-291.7	3,591.9	2,285.7	2,229.2	56.50	40.454	
12,900.0	6,895.2	6,350.0	6,348.2	169.6	1.7	7.07	-291.7	3,591.9	2,291.8	2,235.2	56.55	40.527	
12,992.1	6,894.4	6,350.0	6,348.2	172.2	1.7	7.07	-291.7	3,591.9	2,381.4	2,324.1	57.28	41.573	
13,000.0	6,894.3	6,350.0	6,348.2	172.4	1.7	7.07	-291.7	3,591.9	2,389.1	2,331.7	57.34	41.661	
13,090.5	6,893.5	6,350.0	6,348.2	175.0	1.7	7.07	-291.7	3,591.9	2,477.3	2,419.2	58.06	42.665	
13,100.0	6,893.4	6,350.0	6,348.2	175.2	1.7	7.07	-291.7	3,591.9	2,486.5	2,428.4	58.14	42.768	
13,188.9	6,892.6	6,350.0	6,348.2	177.7	1.7	7.07	-291.7	3,591.9	2,573.4	2,514.5	58.85	43.730	
13,200.0	6,892.5	6,350.0	6,348.2	178.0	1.7	7.07	-291.7	3,591.9	2,584.2	2,525.3	58.93	43.848	
13,287.4	6,891.7	6,350.0	6,348.2	180.5	1.7	7.07	-291.7	3,591.9	2,669.7	2,610.0	59.63	44.771	
13,300.0	6,891.6	6,350.0	6,348.2	180.8	1.7	7.07	-291.7	3,591.9	2,682.0	2,622.3	59.73	44.903	
13,385.8	6,890.8	6,350.0	6,348.2	183.2	1.7	7.07	-291.7	3,591.9	2,766.1	2,705.7	60.41	45.787	
13,400.0	6,890.7	6,350.0	6,348.2	183.6	1.7	7.07	-291.7	3,591.9	2,780.0	2,719.5	60.53	45.931	
13,484.2	6,889.9	6,350.0	6,348.2	186.0	1.7	7.07	-291.7	3,591.9	2,862.7	2,801.5	61.20	46.779	
13,500.0	6,889.8	6,350.0	6,348.2	186.4	1.7	7.07	-291.7	3,591.9	2,878.2	2,816.8	61.32	46.935	
13,582.6	6,889.0	6,350.0	6,348.2	188.7	1.7	7.07	-291.7	3,591.9	2,959.4	2,897.4	61.98	47.747	
13,600.0	6,888.9	6,350.0	6,348.2	189.2	1.7	7.08	-291.7	3,591.9	2,976.4	2,914.3	62.12	47.916	
13,681.1	6,888.1	6,350.0	6,348.2	191.5	1.7	7.08	-291.7	3,591.9	3,056.2	2,993.4	62.76	48.693	
13,700.0	6,888.0	6,350.0	6,348.2	192.0	1.7	7.08	-291.7	3,591.9	3,074.8	3,011.9	62.91	48.873	
13,779.5	6,887.3	6,350.0	6,348.2	194.2	1.7	7.08	-291.7	3,591.9	3,153.1	3,089.5	63.55	49.618	
13,800.0	6,887.1	6,350.0	6,348.2	194.8	1.7	7.08	-291.7	3,591.9	3,173.3	3,109.5	63.71	49.807	
13,877.9	6,886.4	6,350.0	6,348.2	197.0	1.7	7.08	-291.7	3,591.9	3,250.1	3,185.7	64.33	50.520	
13,900.0	6,886.2	6,350.0	6,348.2	197.6	1.7	7.08	-291.7	3,591.9	3,271.8	3,207.3	64.51	50.720	
13,976.3	6,885.5	6,350.0	6,348.2	199.7	1.7	7.08	-291.7	3,591.9	3,347.1	3,282.0	65.12	51.403	
14,000.0	6,885.3	6,350.0	6,348.2	200.4	1.7	7.08	-291.7	3,591.9	3,370.5	3,305.2	65.30	51.612	
14,074.8	6,884.6	6,350.0	6,348.2	202.5	1.7	7.08	-291.7	3,591.9	3,444.3	3,378.4	65.90	52.265	
14,100.0	6,884.4	6,350.0	6,348.2	203.2	1.7	7.08	-291.7	3,591.9	3,469.2	3,403.1	66.10	52.483	
14,173.2	6,883.7	6,350.0	6,348.2	205.3	1.7	7.08	-291.7	3,591.9	3,541.5	3,474.8	66.69	53.108	
14,200.0	6,883.5	6,350.0	6,348.2	206.0	1.7	7.08	-291.7	3,591.9	3,568.0	3,501.1	66.90	53.334	
14,271.6	6,882.8	6,350.0	6,348.2	208.0	1.7	7.08	-291.7	3,591.9	3,638.8	3,571.3	67.47	53.932	
14,300.0	6,882.6	6,350.0	6,348.2	208.8	1.7	7.08	-291.7	3,591.9	3,666.9	3,599.2	67.70	54.166	
14,370.0	6,881.9	6,350.0	6,348.2	210.8	1.7	7.08	-291.7	3,591.9	3,736.1	3,667.9	68.25	54.738	
14,400.0	6,881.7	6,350.0	6,348.2	211.6	1.7	7.08	-291.7	3,591.9	3,765.8	3,697.3	68.49	54.980	
14,468.5	6,881.0	6,350.0	6,348.2	213.5	1.7	7.08	-291.7	3,591.9	3,833.5	3,764.5	69.04	55.526	
14,500.0	6,880.8	6,350.0	6,348.2	214.4	1.7	7.08	-291.7	3,591.9	3,864.7	3,795.5	69.29	55.775	
14,566.9	6,880.2	6,350.0	6,348.2	216.3	1.7	7.08	-291.7	3,591.9	3,931.0	3,861.2	69.83	56.297	
14,584.2	6,880.0	6,350.0	6,348.2	216.8	1.7	7.08	-291.7	3,591.9	3,948.1	3,878.1	69.96	56.431	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
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	83.92	444.8	4,174.2	4,197.9				
98.4	98.4	83.7	83.7	0.1	0.0	83.92	444.6	4,174.1	4,197.7	4,197.6	0.13	N/A	
100.0	100.0	85.6	85.6	0.1	0.0	83.92	444.6	4,174.0	4,197.7	4,197.6	0.13	N/A	
196.8	196.8	182.4	182.4	0.3	0.2	83.92	444.2	4,173.7	4,197.3	4,196.8	0.47	8,840.802	
200.0	200.0	185.5	185.5	0.3	0.2	83.93	444.2	4,173.7	4,197.3	4,196.8	0.49	8,632.903	
295.3	295.3	291.4	291.4	0.5	0.3	83.92	444.2	4,173.2	4,196.9	4,196.1	0.81	5,209.818	
300.0	300.0	296.8	296.8	0.5	0.3	83.92	444.2	4,173.2	4,196.9	4,196.0	0.82	5,110.840	
393.7	393.7	387.3	387.3	0.7	0.4	83.92	444.3	4,172.7	4,196.3	4,195.2	1.09	3,847.905	
400.0	400.0	393.4	393.4	0.8	0.4	83.92	444.4	4,172.6	4,196.3	4,195.2	1.11	3,785.272	
492.1	492.1	500.0	500.0	1.0	0.4	83.91	444.8	4,171.8	4,195.6	4,194.2	1.38	3,047.305	
500.0	500.0	510.9	510.9	1.0	0.4	83.91	444.9	4,171.7	4,195.5	4,194.1	1.40	2,996.704	
590.5	590.5	593.5	593.5	1.2	0.5	83.91	445.3	4,170.9	4,194.7	4,193.1	1.64	2,550.169	
600.0	600.0	602.5	602.5	1.2	0.5	83.91	445.3	4,170.8	4,194.7	4,193.0	1.67	2,511.059	
689.0	689.0	697.9	697.9	1.4	0.5	83.90	445.9	4,170.0	4,193.9	4,192.0	1.91	2,191.685	
700.0	700.0	708.6	708.6	1.4	0.5	83.90	445.9	4,169.9	4,193.8	4,191.9	1.94	2,158.608	
787.4	787.4	790.8	790.8	1.6	0.6	83.89	446.4	4,169.1	4,193.1	4,190.9	2.17	1,929.263	
800.0	800.0	803.0	803.0	1.7	0.6	83.89	446.4	4,169.0	4,193.0	4,190.8	2.21	1,900.111	
885.8	885.8	894.8	894.7	1.9	0.6	83.88	446.8	4,168.2	4,192.3	4,189.9	2.44	1,721.619	
900.0	900.0	909.4	909.3	1.9	0.6	83.88	446.8	4,168.1	4,192.2	4,189.7	2.47	1,695.583	
984.2	984.2	994.5	994.5	2.1	0.7	83.88	447.1	4,167.3	4,191.4	4,188.7	2.69	1,556.449	
1,000.0	1,000.0	1,009.9	1,009.9	2.1	0.7	83.87	447.2	4,167.1	4,191.2	4,188.5	2.73	1,533.190	
1,082.7	1,082.7	1,089.4	1,089.4	2.3	0.7	83.87	447.3	4,166.4	4,190.5	4,187.6	2.95	1,422.271	
1,100.0	1,100.0	1,106.2	1,106.2	2.3	0.7	83.87	447.3	4,166.3	4,190.4	4,187.4	2.99	1,401.046	
1,181.1	1,181.1	1,186.2	1,186.1	2.5	0.8	83.87	447.1	4,165.6	4,189.7	4,186.5	3.20	1,309.681	
1,200.0	1,200.0	1,205.1	1,205.1	2.6	0.8	83.87	447.1	4,165.5	4,189.5	4,186.3	3.25	1,290.072	
1,279.5	1,279.5	1,288.3	1,288.3	2.7	0.8	83.88	446.9	4,164.8	4,188.8	4,185.4	3.45	1,213.558	
1,300.0	1,300.0	1,308.3	1,308.2	2.8	0.8	83.88	446.9	4,164.6	4,188.7	4,185.2	3.50	1,195.465	
1,377.9	1,377.9	1,377.5	1,377.4	3.0	0.8	83.88	446.8	4,164.1	4,188.1	4,184.4	3.70	1,131.946	
1,400.0	1,400.0	1,400.0	1,399.9	3.0	0.8	83.88	446.7	4,163.9	4,187.9	4,184.2	3.76	1,114.926	
1,476.4	1,476.4	1,483.0	1,482.9	3.2	0.9	83.88	446.1	4,163.4	4,187.4	4,183.4	3.95	1,058.970	
1,500.0	1,500.0	1,507.8	1,507.8	3.2	0.9	83.89	445.8	4,163.2	4,187.1	4,183.1	4.02	1,042.766	
1,574.8	1,574.8	1,575.5	1,575.4	3.4	0.9	83.90	444.8	4,162.7	4,186.6	4,182.3	4.21	995.198	
1,600.0	1,600.0	1,600.0	1,599.9	3.5	0.9	83.91	444.4	4,162.6	4,186.4	4,182.1	4.27	980.141	
1,650.0	1,650.0	1,664.6	1,664.5	3.6	0.9	83.92	443.4	4,162.2	4,186.0	4,181.6	4.40	950.813	
1,673.2	1,673.2	1,695.8	1,695.7	3.6	0.9	-156.49	443.0	4,161.9	4,185.8	4,181.2	4.55	920.141	
1,683.7	1,683.7	1,700.0	1,699.9	3.6	0.9	-156.49	443.0	4,161.8	4,185.8	4,181.2	4.57	915.585	
1,700.0	1,700.0	1,717.8	1,717.7	3.7	0.9	-156.49	442.8	4,161.6	4,185.8	4,181.2	4.61	907.946	
1,771.6	1,771.6	1,771.7	1,771.7	3.8	1.0	-156.48	442.2	4,161.2	4,187.1	4,182.3	4.76	879.749	
1,800.0	1,799.9	1,800.0	1,799.9	3.9	1.0	-156.48	441.9	4,161.1	4,188.2	4,183.3	4.82	868.764	
1,870.1	1,869.9	1,858.2	1,858.1	4.0	1.0	-156.46	441.3	4,160.9	4,192.0	4,187.0	4.97	843.086	
1,900.0	1,899.7	1,886.8	1,886.7	4.1	1.0	-156.45	441.0	4,160.8	4,194.1	4,189.1	5.04	832.498	
1,968.5	1,967.8	1,941.6	1,941.5	4.2	1.0	-156.42	440.2	4,160.7	4,200.2	4,195.0	5.19	809.498	
2,000.0	1,999.1	1,965.5	1,965.4	4.3	1.0	-156.41	439.8	4,160.8	4,203.6	4,198.3	5.26	799.682	
2,066.9	2,065.5	2,017.3	2,017.2	4.4	1.0	-156.36	438.6	4,161.1	4,211.9	4,206.5	5.41	778.853	
2,100.0	2,098.2	2,044.0	2,043.9	4.5	1.0	-156.33	437.9	4,161.3	4,216.7	4,211.2	5.48	769.153	
2,165.3	2,162.6	2,100.0	2,099.8	4.7	1.0	-156.28	436.5	4,161.9	4,227.2	4,221.6	5.64	749.710	
2,200.0	2,196.6	2,138.7	2,138.5	4.7	1.0	-156.26	435.5	4,162.3	4,233.4	4,227.7	5.72	739.984	
2,249.9	2,245.5	2,202.0	2,201.8	4.9	1.1	-156.23	434.0	4,162.8	4,242.8	4,236.9	5.85	725.786	
2,263.8	2,259.1	2,218.9	2,218.7	4.9	1.1	-156.24	433.5	4,162.9	4,245.5	4,239.6	5.88	722.043	
2,300.0	2,294.5	2,263.0	2,262.8	5.0	1.1	-156.28	432.5	4,163.1	4,252.4	4,246.5	5.97	712.495	
2,362.2	2,355.4	2,335.3	2,335.1	5.2	1.1	-156.34	431.0	4,163.2	4,264.3	4,258.1	6.13	696.095	
2,400.0	2,392.3	2,377.3	2,377.1	5.4	1.1	-156.38	430.2	4,163.1	4,271.4	4,265.2	6.22	686.584	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
2,460.6	2,451.6	2,441.9	2,441.7	5.6	1.1	-156.43	429.1	4,163.0	4,282.7	4,276.4	6.38	671.274	
2,500.0	2,490.2	2,482.9	2,482.7	5.7	1.1	-156.47	428.3	4,162.9	4,290.1	4,283.6	6.49	661.518	
2,559.0	2,547.9	2,541.6	2,541.3	5.9	1.2	-156.52	427.2	4,162.7	4,301.1	4,294.4	6.64	647.327	
2,600.0	2,588.0	2,581.5	2,581.2	6.1	1.2	-156.56	426.4	4,162.6	4,308.7	4,301.9	6.76	637.816	
2,657.5	2,644.2	2,639.0	2,638.7	6.3	1.2	-156.61	425.4	4,162.4	4,319.4	4,312.5	6.91	624.681	
2,700.0	2,685.8	2,682.2	2,681.9	6.4	1.2	-156.64	424.5	4,162.3	4,327.3	4,320.3	7.03	615.320	
2,755.9	2,740.5	2,733.7	2,733.4	6.6	1.2	-156.69	423.5	4,162.1	4,337.7	4,330.5	7.19	603.331	
2,800.0	2,783.6	2,772.5	2,772.2	6.8	1.2	-156.72	422.8	4,162.0	4,346.0	4,338.6	7.31	594.276	
2,854.3	2,836.7	2,821.7	2,821.4	7.0	1.2	-156.77	422.1	4,161.9	4,356.2	4,348.7	7.47	583.317	
2,900.0	2,881.4	2,864.8	2,864.5	7.2	1.2	-156.81	421.6	4,161.9	4,364.8	4,357.2	7.60	574.426	
2,952.7	2,933.0	2,912.9	2,912.6	7.4	1.3	-156.85	421.1	4,161.8	4,374.8	4,367.0	7.75	564.420	
3,000.0	2,979.2	2,952.4	2,952.1	7.6	1.3	-156.89	420.7	4,161.8	4,383.8	4,375.9	7.89	555.920	
3,051.2	3,029.3	3,000.0	2,999.7	7.8	1.3	-156.94	420.3	4,161.9	4,393.6	4,385.6	8.03	546.888	
3,100.0	3,077.1	3,040.5	3,040.2	8.0	1.3	-156.98	420.1	4,162.0	4,403.1	4,394.9	8.17	538.955	
3,149.6	3,125.6	3,087.1	3,086.8	8.2	1.3	-157.02	419.9	4,162.1	4,412.7	4,404.4	8.31	531.025	
3,200.0	3,174.9	3,130.2	3,129.9	8.4	1.3	-157.07	420.0	4,162.2	4,422.5	4,414.1	8.45	523.287	
3,248.0	3,221.8	3,169.9	3,169.5	8.6	1.3	-157.12	420.1	4,162.4	4,432.0	4,423.4	8.59	516.096	
3,300.0	3,272.7	3,211.6	3,211.3	8.9	1.3	-157.16	420.4	4,162.6	4,442.3	4,433.5	8.74	508.553	
3,346.4	3,318.1	3,246.8	3,246.4	9.0	1.3	-157.20	420.6	4,162.8	4,451.6	4,442.7	8.87	501.892	
3,400.0	3,370.5	3,287.2	3,286.9	9.3	1.3	-157.25	420.9	4,163.2	4,462.4	4,453.4	9.02	494.465	
3,444.9	3,414.4	3,324.4	3,324.1	9.5	1.3	-157.29	421.3	4,163.7	4,471.7	4,462.5	9.16	488.382	
3,500.0	3,468.3	3,372.8	3,372.4	9.7	1.3	-157.35	421.6	4,164.4	4,483.0	4,473.7	9.32	481.154	
3,543.3	3,510.7	3,414.0	3,413.7	9.9	1.3	-157.39	421.9	4,165.0	4,492.0	4,482.6	9.44	475.607	
3,600.0	3,566.1	3,479.3	3,478.9	10.1	1.3	-157.46	422.4	4,165.8	4,503.7	4,494.1	9.61	468.574	
3,641.7	3,606.9	3,525.6	3,525.3	10.3	1.3	-157.52	422.7	4,166.3	4,512.3	4,502.5	9.73	463.531	
3,700.0	3,664.0	3,588.6	3,588.3	10.6	1.3	-157.58	423.1	4,167.0	4,524.1	4,514.2	9.91	456.714	
3,740.1	3,703.2	3,624.9	3,624.5	10.7	1.3	-157.62	423.3	4,167.3	4,532.3	4,522.3	10.02	452.112	
3,800.0	3,761.8	3,675.1	3,674.7	11.0	1.3	-157.68	423.6	4,167.9	4,544.5	4,534.3	10.20	445.464	
3,837.4	3,798.3	3,707.7	3,707.4	11.2	1.3	-157.71	423.8	4,168.3	4,552.2	4,541.9	10.31	441.410	
3,838.6	3,799.5	3,709.0	3,708.6	11.2	1.3	-157.72	423.9	4,168.3	4,552.5	4,542.1	10.32	441.306	
3,900.0	3,859.7	3,771.8	3,771.4	11.4	1.3	-157.87	424.2	4,169.1	4,564.5	4,554.0	10.47	436.121	
3,937.0	3,896.1	3,809.0	3,808.6	11.5	1.3	-157.96	424.4	4,169.6	4,571.2	4,560.6	10.55	433.472	
4,000.0	3,958.3	3,868.5	3,868.1	11.7	1.3	-158.08	424.8	4,170.3	4,581.5	4,570.8	10.68	429.030	
4,035.4	3,993.3	3,902.2	3,901.8	11.8	1.3	-158.15	425.1	4,170.7	4,586.8	4,576.0	10.75	426.694	
4,100.0	4,057.4	3,969.8	3,969.4	12.0	1.3	-158.26	425.8	4,171.5	4,595.4	4,584.5	10.88	422.388	
4,133.8	4,091.0	4,006.0	4,005.6	12.1	1.3	-158.31	426.2	4,171.9	4,599.3	4,588.3	10.94	420.271	
4,200.0	4,156.8	4,084.7	4,084.3	12.2	1.3	-158.41	427.1	4,172.7	4,605.8	4,594.7	11.07	416.083	
4,232.3	4,189.0	4,119.9	4,119.5	12.3	1.3	-158.45	427.7	4,172.9	4,608.4	4,597.3	11.13	414.158	
4,300.0	4,256.6	4,189.3	4,188.9	12.4	1.3	-158.51	428.8	4,173.3	4,612.7	4,601.5	11.25	410.072	
4,330.7	4,287.3	4,221.1	4,220.6	12.5	1.4	-158.53	429.4	4,173.5	4,614.2	4,602.9	11.30	408.314	
4,400.0	4,356.6	4,293.0	4,292.6	12.6	1.4	-158.57	430.8	4,173.9	4,616.4	4,605.0	11.42	404.267	
4,429.1	4,385.7	4,324.8	4,324.4	12.6	1.4	-158.59	431.5	4,174.0	4,616.8	4,605.3	11.47	402.589	
4,437.2	4,393.8	4,333.8	4,333.3	12.7	1.4	81.83	431.7	4,174.1	4,616.9	4,603.2	13.65	338.254	
4,500.0	4,456.6	4,411.5	4,411.1	12.7	1.4	81.80	433.5	4,174.3	4,617.3	4,603.5	13.76	335.644	
4,527.5	4,484.1	4,506.8	4,506.3	12.8	1.4	81.78	435.6	4,173.6	4,617.1	4,603.3	13.81	334.262	
4,600.0	4,556.6	4,609.0	4,608.5	12.9	1.4	81.76	436.8	4,171.9	4,616.1	4,602.1	13.94	331.043	
4,626.0	4,582.6	4,634.0	4,633.5	12.9	1.4	81.76	436.9	4,171.4	4,615.6	4,601.6	13.99	329.906	
4,700.0	4,656.6	4,700.0	4,699.5	13.1	1.4	81.75	437.0	4,170.3	4,614.3	4,600.2	14.12	326.728	
4,724.4	4,681.0	4,725.5	4,725.0	13.1	1.4	81.75	437.1	4,169.8	4,613.9	4,599.8	14.17	325.684	
4,800.0	4,756.6	4,789.9	4,789.3	13.2	1.4	81.74	437.9	4,168.8	4,612.8	4,598.5	14.30	322.536	
4,822.8	4,779.4	4,809.3	4,808.8	13.3	1.4	81.74	438.3	4,168.5	4,612.5	4,598.2	14.34	321.587	
4,900.0	4,856.6	4,875.4	4,874.8	13.4	1.4	81.72	439.3	4,167.6	4,611.7	4,597.2	14.48	318.410	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,921.2	4,877.8	4,900.0	4,899.4	13.4	1.5	81.72	439.7	4,167.3	4,611.5	4,596.9	14.52	317.520	
5,000.0	4,956.6	4,954.0	4,953.4	13.6	1.5	81.70	440.6	4,166.7	4,610.8	4,596.2	14.67	314.399	
5,019.7	4,976.3	4,969.0	4,968.4	13.6	1.5	81.70	441.0	4,166.6	4,610.7	4,596.0	14.70	313.621	
5,100.0	5,056.6	5,046.2	5,045.6	13.7	1.5	81.67	443.0	4,166.0	4,610.5	4,595.6	14.85	310.431	
5,118.1	5,074.7	5,067.5	5,066.8	13.8	1.5	81.67	443.4	4,165.9	4,610.4	4,595.5	14.89	309.702	
5,200.0	5,156.6	5,150.3	5,149.6	13.9	1.5	81.65	444.5	4,165.3	4,610.0	4,594.9	15.04	306.519	
5,216.5	5,173.1	5,165.6	5,165.0	13.9	1.5	81.65	444.6	4,165.2	4,609.9	4,594.8	15.07	305.888	
5,300.0	5,256.6	5,263.1	5,262.5	14.1	1.5	81.65	444.5	4,164.7	4,609.5	4,594.2	15.23	302.698	
5,314.9	5,271.5	5,283.5	5,282.8	14.1	1.5	81.65	444.4	4,164.6	4,609.4	4,594.1	15.26	302.122	
5,400.0	5,356.6	5,376.8	5,376.2	14.2	1.5	81.66	443.4	4,163.8	4,608.5	4,593.1	15.42	298.872	
5,413.4	5,370.0	5,390.9	5,390.3	14.3	1.5	81.67	443.2	4,163.6	4,608.4	4,592.9	15.45	298.364	
5,500.0	5,456.6	5,477.6	5,476.9	14.4	1.6	81.68	442.2	4,162.8	4,607.4	4,591.8	15.61	295.121	
5,511.8	5,468.4	5,489.3	5,488.7	14.4	1.6	81.68	442.0	4,162.7	4,607.3	4,591.7	15.63	294.682	
5,600.0	5,556.6	5,600.0	5,599.3	14.6	1.6	81.69	440.7	4,161.4	4,606.1	4,590.3	15.81	291.372	
5,610.2	5,566.8	5,613.8	5,613.1	14.6	1.6	81.69	440.5	4,161.2	4,605.9	4,590.1	15.83	290.985	
5,700.0	5,656.6	5,689.9	5,689.2	14.8	1.6	81.70	439.8	4,160.2	4,604.6	4,588.6	16.00	287.754	
5,708.6	5,665.2	5,700.0	5,699.3	14.8	1.6	81.70	439.7	4,160.1	4,604.5	4,588.5	16.02	287.439	
5,800.0	5,756.6	5,788.8	5,788.1	14.9	1.6	81.72	438.5	4,159.1	4,603.3	4,587.1	16.20	284.192	
5,807.1	5,763.7	5,796.0	5,795.2	14.9	1.6	81.72	438.4	4,159.0	4,603.2	4,587.0	16.21	283.941	
5,900.0	5,856.6	5,874.3	5,873.5	15.1	1.6	81.73	437.0	4,158.3	4,602.1	4,585.7	16.39	280.725	
5,905.5	5,862.1	5,878.9	5,878.1	15.1	1.6	81.73	436.9	4,158.2	4,602.1	4,585.7	16.40	280.537	
6,000.0	5,956.6	5,969.6	5,968.8	15.3	1.7	81.75	435.3	4,157.6	4,601.2	4,584.6	16.59	277.306	
6,003.9	5,960.5	5,973.5	5,972.8	15.3	1.7	81.75	435.2	4,157.6	4,601.2	4,584.6	16.60	277.172	
6,100.0	6,056.6	6,066.4	6,065.6	15.5	1.7	81.78	433.1	4,157.1	4,600.3	4,583.5	16.79	273.939	
6,102.3	6,058.9	6,068.7	6,067.9	15.5	1.7	81.78	433.0	4,157.1	4,600.3	4,583.5	16.80	273.860	
6,200.0	6,156.6	6,156.4	6,155.6	15.7	1.7	81.81	430.7	4,156.8	4,599.6	4,582.6	16.99	270.654	
6,200.8	6,157.4	6,157.1	6,156.3	15.7	1.7	81.81	430.7	4,156.8	4,599.6	4,582.6	17.00	270.628	
6,272.2	6,228.8	6,287.1	6,286.3	15.8	1.7	81.85	427.1	4,156.0	4,599.1	4,581.9	17.15	268.157	
6,299.2	6,255.8	6,319.4	6,318.5	15.8	1.7	-8.15	426.1	4,155.5	4,598.0	4,582.5	15.53	296.102	
6,300.0	6,256.6	6,320.0	6,319.1	15.8	1.7	-8.15	426.1	4,155.5	4,598.0	4,582.4	15.53	296.072	
6,350.0	6,306.4	6,360.7	6,359.8	15.9	1.7	-8.19	424.8	4,154.9	4,593.4	4,577.7	15.64	293.749	
6,397.6	6,353.6	6,400.0	6,399.1	15.9	1.7	-8.27	423.4	4,154.4	4,585.9	4,570.1	15.77	290.762	
6,400.0	6,355.9	6,400.0	6,399.1	15.9	1.7	-8.28	423.4	4,154.4	4,585.5	4,569.7	15.78	290.613	
6,450.0	6,404.8	6,438.5	6,437.6	15.9	1.8	-8.41	422.0	4,154.1	4,574.3	4,558.3	15.93	287.189	
6,496.0	6,449.0	6,472.5	6,471.5	16.0	1.8	-8.57	420.6	4,153.8	4,561.1	4,545.0	16.06	284.067	
6,500.0	6,452.8	6,475.3	6,474.4	16.0	1.8	-8.59	420.5	4,153.8	4,559.9	4,543.8	16.07	283.806	
6,550.0	6,499.7	6,511.9	6,510.9	15.9	1.8	-8.82	418.9	4,153.7	4,542.3	4,526.1	16.18	280.688	
6,594.5	6,540.3	6,544.5	6,543.5	15.9	1.8	-9.08	417.4	4,153.6	4,524.1	4,507.8	16.26	278.234	
6,600.0	6,545.3	6,548.5	6,547.5	15.9	1.8	-9.11	417.2	4,153.6	4,521.6	4,505.4	16.27	277.952	
6,650.0	6,589.3	6,584.0	6,582.9	15.9	1.8	-9.48	415.5	4,153.7	4,498.0	4,481.6	16.32	275.648	
6,692.9	6,625.7	6,613.3	6,612.2	15.9	1.8	-9.85	414.0	4,153.7	4,475.3	4,459.0	16.33	274.017	
6,700.0	6,631.6	6,618.0	6,616.9	15.9	1.8	-9.92	413.7	4,153.8	4,471.4	4,455.1	16.33	273.777	
6,750.0	6,671.9	6,650.4	6,649.2	15.9	1.8	-10.46	412.0	4,153.9	4,442.1	4,425.8	16.31	272.286	
6,791.3	6,703.6	6,676.0	6,674.7	15.9	1.8	-10.99	410.5	4,154.1	4,415.8	4,399.6	16.28	271.269	
6,800.0	6,710.1	6,681.2	6,679.9	15.9	1.8	-11.11	410.2	4,154.2	4,410.1	4,393.8	16.27	271.079	
6,850.0	6,745.9	6,713.0	6,711.7	16.0	1.8	-11.92	408.3	4,154.5	4,375.6	4,359.4	16.21	269.950	
6,889.7	6,772.6	6,740.6	6,739.2	16.1	1.8	-12.70	406.5	4,154.8	4,346.5	4,330.4	16.16	268.901	
6,900.0	6,779.2	6,747.4	6,746.0	16.1	1.8	-12.92	406.1	4,154.9	4,338.8	4,322.6	16.15	268.620	
6,950.0	6,809.8	6,779.1	6,777.7	16.3	1.8	-14.17	404.0	4,155.2	4,299.7	4,283.6	16.11	266.871	
6,988.2	6,831.3	6,800.0	6,798.5	16.4	1.8	-15.34	402.5	4,155.4	4,268.5	4,252.4	16.11	264.984	
7,000.0	6,837.6	6,800.0	6,798.5	16.5	1.8	-15.73	402.5	4,155.4	4,258.6	4,242.5	16.10	264.449	
7,050.0	6,862.5	6,800.0	6,798.5	16.9	1.8	-17.63	402.5	4,155.4	4,215.9	4,199.7	16.15	261.072	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,086.6	6,878.7	6,828.9	6,827.3	17.2	1.8	-19.57	400.5	4,155.8	4,183.4	4,167.1	16.32	256.287	
7,100.0	6,884.2	6,832.2	6,830.6	17.3	1.8	-20.35	400.2	4,155.9	4,171.4	4,155.0	16.40	254.405	
7,150.0	6,902.7	6,843.5	6,841.9	17.8	1.8	-23.88	399.5	4,156.1	4,125.6	4,108.8	16.84	244.982	
7,185.0	6,913.8	6,850.3	6,848.7	18.3	1.8	-27.16	399.0	4,156.2	4,092.9	4,075.5	17.35	235.867	
7,200.0	6,918.0	6,853.0	6,851.3	18.5	1.8	-28.84	398.8	4,156.2	4,078.7	4,061.1	17.63	231.369	
7,250.0	6,929.9	6,860.6	6,858.9	19.2	1.8	-36.11	398.3	4,156.4	4,030.8	4,012.0	18.90	213.277	
7,283.4	6,936.0	6,864.6	6,862.9	19.7	1.8	-42.98	398.0	4,156.5	3,998.4	3,978.4	20.07	199.240	
7,300.0	6,938.4	6,866.2	6,864.6	20.0	1.8	-47.19	397.9	4,156.5	3,982.3	3,961.6	20.72	192.231	
7,350.0	6,943.4	6,869.9	6,868.2	20.9	1.8	-64.11	397.7	4,156.6	3,933.2	3,910.6	22.64	173.697	
7,381.9	6,944.8	6,871.1	6,869.5	21.4	1.8	-78.30	397.6	4,156.6	3,901.8	3,878.5	23.34	167.182	
7,403.7	6,945.0	6,871.5	6,869.8	21.8	1.8	-88.95	397.5	4,156.6	3,880.2	3,856.6	23.60	164.431	
7,480.3	6,944.3	6,872.2	6,870.5	23.3	1.8	-89.01	397.5	4,156.7	3,804.7	3,779.6	25.09	151.665	
7,500.0	6,944.1	6,872.3	6,870.7	23.7	1.8	-89.03	397.5	4,156.7	3,785.2	3,759.8	25.47	148.623	
7,578.7	6,943.4	6,873.0	6,871.3	25.4	1.8	-89.09	397.4	4,156.7	3,707.6	3,680.5	27.12	136.731	
7,600.0	6,943.2	6,873.2	6,871.5	25.8	1.8	-89.11	397.4	4,156.7	3,686.6	3,659.1	27.56	133.762	
7,677.1	6,942.5	6,873.9	6,872.2	27.5	1.8	-89.17	397.4	4,156.7	3,610.6	3,581.3	29.27	123.345	
7,700.0	6,942.3	6,874.1	6,872.4	28.0	1.8	-89.19	397.4	4,156.7	3,588.1	3,558.3	29.78	120.490	
7,775.6	6,941.6	6,874.8	6,873.1	29.8	1.8	-89.25	397.3	4,156.7	3,513.7	3,482.2	31.53	111.423	
7,800.0	6,941.4	6,875.0	6,873.3	30.3	1.8	-89.27	397.3	4,156.7	3,489.7	3,457.6	32.10	108.705	
7,874.0	6,940.7	6,875.7	6,874.0	32.1	1.8	-89.33	397.3	4,156.7	3,416.9	3,383.0	33.88	100.859	
7,900.0	6,940.5	6,875.9	6,874.2	32.7	1.8	-89.35	397.2	4,156.7	3,391.3	3,356.8	34.50	98.294	
7,972.4	6,939.8	6,876.6	6,874.9	34.5	1.8	-89.42	397.2	4,156.8	3,320.2	3,283.9	36.28	91.506	
8,000.0	6,939.6	6,876.8	6,875.1	35.2	1.8	-89.44	397.2	4,156.8	3,293.1	3,256.1	36.96	89.093	
8,070.8	6,938.9	6,877.5	6,875.8	37.0	1.8	-89.50	397.1	4,156.8	3,223.5	3,184.8	38.74	83.209	
8,100.0	6,938.7	6,877.8	6,876.1	37.7	1.8	-89.53	397.1	4,156.8	3,194.9	3,155.5	39.47	80.943	
8,169.3	6,938.0	6,878.5	6,876.8	39.5	1.8	-89.59	397.1	4,156.8	3,127.0	3,085.8	41.24	75.830	
8,200.0	6,937.7	6,878.8	6,877.1	40.3	1.8	-89.62	397.1	4,156.8	3,096.9	3,054.9	42.02	73.700	
8,267.7	6,937.1	6,879.4	6,877.7	42.0	1.8	-89.68	397.0	4,156.8	3,030.6	2,986.8	43.77	69.242	
8,300.0	6,936.8	6,879.8	6,878.1	42.8	1.8	-89.71	397.0	4,156.8	2,999.0	2,954.4	44.60	67.239	
8,366.1	6,936.2	6,880.4	6,878.7	44.6	1.8	-89.77	396.9	4,156.9	2,934.3	2,888.0	46.33	63.339	
8,400.0	6,935.9	6,880.8	6,879.1	45.5	1.8	-89.80	396.9	4,156.9	2,901.2	2,854.0	47.21	61.453	
8,464.5	6,935.3	6,881.5	6,879.7	47.2	1.8	-89.86	396.9	4,156.9	2,838.2	2,789.3	48.91	58.030	
8,500.0	6,935.0	6,881.8	6,880.1	48.1	1.8	-89.90	396.9	4,156.9	2,803.6	2,753.8	49.84	56.250	
8,563.0	6,934.5	6,882.5	6,880.8	49.8	1.8	-89.96	396.8	4,156.9	2,742.3	2,690.8	51.51	53.236	
8,600.0	6,934.1	6,882.9	6,881.2	50.7	1.8	-89.99	396.8	4,156.9	2,706.2	2,653.7	52.49	51.554	
8,661.4	6,933.6	6,883.6	6,881.8	52.4	1.8	-90.06	396.7	4,156.9	2,646.5	2,592.4	54.13	48.891	
8,700.0	6,933.2	6,884.0	6,882.3	53.4	1.8	-90.09	396.7	4,156.9	2,609.0	2,553.8	55.16	47.299	
8,759.8	6,932.7	6,884.6	6,882.9	55.0	1.8	-90.16	396.7	4,157.0	2,550.9	2,494.2	56.76	44.939	
8,800.0	6,932.3	6,900.0	6,898.2	56.1	1.8	-91.57	395.6	4,157.4	2,512.1	2,454.2	57.83	43.435	
8,858.2	6,931.8	6,900.0	6,898.2	57.7	1.8	-91.57	395.6	4,157.4	2,455.7	2,396.3	59.40	41.339	
8,900.0	6,931.4	6,900.0	6,898.2	58.8	1.8	-91.57	395.6	4,157.4	2,415.3	2,354.8	60.53	39.905	
8,956.7	6,930.9	6,900.0	6,898.2	60.3	1.8	-91.57	395.6	4,157.4	2,360.6	2,298.5	62.06	38.038	
9,000.0	6,930.5	6,900.0	6,898.2	61.5	1.8	-91.57	395.6	4,157.4	2,318.8	2,255.6	63.23	36.673	
9,055.1	6,930.0	6,900.0	6,898.2	63.0	1.8	-91.57	395.6	4,157.4	2,265.7	2,201.0	64.72	35.007	
9,100.0	6,929.6	6,900.0	6,898.2	64.2	1.8	-91.57	395.6	4,157.4	2,222.6	2,156.7	65.94	33.706	
9,153.5	6,929.1	6,900.0	6,898.2	65.6	1.8	-91.57	395.6	4,157.4	2,171.2	2,103.9	67.40	32.217	
9,200.0	6,928.7	6,900.0	6,898.2	66.9	1.8	-91.57	395.6	4,157.4	2,126.8	2,058.1	68.66	30.976	
9,251.9	6,928.2	6,900.0	6,898.2	68.3	1.8	-91.57	395.6	4,157.4	2,077.1	2,007.0	70.08	29.641	
9,300.0	6,927.8	6,900.0	6,898.2	69.6	1.8	-91.57	395.6	4,157.4	2,031.3	1,959.9	71.39	28.456	
9,350.4	6,927.3	6,900.0	6,898.2	71.0	1.8	-91.57	395.6	4,157.4	1,983.4	1,910.6	72.76	27.259	
9,400.0	6,926.9	6,900.0	6,898.2	72.4	1.8	-91.57	395.6	4,157.4	1,936.3	1,862.2	74.12	26.125	
9,448.8	6,926.4	6,900.0	6,898.2	73.7	1.8	-91.57	395.6	4,157.4	1,890.2	1,814.7	75.45	25.050	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
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
9,500.0	6,926.0	6,900.0	6,898.2	75.1	1.8	-91.57	395.6	4,157.4	1,841.9	1,765.0	76.86	23.965	
9,547.2	6,925.5	6,900.0	6,898.2	76.4	1.8	-91.57	395.6	4,157.4	1,797.5	1,719.3	78.15	23.000	
9,600.0	6,925.1	6,900.0	6,898.2	77.9	1.8	-91.57	395.6	4,157.4	1,748.1	1,668.5	79.60	21.961	
9,645.6	6,924.6	6,900.0	6,898.2	79.1	1.8	-91.57	395.6	4,157.4	1,705.5	1,624.6	80.85	21.093	
9,700.0	6,924.1	6,900.0	6,898.2	80.6	1.8	-91.57	395.6	4,157.4	1,655.0	1,572.6	82.35	20.097	
9,744.1	6,923.7	6,900.0	6,898.2	81.8	1.8	-91.57	395.6	4,157.4	1,614.2	1,530.6	83.56	19.317	
9,800.0	6,923.2	6,900.0	6,898.2	83.4	1.8	-91.57	395.6	4,157.4	1,562.7	1,477.6	85.10	18.363	
9,842.5	6,922.9	6,900.0	6,898.2	84.5	1.8	-91.57	395.6	4,157.4	1,523.8	1,437.5	86.27	17.663	
9,900.0	6,922.3	6,900.0	6,898.2	86.1	1.8	-91.57	395.6	4,157.4	1,471.5	1,383.6	87.86	16.749	
9,940.9	6,922.0	6,900.0	6,898.2	87.2	1.8	-91.57	395.6	4,157.4	1,434.5	1,345.5	88.98	16.120	
10,000.0	6,921.4	6,900.0	6,898.2	88.9	1.8	-91.57	395.6	4,157.4	1,381.4	1,290.8	90.61	15.245	
10,039.3	6,921.1	6,900.0	6,898.2	90.0	1.8	-91.57	395.6	4,157.4	1,346.4	1,254.7	91.70	14.682	
10,100.0	6,920.5	6,900.0	6,898.2	91.6	1.8	-91.57	395.6	4,157.4	1,292.9	1,199.5	93.38	13.846	
10,137.8	6,920.2	6,900.0	6,898.2	92.7	1.8	-91.57	395.6	4,157.4	1,259.9	1,165.4	94.42	13.343	
10,200.0	6,919.6	6,900.0	6,898.2	94.4	1.8	-91.57	395.6	4,157.4	1,206.1	1,110.0	96.14	12.545	
10,236.2	6,919.3	6,900.0	6,898.2	95.4	1.8	-91.57	395.6	4,157.4	1,175.2	1,078.1	97.14	12.098	
10,300.0	6,918.7	6,900.0	6,898.2	97.2	1.8	-91.57	395.6	4,157.4	1,121.5	1,022.6	98.91	11.339	
10,334.6	6,918.4	6,900.0	6,898.2	98.1	1.8	-91.57	395.6	4,157.4	1,092.9	993.0	99.87	10.943	
10,400.0	6,917.8	6,900.0	6,898.2	99.9	1.8	-91.57	395.6	4,157.4	1,039.7	938.0	101.68	10.226	
10,433.0	6,917.5	6,900.0	6,898.2	100.9	1.8	-91.57	395.6	4,157.4	1,013.4	910.8	102.59	9.878	
10,500.0	6,916.9	6,900.0	6,898.2	102.7	1.8	-91.57	395.6	4,157.4	961.3	856.9	104.45	9.204	
10,531.5	6,916.6	6,900.0	6,898.2	103.6	1.8	-91.57	395.6	4,157.4	937.5	832.2	105.32	8.901	
10,600.0	6,916.0	6,900.0	6,898.2	105.5	1.8	-91.57	395.6	4,157.4	887.3	780.1	107.22	8.275	
10,629.9	6,915.7	6,900.0	6,898.2	106.3	1.8	-91.57	395.6	4,157.4	866.2	758.1	108.05	8.016	
10,700.0	6,915.1	6,900.0	6,898.2	108.3	1.8	-91.57	395.6	4,157.4	818.8	708.8	110.00	7.444	
10,728.3	6,914.8	6,900.0	6,898.2	109.1	1.8	-91.57	395.6	4,157.4	800.6	689.9	110.79	7.227	
10,800.0	6,914.2	6,900.0	6,898.2	111.0	1.8	-91.57	395.6	4,157.4	757.4	644.6	112.78	6.716	
10,826.7	6,913.9	6,900.0	6,898.2	111.8	1.8	-91.57	395.6	4,157.4	742.4	628.9	113.52	6.540	
10,900.0	6,913.3	6,900.0	6,898.2	113.8	1.8	-91.57	395.6	4,157.4	704.8	589.3	115.55	6.100	
10,925.2	6,913.1	6,900.0	6,898.2	114.5	1.8	-91.57	395.6	4,157.4	693.3	577.0	116.25	5.963	
11,000.0	6,912.4	6,900.0	6,898.2	116.6	1.8	-91.57	395.6	4,157.4	663.3	545.0	118.33	5.605	
11,023.6	6,912.2	6,900.0	6,898.2	117.3	1.8	-91.57	395.6	4,157.4	655.3	536.3	118.99	5.507	
11,100.0	6,911.5	6,900.0	6,898.2	119.4	1.8	-91.57	395.6	4,157.4	634.9	513.8	121.12	5.242	
11,122.0	6,911.3	6,900.0	6,898.2	120.0	1.8	-91.57	395.6	4,157.4	630.6	508.9	121.73	5.181	
11,200.0	6,910.6	6,900.0	6,898.2	122.2	1.8	-91.57	395.6	4,157.4	621.5	497.6	123.90	5.016	
11,220.4	6,910.4	6,900.0	6,898.2	122.7	1.8	-91.57	395.6	4,157.4	620.7	496.3	124.47	4.987	
11,234.2	6,910.3	6,900.0	6,898.2	123.1	1.8	-91.57	395.6	4,157.4	620.6	495.7	124.85	4.971 CC, ES	
11,300.0	6,909.7	6,900.0	6,898.2	125.0	1.8	-91.57	395.6	4,157.4	624.1	497.4	126.68	4.926	
11,318.9	6,909.5	6,900.0	6,898.2	125.5	1.8	-91.57	395.6	4,157.4	626.3	499.1	127.21	4.924 SF	
11,400.0	6,908.8	6,900.0	6,898.2	127.7	1.8	-91.57	395.6	4,157.4	642.3	512.9	129.47	4.961	
11,417.3	6,908.6	6,900.0	6,898.2	128.2	1.8	-91.57	395.6	4,157.4	647.0	517.1	129.95	4.979	
11,500.0	6,907.9	6,900.0	6,898.2	130.5	1.8	-91.57	395.6	4,157.4	675.1	542.9	132.25	5.105	
11,515.7	6,907.7	6,900.0	6,898.2	131.0	1.8	-91.57	395.6	4,157.4	681.5	548.8	132.69	5.136	
11,600.0	6,907.0	6,900.0	6,898.2	133.3	1.8	-91.57	395.6	4,157.4	720.4	585.3	135.04	5.334	
11,614.1	6,906.8	6,900.0	6,898.2	133.7	1.8	-91.57	395.6	4,157.4	727.7	592.2	135.44	5.373	
11,700.0	6,906.0	6,900.0	6,898.2	136.1	1.8	-91.57	395.6	4,157.4	775.9	638.1	137.83	5.630	
11,712.6	6,905.9	6,900.0	6,898.2	136.5	1.8	-91.57	395.6	4,157.4	783.6	645.4	138.18	5.671	
11,800.0	6,905.1	6,900.0	6,898.2	138.9	1.8	-91.57	395.6	4,157.4	839.8	699.2	140.62	5.972	
11,811.0	6,905.0	6,900.0	6,898.2	139.2	1.8	-91.57	395.6	4,157.4	847.2	706.3	140.92	6.012	
11,900.0	6,904.2	6,900.0	6,898.2	141.7	1.8	-91.57	395.6	4,157.4	910.2	766.8	143.41	6.347	
11,909.4	6,904.2	6,900.0	6,898.2	141.9	1.8	-91.57	395.6	4,157.4	917.1	773.4	143.67	6.383	
12,000.0	6,903.3	6,900.0	6,898.2	144.5	1.8	-91.57	395.6	4,157.4	985.7	839.5	146.20	6.742	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,007.8	6,903.3	6,900.0	6,898.2	144.7	1.8	-91.57	395.6	4,157.4	991.8	845.4	146.42	6.774	
12,100.0	6,902.4	6,900.0	6,898.2	147.3	1.8	-91.57	395.6	4,157.4	1,065.2	916.3	148.99	7.150	
12,106.3	6,902.4	6,900.0	6,898.2	147.4	1.8	-91.57	395.6	4,157.4	1,070.3	921.2	149.16	7.176	
12,200.0	6,901.5	6,900.0	6,898.2	150.1	1.8	-91.57	395.6	4,157.4	1,148.0	996.2	151.78	7.564	
12,204.7	6,901.5	6,900.0	6,898.2	150.2	1.8	-91.57	395.6	4,157.4	1,152.0	1,000.0	151.91	7.583	
12,300.0	6,900.6	6,900.0	6,898.2	152.9	1.8	-91.57	395.6	4,157.4	1,233.3	1,078.7	154.57	7.979	
12,303.1	6,900.6	6,900.0	6,898.2	152.9	1.8	-91.57	395.6	4,157.4	1,236.0	1,081.4	154.66	7.992	
12,400.0	6,899.7	6,900.0	6,898.2	155.6	1.8	-91.57	395.6	4,157.4	1,320.7	1,163.3	157.36	8.393	
12,401.5	6,899.7	6,900.0	6,898.2	155.7	1.8	-91.57	395.6	4,157.4	1,322.1	1,164.7	157.41	8.399	
12,500.0	6,898.8	6,900.0	6,898.2	158.4	1.8	-91.57	395.6	4,157.4	1,409.7	1,249.6	160.16	8.802	
12,598.4	6,897.9	6,900.0	6,898.2	161.2	1.8	-91.57	395.6	4,157.4	1,498.7	1,335.8	162.91	9.200	
12,600.0	6,897.9	6,900.0	6,898.2	161.2	1.8	-91.57	395.6	4,157.4	1,500.2	1,337.2	162.95	9.206	
12,696.8	6,897.0	6,900.0	6,898.2	163.9	1.8	-91.57	395.6	4,157.4	1,588.8	1,423.2	165.66	9.591	
12,700.0	6,897.0	6,900.0	6,898.2	164.0	1.8	-91.57	395.6	4,157.4	1,591.8	1,426.0	165.75	9.604	
12,795.2	6,896.1	6,900.0	6,898.2	166.7	1.8	-91.57	395.6	4,157.4	1,679.9	1,511.5	168.41	9.975	
12,800.0	6,896.1	6,900.0	6,898.2	166.8	1.8	-91.57	395.6	4,157.4	1,684.3	1,515.8	168.54	9.993	
12,893.7	6,895.3	6,900.0	6,898.2	169.4	1.8	-91.57	395.6	4,157.4	1,771.7	1,600.6	171.16	10.351	
12,900.0	6,895.2	6,900.0	6,898.2	169.6	1.8	-91.57	395.6	4,157.4	1,777.6	1,606.3	171.34	10.375	
12,992.1	6,894.4	6,900.0	6,898.2	172.2	1.8	-91.57	395.6	4,157.4	1,864.2	1,690.3	173.91	10.719	
13,000.0	6,894.3	6,900.0	6,898.2	172.4	1.8	-91.57	395.6	4,157.4	1,871.7	1,697.5	174.13	10.749	
13,090.5	6,893.5	6,900.0	6,898.2	175.0	1.8	-91.57	395.6	4,157.4	1,957.3	1,780.7	176.66	11.079	
13,100.0	6,893.4	6,900.0	6,898.2	175.2	1.8	-91.57	395.6	4,157.4	1,966.3	1,789.4	176.93	11.114	
13,188.9	6,892.6	6,900.0	6,898.2	177.7	1.8	-91.57	395.6	4,157.4	2,050.9	1,871.5	179.42	11.431	
13,200.0	6,892.5	6,900.0	6,898.2	178.0	1.8	-91.57	395.6	4,157.4	2,061.4	1,881.7	179.73	11.470	
13,287.4	6,891.7	6,900.0	6,898.2	180.5	1.8	-91.57	395.6	4,157.4	2,144.9	1,962.7	182.17	11.774	
13,300.0	6,891.6	6,900.0	6,898.2	180.8	1.8	-91.57	395.6	4,157.4	2,157.0	1,974.5	182.52	11.818	
13,385.8	6,890.8	6,900.0	6,898.2	183.2	1.8	-91.57	395.6	4,157.4	2,239.3	2,054.4	184.92	12.109	
13,400.0	6,890.7	6,900.0	6,898.2	183.6	1.8	-91.57	395.6	4,157.4	2,253.0	2,067.6	185.32	12.157	
13,484.2	6,889.9	6,900.0	6,898.2	186.0	1.8	-91.57	395.6	4,157.4	2,334.0	2,146.4	187.68	12.437	
13,500.0	6,889.8	6,900.0	6,898.2	186.4	1.8	-91.57	395.6	4,157.4	2,349.3	2,161.1	188.12	12.488	
13,582.6	6,889.0	6,900.0	6,898.2	188.7	1.8	-91.57	395.6	4,157.4	2,429.1	2,238.6	190.43	12.756	
13,600.0	6,888.9	6,900.0	6,898.2	189.2	1.8	-91.57	395.6	4,157.4	2,445.8	2,254.9	190.92	12.811	
13,681.1	6,888.1	6,900.0	6,898.2	191.5	1.8	-91.57	395.6	4,157.4	2,524.4	2,331.2	193.18	13.067	
13,700.0	6,888.0	6,900.0	6,898.2	192.0	1.8	-91.57	395.6	4,157.4	2,542.7	2,349.0	193.71	13.126	
13,779.5	6,887.3	6,900.0	6,898.2	194.2	1.8	-91.57	395.6	4,157.4	2,619.9	2,423.9	195.94	13.371	
13,800.0	6,887.1	6,900.0	6,898.2	194.8	1.8	-91.57	395.6	4,157.4	2,639.8	2,443.3	196.51	13.433	
13,877.9	6,886.4	6,900.0	6,898.2	197.0	1.8	-91.57	395.6	4,157.4	2,715.6	2,516.9	198.69	13.667	
13,900.0	6,886.2	6,900.0	6,898.2	197.6	1.8	-91.57	395.6	4,157.4	2,737.1	2,537.8	199.31	13.733	
13,976.3	6,885.5	6,900.0	6,898.2	199.7	1.8	-91.57	395.6	4,157.4	2,811.5	2,610.1	201.45	13.956	
14,000.0	6,885.3	6,900.0	6,898.2	200.4	1.8	-91.57	395.6	4,157.4	2,834.6	2,632.5	202.11	14.025	
14,074.8	6,884.6	6,900.0	6,898.2	202.5	1.8	-91.57	395.6	4,157.4	2,907.6	2,703.4	204.20	14.239	
14,100.0	6,884.4	6,900.0	6,898.2	203.2	1.8	-91.57	395.6	4,157.4	2,932.2	2,727.3	204.91	14.310	
14,173.2	6,883.7	6,900.0	6,898.2	205.3	1.8	-91.57	395.6	4,157.4	3,003.8	2,796.9	206.96	14.514	
14,200.0	6,883.5	6,900.0	6,898.2	206.0	1.8	-91.57	395.6	4,157.4	3,030.0	2,822.3	207.71	14.588	
14,271.6	6,882.8	6,900.0	6,898.2	208.0	1.8	-91.57	395.6	4,157.4	3,100.2	2,890.5	209.72	14.783	
14,300.0	6,882.6	6,900.0	6,898.2	208.8	1.8	-91.57	395.6	4,157.4	3,128.0	2,917.5	210.51	14.859	
14,370.0	6,881.9	6,900.0	6,898.2	210.8	1.8	-91.57	395.6	4,157.4	3,196.7	2,984.2	212.47	15.045	
14,400.0	6,881.7	6,900.0	6,898.2	211.6	1.8	-91.57	395.6	4,157.4	3,226.1	3,012.7	213.31	15.124	
14,468.5	6,881.0	6,900.0	6,898.2	213.5	1.8	-91.57	395.6	4,157.4	3,293.3	3,078.1	215.23	15.301	
14,500.0	6,880.8	6,900.0	6,898.2	214.4	1.8	-91.57	395.6	4,157.4	3,324.2	3,108.1	216.11	15.382	
14,566.9	6,880.2	6,900.0	6,898.2	216.3	1.8	-91.57	395.6	4,157.4	3,390.0	3,172.0	217.98	15.552	
14,584.2	6,880.0	6,900.0	6,898.2	216.8	1.8	-91.57	395.6	4,157.4	3,407.0	3,188.5	218.47	15.595	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	87.29	321.5	6,799.1	6,806.7				
98.4	98.4	74.4	74.4	0.1	0.4	87.29	321.5	6,799.1	6,806.7	6,806.2	0.51	N/A	
100.0	100.0	76.0	76.0	0.1	0.4	87.29	321.5	6,799.1	6,806.7	6,806.2	0.52	N/A	
196.8	196.8	172.8	172.8	0.3	2.4	87.29	321.5	6,799.1	6,806.7	6,804.0	2.66	2,554.980	
200.0	200.0	176.0	176.0	0.3	2.4	87.29	321.5	6,799.1	6,806.7	6,803.9	2.75	2,476.553	
295.3	295.3	271.3	271.3	0.5	4.5	87.29	321.5	6,799.1	6,806.7	6,801.7	5.03	1,352.114	
300.0	300.0	276.0	276.0	0.5	4.6	87.29	321.5	6,799.1	6,806.7	6,801.5	5.14	1,323.482	
393.7	393.7	369.7	369.7	0.7	6.5	87.29	321.5	6,799.1	6,806.7	6,799.4	7.28	935.600	
400.0	400.0	376.0	376.0	0.8	6.7	87.29	321.5	6,799.1	6,806.7	6,799.3	7.42	917.599	
492.1	492.1	468.1	468.1	1.0	8.5	87.29	321.5	6,799.1	6,806.7	6,797.2	9.50	716.793	
500.0	500.0	476.0	476.0	1.0	8.7	87.29	321.5	6,799.1	6,806.7	6,797.0	9.67	703.651	
590.5	590.5	566.5	566.5	1.2	10.5	87.29	321.5	6,799.1	6,806.7	6,795.0	11.71	581.327	
600.0	600.0	576.0	576.0	1.2	10.7	87.29	321.5	6,799.1	6,806.7	6,794.8	11.92	570.976	
689.0	689.0	665.0	665.0	1.4	12.5	87.29	321.5	6,799.1	6,806.7	6,792.8	13.92	489.067	
700.0	700.0	676.0	676.0	1.4	12.7	87.29	321.5	6,799.1	6,806.7	6,792.5	14.17	480.528	
787.4	787.4	763.4	763.4	1.6	14.5	87.29	321.5	6,799.1	6,806.7	6,790.6	16.12	422.140	
800.0	800.0	776.0	776.0	1.7	14.7	87.29	321.5	6,799.1	6,806.7	6,790.3	16.41	414.875	
885.8	885.8	861.8	861.8	1.9	16.5	87.29	321.5	6,799.1	6,806.7	6,788.4	18.33	371.356	
900.0	900.0	876.0	876.0	1.9	16.8	87.29	321.5	6,799.1	6,806.7	6,788.0	18.65	365.033	
984.2	984.2	960.2	960.2	2.1	18.5	87.29	321.5	6,799.1	6,806.7	6,786.2	20.53	331.495	
1,000.0	1,000.0	976.0	976.0	2.1	18.8	87.29	321.5	6,799.1	6,806.7	6,785.8	20.89	325.898	
1,082.7	1,082.7	1,058.7	1,058.7	2.3	20.4	87.29	321.5	6,799.1	6,806.7	6,784.0	22.74	299.370	
1,100.0	1,100.0	1,076.0	1,076.0	2.3	20.8	87.29	321.5	6,799.1	6,806.7	6,783.6	23.12	294.350	
1,181.1	1,181.1	1,157.1	1,157.1	2.5	22.4	87.29	321.5	6,799.1	6,806.7	6,781.8	24.94	272.927	
1,200.0	1,200.0	1,176.0	1,176.0	2.6	22.8	87.29	321.5	6,799.1	6,806.7	6,781.3	25.36	268.376	
1,279.5	1,279.5	1,255.5	1,255.5	2.7	24.4	87.29	321.5	6,799.1	6,806.7	6,779.5	27.14	250.781	
1,300.0	1,300.0	1,276.0	1,276.0	2.8	24.8	87.29	321.5	6,799.1	6,806.7	6,779.1	27.60	246.618	
1,377.9	1,377.9	1,353.9	1,353.9	3.0	26.4	87.29	321.5	6,799.1	6,806.7	6,777.3	29.34	231.960	
1,400.0	1,400.0	1,376.0	1,376.0	3.0	26.8	87.29	321.5	6,799.1	6,806.7	6,776.9	29.84	228.125	
1,476.4	1,476.4	1,452.4	1,452.4	3.2	28.4	87.29	321.5	6,799.1	6,806.7	6,775.1	31.55	215.769	
1,500.0	1,500.0	1,476.0	1,476.0	3.2	28.8	87.29	321.5	6,799.1	6,806.7	6,774.6	32.07	212.214	
1,574.8	1,574.8	1,550.8	1,550.8	3.4	30.3	87.29	321.5	6,799.1	6,806.7	6,772.9	33.75	201.692	
1,600.0	1,600.0	1,576.0	1,576.0	3.5	30.9	87.29	321.5	6,799.1	6,806.7	6,772.4	34.31	198.379	
1,650.0	1,650.0	1,626.0	1,626.0	3.6	31.9	87.29	321.5	6,799.1	6,806.7	6,771.3	35.43	192.117	
1,673.2	1,673.2	1,649.2	1,649.2	3.6	32.3	-153.12	321.5	6,799.1	6,806.8	6,770.8	35.94	189.374	
1,700.0	1,700.0	1,676.0	1,676.0	3.7	32.9	-153.12	321.5	6,799.1	6,807.1	6,770.5	36.53	186.327	
1,771.6	1,771.6	1,747.6	1,747.6	3.8	34.3	-153.11	321.5	6,799.1	6,809.0	6,770.9	38.08	178.792	
1,800.0	1,799.9	1,775.9	1,775.9	3.9	34.9	-153.11	321.5	6,799.1	6,810.2	6,771.5	38.69	176.018	
1,870.1	1,869.9	1,845.9	1,845.9	4.0	36.3	-153.09	321.5	6,799.1	6,814.2	6,774.0	40.18	169.599	
1,900.0	1,899.7	1,875.7	1,875.7	4.1	36.9	-153.08	321.5	6,799.1	6,816.4	6,775.6	40.81	167.044	
1,968.5	1,967.8	1,943.8	1,943.8	4.2	38.3	-153.05	321.5	6,799.1	6,822.5	6,780.2	42.23	161.561	
2,000.0	1,999.1	1,975.1	1,975.1	4.3	38.9	-153.03	321.5	6,799.1	6,825.7	6,782.9	42.87	159.208	
2,066.9	2,065.5	2,041.5	2,041.5	4.4	40.2	-152.99	321.5	6,799.1	6,833.7	6,789.5	44.23	154.512	
2,100.0	2,098.2	2,074.2	2,074.2	4.5	40.9	-152.97	321.5	6,799.1	6,838.2	6,793.3	44.89	152.346	
2,165.3	2,162.6	2,138.6	2,138.6	4.7	42.2	-152.92	321.5	6,799.1	6,848.0	6,801.8	46.17	148.316	
2,200.0	2,196.6	2,172.6	2,172.6	4.7	42.9	-152.89	321.5	6,799.1	6,853.7	6,806.8	46.84	146.322	
2,249.9	2,245.5	2,221.5	2,221.5	4.9	43.8	-152.85	321.5	6,799.1	6,862.6	6,814.8	47.79	143.596	
2,263.8	2,259.1	2,235.1	2,235.1	4.9	44.1	-152.86	321.5	6,799.1	6,865.1	6,817.1	48.09	142.752	
2,300.0	2,294.5	2,270.5	2,270.5	5.0	44.8	-152.89	321.5	6,799.1	6,871.9	6,823.0	48.87	140.602	
2,362.2	2,355.4	2,331.4	2,331.4	5.2	46.0	-152.94	321.5	6,799.1	6,883.4	6,833.2	50.22	137.052	
2,400.0	2,392.3	2,368.3	2,368.3	5.4	46.8	-152.97	321.5	6,799.1	6,890.5	6,839.4	51.04	134.991	
2,460.6	2,451.6	2,427.6	2,427.6	5.6	48.0	-153.01	321.5	6,799.1	6,901.8	6,849.4	52.36	131.806	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,466.2	2,466.2	5.7	48.8	-153.05	321.5	6,799.1	6,909.1	6,855.9	53.22	129.815		
2,559.0	2,547.9	2,523.9	2,523.9	5.9	49.9	-153.09	321.5	6,799.1	6,920.1	6,865.6	54.51	126.944		
2,600.0	2,588.0	2,564.0	2,564.0	6.1	50.7	-153.12	321.5	6,799.1	6,927.7	6,872.3	55.41	125.031		
2,657.5	2,644.2	2,620.2	2,620.2	6.3	51.9	-153.17	321.5	6,799.1	6,938.4	6,881.7	56.67	122.440		
2,700.0	2,685.8	2,661.8	2,661.8	6.4	52.7	-153.20	321.5	6,799.1	6,946.3	6,888.7	57.60	120.596		
2,755.9	2,740.5	2,716.5	2,716.5	6.6	53.8	-153.24	321.5	6,799.1	6,956.7	6,897.9	58.83	118.254		
2,800.0	2,783.6	2,759.6	2,759.6	6.8	54.7	-153.28	321.5	6,799.1	6,965.0	6,905.2	59.80	116.475		
2,854.3	2,836.7	2,812.7	2,812.7	7.0	55.7	-153.32	321.5	6,799.1	6,975.1	6,914.1	60.99	114.357		
2,900.0	2,881.4	2,857.4	2,857.4	7.2	56.6	-153.35	321.5	6,799.1	6,983.6	6,921.6	62.00	112.639		
2,952.7	2,933.0	2,909.0	2,909.0	7.4	57.7	-153.39	321.5	6,799.1	6,993.5	6,930.3	63.16	110.719		
3,000.0	2,979.2	2,955.2	2,955.2	7.6	58.6	-153.43	321.5	6,799.1	7,002.3	6,938.1	64.21	109.059		
3,051.2	3,029.3	3,005.3	3,005.3	7.8	59.6	-153.47	321.5	6,799.1	7,011.8	6,946.5	65.34	107.317		
3,100.0	3,077.1	3,053.1	3,053.1	8.0	60.6	-153.50	321.5	6,799.1	7,021.0	6,954.5	66.42	105.711		
3,149.6	3,125.6	3,101.6	3,101.6	8.2	61.5	-153.54	321.5	6,799.1	7,030.2	6,962.7	67.51	104.129		
3,200.0	3,174.9	3,150.9	3,150.9	8.4	62.5	-153.58	321.5	6,799.1	7,039.7	6,971.0	68.63	102.574		
3,248.0	3,221.8	3,197.8	3,197.8	8.6	63.5	-153.62	321.5	6,799.1	7,048.6	6,978.9	69.69	101.137		
3,300.0	3,272.7	3,248.7	3,248.7	8.9	64.5	-153.65	321.5	6,799.1	7,058.4	6,987.5	70.85	99.630		
3,346.4	3,318.1	3,294.1	3,294.1	9.0	65.4	-153.69	321.5	6,799.1	7,067.0	6,995.2	71.88	98.323		
3,400.0	3,370.5	3,346.5	3,346.5	9.3	66.5	-153.73	321.5	6,799.1	7,077.1	7,004.0	73.06	96.862		
3,444.9	3,414.4	3,390.4	3,390.4	9.5	67.3	-153.76	321.5	6,799.1	7,085.5	7,011.4	74.06	95.672		
3,500.0	3,468.3	3,444.3	3,444.3	9.7	68.4	-153.80	321.5	6,799.1	7,095.8	7,020.5	75.28	94.255		
3,543.3	3,510.7	3,486.7	3,486.7	9.9	69.3	-153.83	321.5	6,799.1	7,103.9	7,027.7	76.25	93.172		
3,600.0	3,566.1	3,542.1	3,542.1	10.1	70.4	-153.88	321.5	6,799.1	7,114.5	7,037.0	77.50	91.794		
3,641.7	3,606.9	3,582.9	3,582.9	10.3	71.2	-153.91	321.5	6,799.1	7,122.4	7,043.9	78.43	90.808		
3,700.0	3,664.0	3,640.0	3,640.0	10.6	72.4	-153.95	321.5	6,799.1	7,133.3	7,053.5	79.73	89.470		
3,740.1	3,703.2	3,679.2	3,679.2	10.7	73.2	-153.98	321.5	6,799.1	7,140.8	7,060.2	80.62	88.572		
3,800.0	3,761.8	3,737.8	3,737.8	11.0	74.3	-154.02	321.5	6,799.1	7,152.0	7,070.1	81.95	87.270		
3,837.4	3,798.3	3,774.3	3,774.3	11.2	75.1	-154.05	321.5	6,799.1	7,159.0	7,076.3	82.78	86.479		
3,838.6	3,799.5	3,775.5	3,775.5	11.2	75.1	-154.05	321.5	6,799.1	7,159.3	7,076.5	82.82	86.448		
3,900.0	3,859.7	3,835.7	3,835.7	11.4	76.3	-154.19	321.5	6,799.1	7,170.2	7,085.8	84.43	84.922		
3,937.0	3,896.1	3,872.1	3,872.1	11.5	77.0	-154.27	321.5	6,799.1	7,176.2	7,090.8	85.39	84.043		
4,000.0	3,958.3	3,934.3	3,934.3	11.7	78.3	-154.38	321.5	6,799.1	7,185.5	7,098.5	87.00	82.593		
4,035.4	3,993.3	3,969.3	3,969.3	11.8	79.0	-154.44	321.5	6,799.1	7,190.2	7,102.3	87.89	81.807		
4,100.0	4,057.4	4,033.4	4,033.4	12.0	80.3	-154.54	321.5	6,799.1	7,197.7	7,108.2	89.50	80.420		
4,133.8	4,091.0	4,067.0	4,067.0	12.1	81.0	-154.58	321.5	6,799.1	7,201.1	7,110.8	90.33	79.720		
4,200.0	4,156.8	4,132.8	4,132.8	12.2	82.3	-154.65	321.5	6,799.1	7,206.7	7,114.8	91.93	78.395		
4,232.3	4,189.0	4,165.0	4,165.0	12.3	82.9	-154.68	321.5	6,799.1	7,209.0	7,116.3	92.69	77.772		
4,300.0	4,256.6	4,232.6	4,232.6	12.4	84.3	-154.72	321.5	6,799.1	7,212.6	7,118.4	94.27	76.508		
4,330.7	4,287.3	4,263.3	4,263.3	12.5	84.9	-154.74	321.5	6,799.1	7,213.8	7,118.8	94.97	75.957		
4,400.0	4,356.6	4,332.6	4,332.6	12.6	86.3	-154.75	321.5	6,799.1	7,215.4	7,118.9	96.52	74.754		
4,429.1	4,385.7	4,361.7	4,361.7	12.6	86.9	-154.76	321.5	6,799.1	7,215.6	7,118.4	97.16	74.266		
4,437.2	4,393.8	4,369.8	4,369.8	12.7	87.0	85.66	321.5	6,799.1	7,215.6	7,116.4	99.21	72.729		
4,500.0	4,456.6	4,432.6	4,432.6	12.7	88.3	85.66	321.5	6,799.1	7,215.6	7,115.0	100.57	71.745		
4,527.5	4,484.1	4,460.1	4,460.1	12.8	88.9	85.66	321.5	6,799.1	7,215.6	7,114.4	101.17	71.320		
4,600.0	4,556.6	4,532.6	4,532.6	12.9	90.3	85.66	321.5	6,799.1	7,215.6	7,112.8	102.75	70.226		
4,626.0	4,582.6	4,558.6	4,558.6	12.9	90.8	85.66	321.5	6,799.1	7,215.6	7,112.3	103.31	69.841		
4,700.0	4,656.6	4,632.6	4,632.6	13.1	92.3	85.66	321.5	6,799.1	7,215.6	7,110.7	104.93	68.768		
4,724.4	4,681.0	4,657.0	4,657.0	13.1	92.8	85.66	321.5	6,799.1	7,215.6	7,110.1	105.46	68.421		
4,800.0	4,756.6	4,732.6	4,732.6	13.2	94.3	85.66	321.5	6,799.1	7,215.6	7,108.5	107.11	67.368		
4,822.8	4,779.4	4,755.4	4,755.4	13.3	94.8	85.66	321.5	6,799.1	7,215.6	7,108.0	107.60	67.057		
4,900.0	4,856.6	4,832.6	4,832.6	13.4	96.4	85.66	321.5	6,799.1	7,215.6	7,106.3	109.29	66.024		
4,921.2	4,877.8	4,853.8	4,853.8	13.4	96.8	85.66	321.5	6,799.1	7,215.6	7,105.8	109.75	65.745		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,932.6	4,932.6	13.6	98.4	85.66	321.5	6,799.1	7,215.6	7,104.1	111.47	64.731	
5,019.7	4,976.3	4,952.3	4,952.3	13.6	98.8	85.66	321.5	6,799.1	7,215.6	7,103.7	111.90	64.482	
5,100.0	5,056.6	5,032.6	5,032.6	13.7	100.4	85.66	321.5	6,799.1	7,215.6	7,101.9	113.66	63.486	
5,118.1	5,074.7	5,050.7	5,050.7	13.8	100.7	85.66	321.5	6,799.1	7,215.6	7,101.5	114.05	63.266	
5,200.0	5,156.6	5,132.6	5,132.6	13.9	102.4	85.66	321.5	6,799.1	7,215.6	7,099.8	115.84	62.288	
5,216.5	5,173.1	5,149.1	5,149.1	13.9	102.7	85.66	321.5	6,799.1	7,215.6	7,099.4	116.20	62.094	
5,300.0	5,256.6	5,232.6	5,232.6	14.1	104.4	85.66	321.5	6,799.1	7,215.6	7,097.6	118.03	61.134	
5,314.9	5,271.5	5,247.5	5,247.5	14.1	104.7	85.66	321.5	6,799.1	7,215.6	7,097.2	118.36	60.965	
5,400.0	5,356.6	5,332.6	5,332.6	14.2	106.4	85.66	321.5	6,799.1	7,215.6	7,095.4	120.22	60.020	
5,413.4	5,370.0	5,346.0	5,346.0	14.3	106.7	85.66	321.5	6,799.1	7,215.6	7,095.1	120.51	59.875	
5,500.0	5,456.6	5,432.6	5,432.6	14.4	108.4	85.66	321.5	6,799.1	7,215.6	7,093.2	122.41	58.946	
5,511.8	5,468.4	5,444.4	5,444.4	14.4	108.7	85.66	321.5	6,799.1	7,215.6	7,092.9	122.67	58.822	
5,600.0	5,556.6	5,532.6	5,532.6	14.6	110.4	85.66	321.5	6,799.1	7,215.6	7,091.0	124.60	57.910	
5,610.2	5,566.8	5,542.8	5,542.8	14.6	110.6	85.66	321.5	6,799.1	7,215.6	7,090.8	124.83	57.806	
5,700.0	5,656.6	5,632.6	5,632.6	14.8	112.4	85.66	321.5	6,799.1	7,215.6	7,088.8	126.79	56.908	
5,708.6	5,665.2	5,641.2	5,641.2	14.8	112.6	85.66	321.5	6,799.1	7,215.6	7,088.6	126.98	56.823	
5,800.0	5,756.6	5,732.6	5,732.6	14.9	114.5	85.66	321.5	6,799.1	7,215.6	7,086.6	128.99	55.940	
5,807.1	5,763.7	5,739.7	5,739.7	14.9	114.6	85.66	321.5	6,799.1	7,215.6	7,086.5	129.14	55.873	
5,900.0	5,856.6	5,832.6	5,832.6	15.1	116.5	85.66	321.5	6,799.1	7,215.6	7,084.4	131.18	55.004	
5,905.5	5,862.1	5,838.1	5,838.1	15.1	116.6	85.66	321.5	6,799.1	7,215.6	7,084.3	131.30	54.953	
6,000.0	5,956.6	5,932.6	5,932.6	15.3	118.5	85.66	321.5	6,799.1	7,215.6	7,082.2	133.38	54.098	
6,003.9	5,960.5	5,936.5	5,936.5	15.3	118.6	85.66	321.5	6,799.1	7,215.6	7,082.1	133.47	54.063	
6,100.0	6,056.6	6,032.6	6,032.6	15.5	120.5	85.66	321.5	6,799.1	7,215.6	7,080.0	135.58	53.221	
6,102.3	6,058.9	6,034.9	6,034.9	15.5	120.5	85.66	321.5	6,799.1	7,215.6	7,080.0	135.63	53.201	
6,200.0	6,156.6	6,132.6	6,132.6	15.7	122.5	85.66	321.5	6,799.1	7,215.6	7,077.8	137.78	52.372	
6,200.8	6,157.4	6,133.4	6,133.4	15.7	122.5	85.66	321.5	6,799.1	7,215.6	7,077.8	137.79	52.365	
6,272.2	6,228.8	6,204.8	6,204.8	15.8	123.9	85.66	321.5	6,799.1	7,215.6	7,076.2	139.36	51.775	
6,299.2	6,255.8	6,231.8	6,231.8	15.8	124.5	-4.34	321.5	6,799.1	7,215.1	7,076.8	138.32	52.163	
6,300.0	6,256.6	6,232.6	6,232.6	15.8	124.5	-4.35	321.5	6,799.1	7,215.1	7,076.7	138.33	52.158	
6,350.0	6,306.4	6,282.4	6,282.4	15.9	125.5	-4.37	321.5	6,799.1	7,211.4	7,072.7	138.67	52.005	
6,397.6	6,353.6	6,329.6	6,329.6	15.9	126.5	-4.42	321.5	6,799.1	7,204.7	7,066.3	138.35	52.074	
6,400.0	6,355.9	6,331.9	6,331.9	15.9	126.5	-4.42	321.5	6,799.1	7,204.3	7,065.9	138.32	52.083	
6,450.0	6,404.8	6,380.8	6,380.8	15.9	127.5	-4.49	321.5	6,799.1	7,193.7	7,056.4	137.28	52.401	
6,496.0	6,449.0	6,425.0	6,425.0	16.0	128.4	-4.58	321.5	6,799.1	7,181.0	7,045.3	135.70	52.916	
6,500.0	6,452.8	6,428.8	6,428.8	16.0	128.5	-4.59	321.5	6,799.1	7,179.8	7,044.2	135.54	52.971	
6,550.0	6,499.7	6,475.7	6,475.7	15.9	129.4	-4.72	321.5	6,799.1	7,162.6	7,029.5	133.10	53.813	
6,594.5	6,540.3	6,516.3	6,516.3	15.9	130.2	-4.87	321.5	6,799.1	7,144.5	7,014.2	130.35	54.812	
6,600.0	6,545.3	6,521.3	6,521.3	15.9	130.3	-4.89	321.5	6,799.1	7,142.1	7,012.1	129.97	54.954	
6,650.0	6,589.3	6,565.3	6,565.3	15.9	131.2	-5.09	321.5	6,799.1	7,118.5	6,992.4	126.15	56.429	
6,692.9	6,625.7	6,601.7	6,601.7	15.9	131.9	-5.30	321.5	6,799.1	7,095.9	6,973.6	122.35	57.997	
6,700.0	6,631.6	6,607.6	6,607.6	15.9	132.0	-5.34	321.5	6,799.1	7,092.0	6,970.3	121.67	58.287	
6,750.0	6,671.9	6,647.9	6,647.9	15.9	132.9	-5.64	321.5	6,799.1	7,062.5	6,945.9	116.57	60.587	
6,791.3	6,703.6	6,679.6	6,679.6	15.9	133.5	-5.94	321.5	6,799.1	7,036.1	6,924.2	111.90	62.879	
6,800.0	6,710.1	6,686.1	6,686.1	15.9	133.6	-6.01	321.5	6,799.1	7,030.3	6,919.5	110.87	63.410	
6,850.0	6,745.9	6,721.9	6,721.9	16.0	134.3	-6.46	321.5	6,799.1	6,995.6	6,890.9	104.64	66.854	
6,889.7	6,772.6	6,748.6	6,748.6	16.1	134.9	-6.89	321.5	6,799.1	6,966.2	6,866.8	99.35	70.114	
6,900.0	6,779.2	6,755.2	6,755.2	16.1	135.0	-7.02	321.5	6,799.1	6,958.4	6,860.4	97.95	71.040	
6,950.0	6,809.8	6,785.8	6,785.8	16.3	135.6	-7.71	321.5	6,799.1	6,919.0	6,828.1	90.91	76.104	
6,988.2	6,831.3	6,807.3	6,807.3	16.4	136.1	-8.37	321.5	6,799.1	6,887.6	6,802.1	85.41	80.642	
7,000.0	6,837.6	6,813.6	6,813.6	16.5	136.2	-8.60	321.5	6,799.1	6,877.6	6,793.9	83.70	82.172	
7,050.0	6,862.5	6,838.5	6,838.5	16.9	136.7	-9.76	321.5	6,799.1	6,834.3	6,757.8	76.57	89.252	
7,086.6	6,878.7	6,854.7	6,854.7	17.2	137.0	-10.85	321.5	6,799.1	6,801.6	6,730.0	71.69	94.880	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 FIOLKOSKI 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						
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	6,884.2	6,860.2	6,860.2	17.3	137.1	-11.32	321.5	6,799.1	6,789.5	6,719.4	70.03	96.950	
7,150.0	6,902.7	6,878.7	6,878.7	17.8	137.5	-13.51	321.5	6,799.1	6,743.2	6,678.2	65.01	103.726	
7,185.0	6,913.8	6,889.8	6,889.8	18.3	137.7	-15.63	321.5	6,799.1	6,710.1	6,646.7	63.34	105.940	
7,200.0	6,918.0	6,894.0	6,894.0	18.5	137.8	-16.75	321.5	6,799.1	6,695.8	6,632.4	63.36	105.670	
7,250.0	6,929.9	6,905.9	6,905.9	19.2	138.0	-22.00	321.5	6,799.1	6,647.4	6,578.8	68.58	96.934	
7,283.4	6,936.0	6,912.0	6,912.0	19.7	138.2	-27.65	321.5	6,799.1	6,614.6	6,535.9	78.73	84.019	
7,300.0	6,938.4	6,914.4	6,914.4	20.0	138.2	-31.54	321.5	6,799.1	6,598.3	6,511.6	86.63	76.164	
7,350.0	6,943.4	6,919.4	6,919.4	20.9	138.3	-51.79	321.5	6,799.1	6,548.7	6,422.8	125.86	52.031	
7,381.9	6,944.8	6,920.8	6,920.8	21.4	138.3	-75.71	321.5	6,799.1	6,517.0	6,362.1	154.84	42.088	
7,403.7	6,945.0	6,921.0	6,921.0	21.8	138.4	-96.14	321.5	6,799.1	6,495.2	6,335.9	159.33	40.766	
7,480.3	6,944.3	6,920.3	6,920.3	23.3	138.3	-96.07	321.5	6,799.1	6,418.9	6,258.1	160.82	39.914	
7,500.0	6,944.1	6,920.1	6,920.1	23.7	138.3	-96.05	321.5	6,799.1	6,399.3	6,238.1	161.20	39.698	
7,578.7	6,943.4	6,919.4	6,919.4	25.4	138.3	-95.97	321.5	6,799.1	6,320.8	6,158.0	162.85	38.815	
7,600.0	6,943.2	6,919.2	6,919.2	25.8	138.3	-95.95	321.5	6,799.1	6,299.7	6,136.4	163.29	38.579	
7,677.1	6,942.5	6,918.5	6,918.5	27.5	138.3	-95.88	321.5	6,799.1	6,222.8	6,057.8	165.00	37.714	
7,700.0	6,942.3	6,918.3	6,918.3	28.0	138.3	-95.86	321.5	6,799.1	6,200.0	6,034.5	165.51	37.461	
7,775.6	6,941.6	6,917.6	6,917.6	29.8	138.3	-95.79	321.5	6,799.1	6,124.8	5,957.5	167.26	36.619	
7,800.0	6,941.4	6,917.4	6,917.4	30.3	138.3	-95.76	321.5	6,799.1	6,100.4	5,932.6	167.82	36.350	
7,874.0	6,940.7	6,916.7	6,916.7	32.1	138.3	-95.69	321.5	6,799.1	6,026.7	5,857.1	169.60	35.536	
7,900.0	6,940.5	6,916.5	6,916.5	32.7	138.3	-95.67	321.5	6,799.1	6,000.8	5,830.6	170.22	35.253	
7,972.4	6,939.8	6,915.8	6,915.8	34.5	138.2	-95.60	321.5	6,799.1	5,928.7	5,756.7	172.00	34.470	
8,000.0	6,939.6	6,915.6	6,915.6	35.2	138.2	-95.57	321.5	6,799.1	5,901.3	5,728.6	172.68	34.175	
8,070.8	6,938.9	6,914.9	6,914.9	37.0	138.2	-95.51	321.5	6,799.1	5,830.7	5,656.3	174.45	33.423	
8,100.0	6,938.7	6,914.7	6,914.7	37.7	138.2	-95.48	321.5	6,799.1	5,801.7	5,626.5	175.18	33.118	
8,169.3	6,938.0	6,914.0	6,914.0	39.5	138.2	-95.41	321.5	6,799.1	5,732.8	5,555.8	176.95	32.398	
8,200.0	6,937.7	6,913.7	6,913.7	40.3	138.2	-95.38	321.5	6,799.1	5,702.2	5,524.4	177.73	32.084	
8,267.7	6,937.1	6,913.1	6,913.1	42.0	138.2	-95.32	321.5	6,799.1	5,634.8	5,455.3	179.47	31.396	
8,300.0	6,936.8	6,912.8	6,912.8	42.8	138.2	-95.29	321.5	6,799.1	5,602.6	5,422.3	180.31	31.073	
8,366.1	6,936.2	6,912.2	6,912.2	44.6	138.2	-95.23	321.5	6,799.1	5,536.8	5,354.8	182.03	30.417	
8,400.0	6,935.9	6,911.9	6,911.9	45.5	138.2	-95.19	321.5	6,799.1	5,503.1	5,320.2	182.91	30.086	
8,464.5	6,935.3	6,911.3	6,911.3	47.2	138.2	-95.13	321.5	6,799.1	5,438.9	5,254.3	184.61	29.462	
8,500.0	6,935.0	6,911.0	6,911.0	48.1	138.2	-95.10	321.5	6,799.1	5,403.6	5,218.1	185.54	29.124	
8,563.0	6,934.5	6,910.5	6,910.5	49.8	138.1	-95.04	321.5	6,799.1	5,341.0	5,153.8	187.21	28.530	
8,600.0	6,934.1	6,910.1	6,910.1	50.7	138.1	-95.00	321.5	6,799.1	5,304.2	5,116.0	188.19	28.186	
8,661.4	6,933.6	6,909.6	6,909.6	52.4	138.1	-94.95	321.5	6,799.1	5,243.1	5,053.3	189.82	27.621	
8,700.0	6,933.2	6,909.2	6,909.2	53.4	138.1	-94.91	321.5	6,799.1	5,204.7	5,013.9	190.85	27.271	
8,759.8	6,932.7	6,908.7	6,908.7	55.0	138.1	-94.85	321.5	6,799.1	5,145.2	4,952.8	192.45	26.735	
8,800.0	6,932.3	6,908.3	6,908.3	56.1	138.1	-94.82	321.5	6,799.1	5,105.3	4,911.7	193.53	26.380	
8,858.2	6,931.8	6,907.8	6,907.8	57.7	138.1	-94.76	321.5	6,799.1	5,047.4	4,852.3	195.10	25.871	
8,900.0	6,931.4	6,907.4	6,907.4	58.8	138.1	-94.72	321.5	6,799.1	5,005.9	4,809.6	196.22	25.511	
8,956.7	6,930.9	6,906.9	6,906.9	60.3	138.1	-94.67	321.5	6,799.1	4,949.5	4,751.8	197.75	25.029	
9,000.0	6,930.5	6,906.5	6,906.5	61.5	138.1	-94.63	321.5	6,799.1	4,906.5	4,707.6	198.92	24.665	
9,055.1	6,930.0	6,906.0	6,906.0	63.0	138.0	-94.57	321.5	6,799.1	4,851.7	4,651.3	200.42	24.208	
9,100.0	6,929.6	6,905.6	6,905.6	64.2	138.0	-94.53	321.5	6,799.1	4,807.1	4,605.5	201.63	23.841	
9,153.5	6,929.1	6,905.1	6,905.1	65.6	138.0	-94.48	321.5	6,799.1	4,753.9	4,550.9	203.09	23.408	
9,200.0	6,928.7	6,904.7	6,904.7	66.9	138.0	-94.44	321.5	6,799.1	4,707.8	4,503.4	204.35	23.038	
9,251.9	6,928.2	6,904.2	6,904.2	68.3	138.0	-94.39	321.5	6,799.1	4,656.2	4,450.4	205.77	22.628	
9,300.0	6,927.8	6,903.8	6,903.8	69.6	138.0	-94.34	321.5	6,799.1	4,608.5	4,401.4	207.08	22.255	
9,350.4	6,927.3	6,903.3	6,903.3	71.0	138.0	-94.29	321.5	6,799.1	4,558.5	4,350.0	208.45	21.868	
9,400.0	6,926.9	6,902.9	6,902.9	72.4	138.0	-94.25	321.5	6,799.1	4,509.2	4,299.4	209.81	21.492	
9,448.8	6,926.4	6,902.4	6,902.4	73.7	138.0	-94.20	321.5	6,799.1	4,460.8	4,249.6	211.15	21.126	
9,500.0	6,926.0	6,902.0	6,902.0	75.1	138.0	-94.15	321.5	6,799.1	4,410.0	4,197.4	212.55	20.748	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 FIOLKOSKI 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						
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
9,547.2	6,925.5	6,901.5	6,901.5	76.4	138.0	-94.11	321.5	6,799.1	4,363.1	4,149.3	213.84	20.403	
9,600.0	6,925.1	6,901.1	6,901.1	77.9	138.0	-94.06	321.5	6,799.1	4,310.8	4,095.5	215.29	20.023	
9,645.6	6,924.6	6,900.6	6,900.6	79.1	137.9	-94.01	321.5	6,799.1	4,265.5	4,048.9	216.55	19.698	
9,700.0	6,924.1	6,900.1	6,900.1	80.6	137.9	-93.96	321.5	6,799.1	4,211.6	3,993.5	218.04	19.316	
9,744.1	6,923.7	6,899.7	6,899.7	81.8	137.9	-93.92	321.5	6,799.1	4,167.9	3,948.6	219.25	19.009	
9,800.0	6,923.2	6,899.2	6,899.2	83.4	137.9	-93.87	321.5	6,799.1	4,112.5	3,891.7	220.79	18.626	
9,842.5	6,922.9	6,898.9	6,898.9	84.5	137.9	-93.83	321.5	6,799.1	4,070.3	3,848.4	221.96	18.338	
9,900.0	6,922.3	6,898.3	6,898.3	86.1	137.9	-93.77	321.5	6,799.1	4,013.4	3,789.8	223.55	17.953	
9,940.9	6,922.0	6,898.0	6,898.0	87.2	137.9	-93.73	321.5	6,799.1	3,972.8	3,748.1	224.68	17.682	
10,000.0	6,921.4	6,897.4	6,897.4	88.9	137.9	-93.68	321.5	6,799.1	3,914.3	3,688.0	226.31	17.297	
10,039.3	6,921.1	6,897.1	6,897.1	90.0	137.9	-93.64	321.5	6,799.1	3,875.4	3,648.0	227.39	17.043	
10,100.0	6,920.5	6,896.5	6,896.5	91.6	137.9	-93.58	321.5	6,799.1	3,815.3	3,586.3	229.07	16.656	
10,137.8	6,920.2	6,896.2	6,896.2	92.7	137.9	-93.55	321.5	6,799.1	3,778.0	3,547.8	230.11	16.418	
10,200.0	6,919.6	6,895.6	6,895.6	94.4	137.8	-93.49	321.5	6,799.1	3,716.4	3,484.6	231.83	16.030	
10,236.2	6,919.3	6,895.3	6,895.3	95.4	137.8	-93.45	321.5	6,799.1	3,680.6	3,447.8	232.84	15.808	
10,300.0	6,918.7	6,894.7	6,894.7	97.2	137.8	-93.39	321.5	6,799.1	3,617.5	3,382.9	234.60	15.420	
10,334.6	6,918.4	6,894.4	6,894.4	98.1	137.8	-93.36	321.5	6,799.1	3,583.3	3,347.7	235.56	15.212	
10,400.0	6,917.8	6,893.8	6,893.8	99.9	137.8	-93.30	321.5	6,799.1	3,518.7	3,281.3	237.37	14.824	
10,433.0	6,917.5	6,893.5	6,893.5	100.9	137.8	-93.27	321.5	6,799.1	3,486.1	3,247.8	238.29	14.630	
10,500.0	6,916.9	6,892.9	6,892.9	102.7	137.8	-93.20	321.5	6,799.1	3,419.9	3,179.8	240.14	14.241	
10,531.5	6,916.6	6,892.6	6,892.6	103.6	137.8	-93.17	321.5	6,799.1	3,388.9	3,147.9	241.01	14.061	
10,600.0	6,916.0	6,892.0	6,892.0	105.5	137.8	-93.11	321.5	6,799.1	3,321.3	3,078.4	242.91	13.673	
10,629.9	6,915.7	6,891.7	6,891.7	106.3	137.8	-93.08	321.5	6,799.1	3,291.8	3,048.0	243.74	13.505	
10,700.0	6,915.1	6,891.1	6,891.1	108.3	137.8	-93.01	321.5	6,799.1	3,222.7	2,977.0	245.69	13.117	
10,728.3	6,914.8	6,890.8	6,890.8	109.1	137.7	-92.99	321.5	6,799.1	3,194.8	2,948.3	246.48	12.962	
10,800.0	6,914.2	6,890.2	6,890.2	111.0	137.7	-92.92	321.5	6,799.1	3,124.2	2,875.7	248.47	12.574	
10,826.7	6,913.9	6,889.9	6,889.9	111.8	137.7	-92.89	321.5	6,799.1	3,097.8	2,848.6	249.21	12.431	
10,900.0	6,913.3	6,889.3	6,889.3	113.8	137.7	-92.82	321.5	6,799.1	3,025.8	2,774.5	251.24	12.043	
10,925.2	6,913.1	6,889.1	6,889.1	114.5	137.7	-92.80	321.5	6,799.1	3,001.0	2,749.1	251.94	11.911	
11,000.0	6,912.4	6,888.4	6,888.4	116.6	137.7	-92.73	321.5	6,799.1	2,927.5	2,673.5	254.02	11.524	
11,023.6	6,912.2	6,888.2	6,888.2	117.3	137.7	-92.71	321.5	6,799.1	2,904.3	2,649.6	254.68	11.404	
11,100.0	6,911.5	6,887.5	6,887.5	119.4	137.7	-92.63	321.5	6,799.1	2,829.3	2,572.5	256.80	11.017	
11,122.0	6,911.3	6,887.3	6,887.3	120.0	137.7	-92.61	321.5	6,799.1	2,807.7	2,550.3	257.42	10.907	
11,200.0	6,910.6	6,886.6	6,886.6	122.2	137.7	-92.54	321.5	6,799.1	2,731.3	2,471.7	259.58	10.522	
11,220.4	6,910.4	6,886.4	6,886.4	122.7	137.7	-92.52	321.5	6,799.1	2,711.2	2,451.1	260.15	10.422	
11,300.0	6,909.7	6,885.7	6,885.7	125.0	137.6	-92.44	321.5	6,799.1	2,633.4	2,371.0	262.37	10.037	
11,318.9	6,909.5	6,885.5	6,885.5	125.5	137.6	-92.42	321.5	6,799.1	2,614.9	2,352.0	262.89	9.947	
11,400.0	6,908.8	6,884.8	6,884.8	127.7	137.6	-92.35	321.5	6,799.1	2,535.6	2,270.5	265.15	9.563	
11,417.3	6,908.6	6,884.6	6,884.6	128.2	137.6	-92.33	321.5	6,799.1	2,518.7	2,253.1	265.63	9.482	
11,500.0	6,907.9	6,883.9	6,883.9	130.5	137.6	-92.25	321.5	6,799.1	2,438.1	2,170.1	267.93	9.100	
11,515.7	6,907.7	6,883.7	6,883.7	131.0	137.6	-92.24	321.5	6,799.1	2,422.7	2,154.4	268.37	9.028	
11,600.0	6,907.0	6,883.0	6,883.0	133.3	137.6	-92.16	321.5	6,799.1	2,340.7	2,070.0	270.72	8.646	
11,614.1	6,906.8	6,882.8	6,882.8	133.7	137.6	-92.14	321.5	6,799.1	2,327.0	2,055.9	271.11	8.583	
11,700.0	6,906.0	6,882.0	6,882.0	136.1	137.6	-92.06	321.5	6,799.1	2,243.6	1,970.1	273.50	8.203	
11,712.6	6,905.9	6,881.9	6,881.9	136.5	137.6	-92.05	321.5	6,799.1	2,231.4	1,957.6	273.85	8.148	
11,800.0	6,905.1	6,881.1	6,881.1	138.9	137.6	-91.97	321.5	6,799.1	2,146.8	1,870.5	276.28	7.770	
11,811.0	6,905.0	6,881.0	6,881.0	139.2	137.5	-91.96	321.5	6,799.1	2,136.1	1,859.5	276.59	7.723	
11,900.0	6,904.2	6,880.2	6,880.2	141.7	137.5	-91.87	321.5	6,799.1	2,050.2	1,771.1	279.07	7.347	
11,909.4	6,904.2	6,880.2	6,880.2	141.9	137.5	-91.86	321.5	6,799.1	2,041.1	1,761.8	279.33	7.307	
12,000.0	6,903.3	6,879.3	6,879.3	144.5	137.5	-91.78	321.5	6,799.1	1,954.0	1,672.2	281.86	6.933	
12,007.8	6,903.3	6,879.3	6,879.3	144.7	137.5	-91.77	321.5	6,799.1	1,946.5	1,664.4	282.07	6.901	
12,100.0	6,902.4	6,878.4	6,878.4	147.3	137.5	-91.68	321.5	6,799.1	1,858.2	1,573.6	284.64	6.528	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,878.4	6,878.4	147.4	137.5	-91.68	321.5	6,799.1	1,852.2	1,567.4	284.82	6.503	
12,200.0	6,901.5	6,877.5	6,877.5	150.1	137.5	-91.59	321.5	6,799.1	1,762.9	1,475.4	287.43	6.133	
12,204.7	6,901.5	6,877.5	6,877.5	150.2	137.5	-91.58	321.5	6,799.1	1,758.4	1,470.9	287.56	6.115	
12,300.0	6,900.6	6,876.6	6,876.6	152.9	137.5	-91.49	321.5	6,799.1	1,668.1	1,377.9	290.21	5.748	
12,303.1	6,900.6	6,876.6	6,876.6	152.9	137.5	-91.49	321.5	6,799.1	1,665.1	1,374.8	290.30	5.736	
12,400.0	6,899.7	6,875.7	6,875.7	155.6	137.4	-91.40	321.5	6,799.1	1,573.9	1,280.9	293.00	5.372	
12,401.5	6,899.7	6,875.7	6,875.7	155.7	137.4	-91.40	321.5	6,799.1	1,572.5	1,279.5	293.04	5.366	
12,500.0	6,898.8	6,874.8	6,874.8	158.4	137.4	-91.30	321.5	6,799.1	1,480.6	1,184.8	295.79	5.006	
12,598.4	6,897.9	6,873.9	6,873.9	161.2	137.4	-91.21	321.5	6,799.1	1,389.6	1,091.1	298.53	4.655	
12,600.0	6,897.9	6,873.9	6,873.9	161.2	137.4	-91.21	321.5	6,799.1	1,388.1	1,089.6	298.57	4.649	
12,696.8	6,897.0	6,873.0	6,873.0	163.9	137.4	-91.12	321.5	6,799.1	1,299.7	998.4	301.27	4.314	
12,700.0	6,897.0	6,873.0	6,873.0	164.0	137.4	-91.11	321.5	6,799.1	1,296.8	995.4	301.36	4.303	
12,795.2	6,896.1	6,872.1	6,872.1	166.7	137.4	-91.02	321.5	6,799.1	1,211.1	907.1	304.01	3.984	
12,800.0	6,896.1	6,872.1	6,872.1	166.8	137.4	-91.02	321.5	6,799.1	1,206.8	902.7	304.14	3.968	
12,893.7	6,895.3	6,871.3	6,871.3	169.4	137.4	-90.93	321.5	6,799.1	1,124.1	817.4	306.75	3.665	
12,900.0	6,895.2	6,871.2	6,871.2	169.6	137.4	-90.92	321.5	6,799.1	1,118.6	811.7	306.93	3.644	
12,992.1	6,894.4	6,870.4	6,870.4	172.2	137.3	-90.84	321.5	6,799.1	1,039.2	729.7	309.50	3.358	
13,000.0	6,894.3	6,870.3	6,870.3	172.4	137.3	-90.83	321.5	6,799.1	1,032.5	722.8	309.72	3.334	
13,090.5	6,893.5	6,869.5	6,869.5	175.0	137.3	-90.74	321.5	6,799.1	956.9	644.6	312.24	3.065	
13,100.0	6,893.4	6,869.4	6,869.4	175.2	137.3	-90.74	321.5	6,799.1	949.1	636.6	312.50	3.037	
13,188.9	6,892.6	6,868.6	6,868.6	177.7	137.3	-90.65	321.5	6,799.1	877.9	562.9	314.98	2.787	
13,200.0	6,892.5	6,868.5	6,868.5	178.0	137.3	-90.64	321.5	6,799.1	869.2	553.9	315.29	2.757	
13,287.4	6,891.7	6,867.7	6,867.7	180.5	137.3	-90.56	321.5	6,799.1	803.1	485.4	317.72	2.528	
13,300.0	6,891.6	6,867.6	6,867.6	180.8	137.3	-90.55	321.5	6,799.1	793.9	475.9	318.07	2.496	
13,385.8	6,890.8	6,866.8	6,866.8	183.2	137.3	-90.46	321.5	6,799.1	734.1	413.6	320.46	2.291	
13,400.0	6,890.7	6,866.7	6,866.7	183.6	137.3	-90.45	321.5	6,799.1	724.6	403.8	320.86	2.258	
13,484.2	6,889.9	6,865.9	6,865.9	186.0	137.2	-90.37	321.5	6,799.1	672.3	349.1	323.20	2.080	
13,500.0	6,889.8	6,865.8	6,865.8	186.4	137.2	-90.36	321.5	6,799.1	663.2	339.6	323.64	2.049	
13,582.6	6,889.0	6,865.0	6,865.0	188.7	137.2	-90.28	321.5	6,799.1	620.1	294.2	325.94	1.903	
13,600.0	6,888.9	6,864.9	6,864.9	189.2	137.2	-90.26	321.5	6,799.1	612.1	285.7	326.42	1.875	
13,681.1	6,888.1	6,864.1	6,864.1	191.5	137.2	-90.18	321.5	6,799.1	580.0	251.4	328.68	1.765	
13,700.0	6,888.0	6,864.0	6,864.0	192.0	137.2	-90.17	321.5	6,799.1	574.0	244.7	329.21	1.743	
13,779.5	6,887.3	6,863.3	6,863.3	194.2	137.2	-90.09	321.5	6,799.1	554.7	223.3	331.42	1.674	
13,800.0	6,887.1	6,863.1	6,863.1	194.8	137.2	-90.07	321.5	6,799.1	551.5	219.5	331.99	1.661	
13,876.2	6,886.4	6,862.4	6,862.4	196.9	137.2	-90.00	321.5	6,799.1	546.2	212.1	334.11	1.635 CC	
13,877.9	6,886.4	6,862.4	6,862.4	197.0	137.2	-90.00	321.5	6,799.1	546.2	212.1	334.16	1.635	
13,900.0	6,886.2	6,862.2	6,862.2	197.6	137.2	-89.98	321.5	6,799.1	546.8	212.0	334.77	1.633 ES, SF	
13,976.3	6,885.5	6,861.5	6,861.5	199.7	137.2	-89.91	321.5	6,799.1	555.4	218.5	336.90	1.648	
14,000.0	6,885.3	6,861.3	6,861.3	200.4	137.2	-89.88	321.5	6,799.1	560.1	222.6	337.55	1.659	
14,074.8	6,884.6	6,860.6	6,860.6	202.5	137.1	-89.81	321.5	6,799.1	581.2	241.6	339.63	1.711	
14,100.0	6,884.4	6,860.4	6,860.4	203.2	137.1	-89.79	321.5	6,799.1	590.3	250.0	340.33	1.735	
14,173.2	6,883.7	6,859.7	6,859.7	205.3	137.1	-89.72	321.5	6,799.1	621.8	279.4	342.37	1.816	
14,200.0	6,883.5	6,859.5	6,859.5	206.0	137.1	-89.69	321.5	6,799.1	635.0	291.9	343.11	1.851	
14,271.6	6,882.8	6,858.8	6,858.8	208.0	137.1	-89.63	321.5	6,799.1	674.4	329.2	345.10	1.954	
14,300.0	6,882.6	6,858.6	6,858.6	208.8	137.1	-89.60	321.5	6,799.1	691.4	345.5	345.89	1.999	
14,370.0	6,881.9	6,857.9	6,857.9	210.8	137.1	-89.53	321.5	6,799.1	736.4	388.6	347.84	2.117	
14,400.0	6,881.7	6,857.7	6,857.7	211.6	137.1	-89.50	321.5	6,799.1	756.8	408.1	348.67	2.171	
14,468.5	6,881.0	6,857.0	6,857.0	213.5	137.1	-89.44	321.5	6,799.1	805.7	455.1	350.57	2.298	
14,500.0	6,880.8	6,856.8	6,856.8	214.4	137.1	-89.41	321.5	6,799.1	829.2	477.7	351.45	2.359	
14,566.9	6,880.2	6,856.2	6,856.2	216.3	137.0	-89.35	321.5	6,799.1	880.6	527.3	353.31	2.492	
14,584.2	6,880.0	6,856.0	6,856.0	216.8	137.0	-89.33	321.5	6,799.1	894.2	540.4	353.79	2.527	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	100.30	-1,004.9	5,531.5	5,622.1				
98.4	98.4	76.4	76.4	0.1	0.4	100.30	-1,004.9	5,531.5	5,622.1	5,621.6	0.50	N/A	
100.0	100.0	78.0	78.0	0.1	0.4	100.30	-1,004.9	5,531.5	5,622.1	5,621.5	0.51	N/A	
196.8	196.8	174.8	174.8	0.3	2.4	100.30	-1,004.9	5,531.5	5,622.1	5,619.4	2.69	2,087.863	
200.0	200.0	178.0	178.0	0.3	2.5	100.30	-1,004.9	5,531.5	5,622.1	5,619.3	2.78	2,024.245	
295.3	295.3	273.3	273.3	0.5	4.5	100.30	-1,004.9	5,531.5	5,622.1	5,617.0	5.06	1,111.728	
300.0	300.0	278.0	278.0	0.5	4.6	100.30	-1,004.9	5,531.5	5,622.1	5,616.9	5.17	1,088.295	
393.7	393.7	371.7	371.7	0.7	6.6	100.30	-1,004.9	5,531.5	5,622.1	5,614.8	7.30	770.459	
400.0	400.0	378.0	378.0	0.8	6.7	100.30	-1,004.9	5,531.5	5,622.1	5,614.6	7.44	755.680	
492.1	492.1	470.1	470.1	1.0	8.5	100.30	-1,004.9	5,531.5	5,622.1	5,612.5	9.52	590.716	
500.0	500.0	478.0	478.0	1.0	8.7	100.30	-1,004.9	5,531.5	5,622.1	5,612.4	9.69	579.910	
590.5	590.5	568.5	568.5	1.2	10.5	100.30	-1,004.9	5,531.5	5,622.1	5,610.3	11.73	479.291	
600.0	600.0	578.0	578.0	1.2	10.7	100.30	-1,004.9	5,531.5	5,622.1	5,610.1	11.94	470.772	
689.0	689.0	667.0	667.0	1.4	12.5	100.30	-1,004.9	5,531.5	5,622.1	5,608.1	13.94	403.344	
700.0	700.0	678.0	678.0	1.4	12.8	100.30	-1,004.9	5,531.5	5,622.1	5,607.9	14.19	396.313	
787.4	787.4	765.4	765.4	1.6	14.5	100.30	-1,004.9	5,531.5	5,622.1	5,605.9	16.15	348.223	
800.0	800.0	778.0	778.0	1.7	14.8	100.30	-1,004.9	5,531.5	5,622.1	5,605.6	16.43	342.237	
885.8	885.8	863.8	863.8	1.9	16.5	100.30	-1,004.9	5,531.5	5,622.1	5,603.7	18.35	306.380	
900.0	900.0	878.0	878.0	1.9	16.8	100.30	-1,004.9	5,531.5	5,622.1	5,603.4	18.67	301.169	
984.2	984.2	962.2	962.2	2.1	18.5	100.30	-1,004.9	5,531.5	5,622.1	5,601.5	20.55	273.527	
1,000.0	1,000.0	978.0	978.0	2.1	18.8	100.30	-1,004.9	5,531.5	5,622.1	5,601.2	20.91	268.913	
1,082.7	1,082.7	1,060.7	1,060.7	2.3	20.5	100.30	-1,004.9	5,531.5	5,622.1	5,599.3	22.76	247.045	
1,100.0	1,100.0	1,078.0	1,078.0	2.3	20.8	100.30	-1,004.9	5,531.5	5,622.1	5,598.9	23.15	242.905	
1,181.1	1,181.1	1,159.1	1,159.1	2.5	22.4	100.30	-1,004.9	5,531.5	5,622.1	5,597.1	24.96	225.242	
1,200.0	1,200.0	1,178.0	1,178.0	2.6	22.8	100.30	-1,004.9	5,531.5	5,622.1	5,596.7	25.38	221.489	
1,279.5	1,279.5	1,257.5	1,257.5	2.7	24.4	100.30	-1,004.9	5,531.5	5,622.1	5,594.9	27.16	206.979	
1,300.0	1,300.0	1,278.0	1,278.0	2.8	24.8	100.30	-1,004.9	5,531.5	5,622.1	5,594.4	27.62	203.546	
1,377.9	1,377.9	1,355.9	1,355.9	3.0	26.4	100.30	-1,004.9	5,531.5	5,622.1	5,592.7	29.36	191.457	
1,400.0	1,400.0	1,378.0	1,378.0	3.0	26.8	100.30	-1,004.9	5,531.5	5,622.1	5,592.2	29.86	188.293	
1,476.4	1,476.4	1,454.4	1,454.4	3.2	28.4	100.30	-1,004.9	5,531.5	5,622.1	5,590.5	31.57	178.102	
1,500.0	1,500.0	1,478.0	1,478.0	3.2	28.9	100.30	-1,004.9	5,531.5	5,622.1	5,590.0	32.10	175.169	
1,574.8	1,574.8	1,552.8	1,552.8	3.4	30.4	100.30	-1,004.9	5,531.5	5,622.1	5,588.3	33.77	166.489	
1,600.0	1,600.0	1,578.0	1,578.0	3.5	30.9	100.30	-1,004.9	5,531.5	5,622.1	5,587.7	34.33	163.756	
1,650.0	1,650.0	1,628.0	1,628.0	3.6	31.9	100.30	-1,004.9	5,531.5	5,622.1	5,586.6	35.45	158.590	
1,673.2	1,673.2	1,651.2	1,651.2	3.6	32.3	-140.12	-1,004.9	5,531.5	5,622.1	5,586.2	35.96	156.326	
1,700.0	1,700.0	1,678.0	1,678.0	3.7	32.9	-140.12	-1,004.9	5,531.5	5,622.4	5,585.8	36.55	153.808	
1,771.6	1,771.6	1,749.6	1,749.6	3.8	34.3	-140.11	-1,004.9	5,531.5	5,624.0	5,585.9	38.11	147.571	
1,800.0	1,799.9	1,777.9	1,777.9	3.9	34.9	-140.11	-1,004.9	5,531.5	5,625.1	5,586.4	38.72	145.270	
1,870.1	1,869.9	1,847.9	1,847.9	4.0	36.3	-140.09	-1,004.9	5,531.5	5,628.5	5,588.3	40.22	139.932	
1,900.0	1,899.7	1,877.7	1,877.7	4.1	36.9	-140.08	-1,004.9	5,531.5	5,630.4	5,589.6	40.86	137.802	
1,968.5	1,967.8	1,945.8	1,945.8	4.2	38.3	-140.06	-1,004.9	5,531.5	5,635.6	5,593.3	42.30	133.216	
2,000.0	1,999.1	1,977.1	1,977.1	4.3	38.9	-140.05	-1,004.9	5,531.5	5,638.5	5,595.5	42.96	131.243	
2,066.9	2,065.5	2,043.5	2,043.5	4.4	40.2	-140.02	-1,004.9	5,531.5	5,645.3	5,601.0	44.35	127.288	
2,100.0	2,098.2	2,076.2	2,076.2	4.5	40.9	-140.00	-1,004.9	5,531.5	5,649.2	5,604.1	45.03	125.457	
2,165.3	2,162.6	2,140.6	2,140.6	4.7	42.2	-139.96	-1,004.9	5,531.5	5,657.6	5,611.3	46.36	122.035	
2,200.0	2,196.6	2,174.6	2,174.6	4.7	42.9	-139.94	-1,004.9	5,531.5	5,662.5	5,615.5	47.06	120.333	
2,249.9	2,245.5	2,223.5	2,223.5	4.9	43.9	-139.90	-1,004.9	5,531.5	5,670.2	5,622.2	48.05	117.996	
2,263.8	2,259.1	2,237.1	2,237.1	4.9	44.1	-139.92	-1,004.9	5,531.5	5,672.5	5,624.1	48.36	117.300	
2,300.0	2,294.5	2,272.5	2,272.5	5.0	44.8	-139.97	-1,004.9	5,531.5	5,678.3	5,629.1	49.15	115.526	
2,362.2	2,355.4	2,333.4	2,333.4	5.2	46.1	-140.05	-1,004.9	5,531.5	5,688.3	5,637.7	50.52	112.596	
2,400.0	2,392.3	2,370.3	2,370.3	5.4	46.8	-140.10	-1,004.9	5,531.5	5,694.3	5,643.0	51.35	110.893	
2,460.6	2,451.6	2,429.6	2,429.6	5.6	48.0	-140.18	-1,004.9	5,531.5	5,704.1	5,651.4	52.69	108.261	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,468.2	2,468.2	5.7	48.8	-140.24	-1,004.9	5,531.5	5,710.4	5,656.9	53.56	106.617	
2,559.0	2,547.9	2,525.9	2,525.9	5.9	49.9	-140.31	-1,004.9	5,531.5	5,720.0	5,665.1	54.87	104.244	
2,600.0	2,588.0	2,566.0	2,566.0	6.1	50.7	-140.37	-1,004.9	5,531.5	5,726.6	5,670.8	55.78	102.662	
2,657.5	2,644.2	2,622.2	2,622.2	6.3	51.9	-140.44	-1,004.9	5,531.5	5,735.9	5,678.8	57.06	100.521	
2,700.0	2,685.8	2,663.8	2,663.8	6.4	52.7	-140.50	-1,004.9	5,531.5	5,742.8	5,684.7	58.01	98.996	
2,755.9	2,740.5	2,718.5	2,718.5	6.6	53.8	-140.57	-1,004.9	5,531.5	5,751.8	5,692.5	59.26	97.061	
2,800.0	2,783.6	2,761.6	2,761.6	6.8	54.7	-140.63	-1,004.9	5,531.5	5,758.9	5,698.7	60.25	95.591	
2,854.3	2,836.7	2,814.7	2,814.7	7.0	55.8	-140.70	-1,004.9	5,531.5	5,767.8	5,706.3	61.46	93.841	
2,900.0	2,881.4	2,859.4	2,859.4	7.2	56.7	-140.76	-1,004.9	5,531.5	5,775.2	5,712.7	62.49	92.422	
2,952.7	2,933.0	2,911.0	2,911.0	7.4	57.7	-140.83	-1,004.9	5,531.5	5,783.7	5,720.1	63.67	90.836	
3,000.0	2,979.2	2,957.2	2,957.2	7.6	58.6	-140.89	-1,004.9	5,531.5	5,791.4	5,726.7	64.73	89.465	
3,051.2	3,029.3	3,007.3	3,007.3	7.8	59.6	-140.95	-1,004.9	5,531.5	5,799.8	5,733.9	65.89	88.027	
3,100.0	3,077.1	3,055.1	3,055.1	8.0	60.6	-141.02	-1,004.9	5,531.5	5,807.7	5,740.7	66.98	86.702	
3,149.6	3,125.6	3,103.6	3,103.6	8.2	61.6	-141.08	-1,004.9	5,531.5	5,815.8	5,747.7	68.10	85.397	
3,200.0	3,174.9	3,152.9	3,152.9	8.4	62.6	-141.14	-1,004.9	5,531.5	5,824.0	5,754.8	69.24	84.114	
3,248.0	3,221.8	3,199.8	3,199.8	8.6	63.5	-141.20	-1,004.9	5,531.5	5,831.9	5,761.5	70.32	82.929	
3,300.0	3,272.7	3,250.7	3,250.7	8.9	64.5	-141.27	-1,004.9	5,531.5	5,840.4	5,768.9	71.50	81.687	
3,346.4	3,318.1	3,296.1	3,296.1	9.0	65.4	-141.33	-1,004.9	5,531.5	5,848.0	5,775.4	72.55	80.610	
3,400.0	3,370.5	3,348.5	3,348.5	9.3	66.5	-141.40	-1,004.9	5,531.5	5,856.7	5,783.0	73.76	79.406	
3,444.9	3,414.4	3,392.4	3,392.4	9.5	67.4	-141.45	-1,004.9	5,531.5	5,864.1	5,789.3	74.77	78.427	
3,500.0	3,468.3	3,446.3	3,446.3	9.7	68.5	-141.52	-1,004.9	5,531.5	5,873.1	5,797.1	76.02	77.259	
3,543.3	3,510.7	3,488.7	3,488.7	9.9	69.3	-141.58	-1,004.9	5,531.5	5,880.2	5,803.2	77.00	76.368	
3,600.0	3,566.1	3,544.1	3,544.1	10.1	70.4	-141.65	-1,004.9	5,531.5	5,889.6	5,811.3	78.28	75.235	
3,641.7	3,606.9	3,584.9	3,584.9	10.3	71.2	-141.70	-1,004.9	5,531.5	5,896.4	5,817.2	79.23	74.424	
3,700.0	3,664.0	3,642.0	3,642.0	10.6	72.4	-141.77	-1,004.9	5,531.5	5,906.0	5,825.5	80.55	73.323	
3,740.1	3,703.2	3,681.2	3,681.2	10.7	73.2	-141.82	-1,004.9	5,531.5	5,912.6	5,831.2	81.46	72.585	
3,800.0	3,761.8	3,739.8	3,739.8	11.0	74.4	-141.89	-1,004.9	5,531.5	5,922.5	5,839.7	82.81	71.516	
3,837.4	3,798.3	3,776.3	3,776.3	11.2	75.1	-141.94	-1,004.9	5,531.5	5,928.6	5,845.0	83.66	70.865	
3,838.6	3,799.5	3,777.5	3,777.5	11.2	75.1	-141.94	-1,004.9	5,531.5	5,928.8	5,845.2	83.69	70.841	
3,900.0	3,859.7	3,837.7	3,837.7	11.4	76.3	-142.14	-1,004.9	5,531.5	5,938.5	5,853.2	85.26	69.650	
3,937.0	3,896.1	3,874.1	3,874.1	11.5	77.1	-142.24	-1,004.9	5,531.5	5,943.8	5,857.6	86.19	68.964	
4,000.0	3,958.3	3,936.3	3,936.3	11.7	78.3	-142.40	-1,004.9	5,531.5	5,951.9	5,864.2	87.75	67.826	
4,035.4	3,993.3	3,971.3	3,971.3	11.8	79.0	-142.48	-1,004.9	5,531.5	5,956.0	5,867.4	88.62	67.208	
4,100.0	4,057.4	4,035.4	4,035.4	12.0	80.3	-142.61	-1,004.9	5,531.5	5,962.6	5,872.5	90.19	66.110	
4,133.8	4,091.0	4,069.0	4,069.0	12.1	81.0	-142.67	-1,004.9	5,531.5	5,965.7	5,874.7	91.00	65.554	
4,200.0	4,156.8	4,134.8	4,134.8	12.2	82.3	-142.77	-1,004.9	5,531.5	5,970.6	5,878.0	92.57	64.497	
4,232.3	4,189.0	4,167.0	4,167.0	12.3	82.9	-142.80	-1,004.9	5,531.5	5,972.6	5,879.3	93.32	63.999	
4,300.0	4,256.6	4,234.6	4,234.6	12.4	84.3	-142.87	-1,004.9	5,531.5	5,975.8	5,880.9	94.88	62.981	
4,330.7	4,287.3	4,265.3	4,265.3	12.5	84.9	-142.89	-1,004.9	5,531.5	5,976.9	5,881.3	95.57	62.536	
4,400.0	4,356.6	4,334.6	4,334.6	12.6	86.3	-142.91	-1,004.9	5,531.5	5,978.3	5,881.1	97.11	61.559	
4,429.1	4,385.7	4,363.7	4,363.7	12.6	86.9	-142.92	-1,004.9	5,531.5	5,978.4	5,880.7	97.75	61.161	
4,437.2	4,393.8	4,371.8	4,371.8	12.7	87.1	97.50	-1,004.9	5,531.5	5,978.4	5,879.7	98.73	60.556	
4,500.0	4,456.6	4,434.6	4,434.6	12.7	88.3	97.50	-1,004.9	5,531.5	5,978.4	5,878.4	100.09	59.730	
4,527.5	4,484.1	4,462.1	4,462.1	12.8	88.9	97.50	-1,004.9	5,531.5	5,978.4	5,877.8	100.69	59.374	
4,600.0	4,556.6	4,534.6	4,534.6	12.9	90.3	97.50	-1,004.9	5,531.5	5,978.4	5,876.2	102.27	58.455	
4,626.0	4,582.6	4,560.6	4,560.6	12.9	90.9	97.50	-1,004.9	5,531.5	5,978.4	5,875.6	102.84	58.133	
4,700.0	4,656.6	4,634.6	4,634.6	13.1	92.4	97.50	-1,004.9	5,531.5	5,978.4	5,874.0	104.46	57.233	
4,724.4	4,681.0	4,659.0	4,659.0	13.1	92.8	97.50	-1,004.9	5,531.5	5,978.4	5,873.5	104.99	56.942	
4,800.0	4,756.6	4,734.6	4,734.6	13.2	94.4	97.50	-1,004.9	5,531.5	5,978.4	5,871.8	106.64	56.059	
4,822.8	4,779.4	4,757.4	4,757.4	13.3	94.8	97.50	-1,004.9	5,531.5	5,978.4	5,871.3	107.14	55.798	
4,900.0	4,856.6	4,834.6	4,834.6	13.4	96.4	97.50	-1,004.9	5,531.5	5,978.4	5,869.6	108.83	54.932	
4,921.2	4,877.8	4,855.8	4,855.8	13.4	96.8	97.50	-1,004.9	5,531.5	5,978.4	5,869.2	109.30	54.699	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,934.6	4,934.6	13.6	98.4	97.50	-1,004.9	5,531.5	5,978.4	5,867.4	111.02	53.849	
5,019.7	4,976.3	4,954.3	4,954.3	13.6	98.8	97.50	-1,004.9	5,531.5	5,978.4	5,867.0	111.45	53.641	
5,100.0	5,056.6	5,034.6	5,034.6	13.7	100.4	97.50	-1,004.9	5,531.5	5,978.4	5,865.2	113.21	52.807	
5,118.1	5,074.7	5,052.7	5,052.7	13.8	100.8	97.50	-1,004.9	5,531.5	5,978.4	5,864.8	113.61	52.622	
5,200.0	5,156.6	5,134.6	5,134.6	13.9	102.4	97.50	-1,004.9	5,531.5	5,978.4	5,863.0	115.41	51.804	
5,216.5	5,173.1	5,151.1	5,151.1	13.9	102.7	97.50	-1,004.9	5,531.5	5,978.4	5,862.7	115.77	51.642	
5,300.0	5,256.6	5,234.6	5,234.6	14.1	104.4	97.50	-1,004.9	5,531.5	5,978.4	5,860.8	117.60	50.837	
5,314.9	5,271.5	5,249.5	5,249.5	14.1	104.7	97.50	-1,004.9	5,531.5	5,978.4	5,860.5	117.93	50.696	
5,400.0	5,356.6	5,334.6	5,334.6	14.2	106.4	97.50	-1,004.9	5,531.5	5,978.4	5,858.7	119.79	49.906	
5,413.4	5,370.0	5,348.0	5,348.0	14.3	106.7	97.50	-1,004.9	5,531.5	5,978.4	5,858.4	120.09	49.784	
5,500.0	5,456.6	5,434.6	5,434.6	14.4	108.4	97.50	-1,004.9	5,531.5	5,978.4	5,856.5	121.99	49.008	
5,511.8	5,468.4	5,446.4	5,446.4	14.4	108.7	97.50	-1,004.9	5,531.5	5,978.4	5,856.2	122.25	48.904	
5,600.0	5,556.6	5,534.6	5,534.6	14.6	110.5	97.50	-1,004.9	5,531.5	5,978.4	5,854.3	124.19	48.140	
5,610.2	5,566.8	5,544.8	5,544.8	14.6	110.7	97.50	-1,004.9	5,531.5	5,978.4	5,854.0	124.41	48.053	
5,700.0	5,656.6	5,634.6	5,634.6	14.8	112.5	97.50	-1,004.9	5,531.5	5,978.4	5,852.1	126.39	47.303	
5,708.6	5,665.2	5,643.2	5,643.2	14.8	112.6	97.50	-1,004.9	5,531.5	5,978.4	5,851.9	126.58	47.232	
5,800.0	5,756.6	5,734.6	5,734.6	14.9	114.5	97.50	-1,004.9	5,531.5	5,978.4	5,849.9	128.59	46.494	
5,807.1	5,763.7	5,741.7	5,741.7	14.9	114.6	97.50	-1,004.9	5,531.5	5,978.4	5,849.7	128.74	46.438	
5,900.0	5,856.6	5,834.6	5,834.6	15.1	116.5	97.50	-1,004.9	5,531.5	5,978.4	5,847.7	130.79	45.712	
5,905.5	5,862.1	5,840.1	5,840.1	15.1	116.6	97.50	-1,004.9	5,531.5	5,978.4	5,847.5	130.91	45.669	
6,000.0	5,956.6	5,934.6	5,934.6	15.3	118.5	97.50	-1,004.9	5,531.5	5,978.4	5,845.5	132.99	44.955	
6,003.9	5,960.5	5,938.5	5,938.5	15.3	118.6	97.50	-1,004.9	5,531.5	5,978.4	5,845.4	133.07	44.926	
6,100.0	6,056.6	6,034.6	6,034.6	15.5	120.5	97.50	-1,004.9	5,531.5	5,978.4	5,843.3	135.19	44.222	
6,102.3	6,058.9	6,036.9	6,036.9	15.5	120.6	97.50	-1,004.9	5,531.5	5,978.4	5,843.2	135.24	44.205	
6,200.0	6,156.6	6,134.6	6,134.6	15.7	122.5	97.50	-1,004.9	5,531.5	5,978.4	5,841.1	137.39	43.513	
6,200.8	6,157.4	6,135.4	6,135.4	15.7	122.5	97.50	-1,004.9	5,531.5	5,978.4	5,841.0	137.41	43.508	
6,272.2	6,228.8	6,206.8	6,206.8	15.8	124.0	97.50	-1,004.9	5,531.5	5,978.4	5,839.5	138.99	43.015	
6,299.2	6,255.8	6,233.8	6,233.8	15.8	124.5	7.50	-1,004.9	5,531.5	5,977.9	5,839.2	138.77	43.077	
6,300.0	6,256.6	6,234.6	6,234.6	15.8	124.5	7.50	-1,004.9	5,531.5	5,977.9	5,839.1	138.78	43.074	
6,350.0	6,306.4	6,284.4	6,284.4	15.9	125.5	7.55	-1,004.9	5,531.5	5,974.3	5,835.1	139.13	42.939	
6,397.6	6,353.6	6,331.6	6,331.6	15.9	126.5	7.63	-1,004.9	5,531.5	5,967.6	5,828.8	138.84	42.982	
6,400.0	6,355.9	6,333.9	6,333.9	15.9	126.5	7.63	-1,004.9	5,531.5	5,967.2	5,828.4	138.81	42.989	
6,450.0	6,404.8	6,382.8	6,382.8	15.9	127.5	7.76	-1,004.9	5,531.5	5,956.7	5,818.9	137.80	43.228	
6,496.0	6,449.0	6,427.0	6,427.0	16.0	128.4	7.92	-1,004.9	5,531.5	5,944.1	5,807.8	136.26	43.624	
6,500.0	6,452.8	6,430.8	6,430.8	16.0	128.5	7.94	-1,004.9	5,531.5	5,942.8	5,806.7	136.10	43.666	
6,550.0	6,499.7	6,477.7	6,477.7	15.9	129.4	8.16	-1,004.9	5,531.5	5,925.7	5,792.0	133.72	44.316	
6,594.5	6,540.3	6,518.3	6,518.3	15.9	130.2	8.42	-1,004.9	5,531.5	5,907.8	5,776.8	131.03	45.087	
6,600.0	6,545.3	6,523.3	6,523.3	15.9	130.3	8.45	-1,004.9	5,531.5	5,905.4	5,774.7	130.66	45.196	
6,650.0	6,589.3	6,567.3	6,567.3	15.9	131.2	8.80	-1,004.9	5,531.5	5,881.9	5,755.0	126.95	46.331	
6,692.9	6,625.7	6,603.7	6,603.7	15.9	132.0	9.17	-1,004.9	5,531.5	5,859.5	5,736.2	123.28	47.530	
6,700.0	6,631.6	6,609.6	6,609.6	15.9	132.1	9.23	-1,004.9	5,531.5	5,855.5	5,732.9	122.63	47.750	
6,750.0	6,671.9	6,649.9	6,649.9	15.9	132.9	9.76	-1,004.9	5,531.5	5,826.3	5,708.5	117.73	49.489	
6,791.3	6,703.6	6,681.6	6,681.6	15.9	133.5	10.28	-1,004.9	5,531.5	5,800.0	5,686.7	113.29	51.194	
6,800.0	6,710.1	6,688.1	6,688.1	15.9	133.6	10.40	-1,004.9	5,531.5	5,794.3	5,681.9	112.32	51.586	
6,850.0	6,745.9	6,723.9	6,723.9	16.0	134.4	11.18	-1,004.9	5,531.5	5,759.7	5,653.2	106.51	54.078	
6,889.7	6,772.6	6,750.6	6,750.6	16.1	134.9	11.92	-1,004.9	5,531.5	5,730.5	5,628.9	101.68	56.357	
6,900.0	6,779.2	6,757.2	6,757.2	16.1	135.0	12.14	-1,004.9	5,531.5	5,722.8	5,622.4	100.42	56.987	
6,950.0	6,809.8	6,787.8	6,787.8	16.3	135.7	13.33	-1,004.9	5,531.5	5,683.6	5,589.4	94.28	60.284	
6,988.2	6,831.3	6,809.3	6,809.3	16.4	136.1	14.46	-1,004.9	5,531.5	5,652.4	5,562.6	89.76	62.975	
7,000.0	6,837.6	6,815.6	6,815.6	16.5	136.2	14.85	-1,004.9	5,531.5	5,642.5	5,554.1	88.42	63.817	
7,050.0	6,862.5	6,840.5	6,840.5	16.9	136.7	16.80	-1,004.9	5,531.5	5,599.5	5,516.2	83.37	67.162	
7,086.6	6,878.7	6,856.7	6,856.7	17.2	137.0	18.61	-1,004.9	5,531.5	5,567.0	5,486.3	80.69	68.989	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,862.2	6,862.2	17.3	137.1	19.38	-1,004.9	5,531.5	5,555.0	5,474.9	80.03	69.408	
7,150.0	6,902.7	6,880.7	6,880.7	17.8	137.5	22.92	-1,004.9	5,531.5	5,509.0	5,429.2	79.79	69.041	
7,185.0	6,913.8	6,891.8	6,891.8	18.3	137.7	26.24	-1,004.9	5,531.5	5,476.1	5,393.6	82.52	66.357	
7,200.0	6,918.0	6,896.0	6,896.0	18.5	137.8	27.96	-1,004.9	5,531.5	5,461.9	5,377.2	84.65	64.522	
7,250.0	6,929.9	6,907.9	6,907.9	19.2	138.1	35.51	-1,004.9	5,531.5	5,413.8	5,316.8	97.01	55.807	
7,283.4	6,936.0	6,914.0	6,914.0	19.7	138.2	42.81	-1,004.9	5,531.5	5,381.3	5,270.8	110.47	48.713	
7,300.0	6,938.4	6,916.4	6,916.4	20.0	138.2	47.36	-1,004.9	5,531.5	5,365.1	5,246.4	118.66	45.215	
7,350.0	6,943.4	6,921.4	6,921.4	20.9	138.3	66.05	-1,004.9	5,531.5	5,315.9	5,169.8	146.07	36.392	
7,381.9	6,944.8	6,922.8	6,922.8	21.4	138.4	81.83	-1,004.9	5,531.5	5,284.4	5,126.1	158.28	33.386	
7,403.7	6,945.0	6,923.0	6,923.0	21.8	138.4	93.46	-1,004.9	5,531.5	5,262.8	5,102.9	159.88	32.916	
7,480.3	6,944.3	6,922.3	6,922.3	23.3	138.4	93.41	-1,004.9	5,531.5	5,187.1	5,025.7	161.36	32.145	
7,500.0	6,944.1	6,922.1	6,922.1	23.7	138.4	93.40	-1,004.9	5,531.5	5,167.6	5,005.8	161.74	31.949	
7,578.7	6,943.4	6,921.4	6,921.4	25.4	138.3	93.35	-1,004.9	5,531.5	5,089.8	4,926.4	163.38	31.152	
7,600.0	6,943.2	6,921.2	6,921.2	25.8	138.3	93.33	-1,004.9	5,531.5	5,068.8	4,904.9	163.83	30.940	
7,677.1	6,942.5	6,920.5	6,920.5	27.5	138.3	93.28	-1,004.9	5,531.5	4,992.5	4,827.0	165.53	30.161	
7,700.0	6,942.3	6,920.3	6,920.3	28.0	138.3	93.27	-1,004.9	5,531.5	4,970.0	4,803.9	166.03	29.933	
7,775.6	6,941.6	6,919.6	6,919.6	29.8	138.3	93.22	-1,004.9	5,531.5	4,895.4	4,727.6	167.78	29.177	
7,800.0	6,941.4	6,919.4	6,919.4	30.3	138.3	93.20	-1,004.9	5,531.5	4,871.2	4,702.9	168.35	28.936	
7,874.0	6,940.7	6,918.7	6,918.7	32.1	138.3	93.15	-1,004.9	5,531.5	4,798.2	4,628.1	170.11	28.206	
7,900.0	6,940.5	6,918.5	6,918.5	32.7	138.3	93.13	-1,004.9	5,531.5	4,772.6	4,601.8	170.74	27.953	
7,972.4	6,939.8	6,917.8	6,917.8	34.5	138.3	93.09	-1,004.9	5,531.5	4,701.1	4,528.6	172.51	27.251	
8,000.0	6,939.6	6,917.6	6,917.6	35.2	138.3	93.07	-1,004.9	5,531.5	4,673.9	4,500.8	173.19	26.988	
8,070.8	6,938.9	6,916.9	6,916.9	37.0	138.2	93.02	-1,004.9	5,531.5	4,604.1	4,429.2	174.96	26.316	
8,100.0	6,938.7	6,916.7	6,916.7	37.7	138.2	93.00	-1,004.9	5,531.5	4,575.4	4,399.7	175.69	26.043	
8,169.3	6,938.0	6,916.0	6,916.0	39.5	138.2	92.95	-1,004.9	5,531.5	4,507.1	4,329.7	177.44	25.400	
8,200.0	6,937.7	6,915.7	6,915.7	40.3	138.2	92.93	-1,004.9	5,531.5	4,476.9	4,298.7	178.22	25.119	
8,267.7	6,937.1	6,915.1	6,915.1	42.0	138.2	92.89	-1,004.9	5,531.5	4,410.2	4,230.3	179.96	24.506	
8,300.0	6,936.8	6,914.8	6,914.8	42.8	138.2	92.87	-1,004.9	5,531.5	4,378.5	4,197.7	180.80	24.218	
8,366.1	6,936.2	6,914.2	6,914.2	44.6	138.2	92.82	-1,004.9	5,531.5	4,313.4	4,130.9	182.51	23.633	
8,400.0	6,935.9	6,913.9	6,913.9	45.5	138.2	92.80	-1,004.9	5,531.5	4,280.1	4,096.7	183.39	23.338	
8,464.5	6,935.3	6,913.3	6,913.3	47.2	138.2	92.76	-1,004.9	5,531.5	4,216.6	4,031.6	185.09	22.782	
8,500.0	6,935.0	6,913.0	6,913.0	48.1	138.2	92.73	-1,004.9	5,531.5	4,181.8	3,995.8	186.01	22.481	
8,563.0	6,934.5	6,912.5	6,912.5	49.8	138.2	92.69	-1,004.9	5,531.5	4,120.0	3,932.3	187.68	21.952	
8,600.0	6,934.1	6,912.1	6,912.1	50.7	138.2	92.67	-1,004.9	5,531.5	4,083.6	3,895.0	188.66	21.646	
8,661.4	6,933.6	6,911.6	6,911.6	52.4	138.1	92.63	-1,004.9	5,531.5	4,023.4	3,833.1	190.29	21.144	
8,700.0	6,933.2	6,911.2	6,911.2	53.4	138.1	92.60	-1,004.9	5,531.5	3,985.5	3,794.2	191.31	20.833	
8,759.8	6,932.7	6,910.7	6,910.7	55.0	138.1	92.56	-1,004.9	5,531.5	3,926.9	3,734.0	192.91	20.356	
8,800.0	6,932.3	6,910.3	6,910.3	56.1	138.1	92.53	-1,004.9	5,531.5	3,887.5	3,693.5	193.98	20.040	
8,858.2	6,931.8	6,909.8	6,909.8	57.7	138.1	92.49	-1,004.9	5,531.5	3,830.5	3,634.9	195.55	19.589	
8,900.0	6,931.4	6,909.4	6,909.4	58.8	138.1	92.47	-1,004.9	5,531.5	3,789.6	3,592.9	196.67	19.269	
8,956.7	6,930.9	6,908.9	6,908.9	60.3	138.1	92.43	-1,004.9	5,531.5	3,734.1	3,536.0	198.19	18.841	
9,000.0	6,930.5	6,908.5	6,908.5	61.5	138.1	92.40	-1,004.9	5,531.5	3,691.8	3,492.4	199.36	18.518	
9,055.1	6,930.0	6,908.0	6,908.0	63.0	138.1	92.36	-1,004.9	5,531.5	3,638.0	3,437.1	200.85	18.113	
9,100.0	6,929.6	6,907.6	6,907.6	64.2	138.1	92.33	-1,004.9	5,531.5	3,594.1	3,392.1	202.06	17.787	
9,153.5	6,929.1	6,907.1	6,907.1	65.6	138.1	92.30	-1,004.9	5,531.5	3,541.9	3,338.4	203.51	17.404	
9,200.0	6,928.7	6,906.7	6,906.7	66.9	138.0	92.27	-1,004.9	5,531.5	3,496.6	3,291.8	204.77	17.076	
9,251.9	6,928.2	6,906.2	6,906.2	68.3	138.0	92.23	-1,004.9	5,531.5	3,446.0	3,239.8	206.18	16.713	
9,300.0	6,927.8	6,905.8	6,905.8	69.6	138.0	92.20	-1,004.9	5,531.5	3,399.2	3,191.7	207.49	16.383	
9,350.4	6,927.3	6,905.3	6,905.3	71.0	138.0	92.17	-1,004.9	5,531.5	3,350.2	3,141.3	208.86	16.040	
9,400.0	6,926.9	6,904.9	6,904.9	72.4	138.0	92.13	-1,004.9	5,531.5	3,301.9	3,091.7	210.21	15.708	
9,448.8	6,926.4	6,904.4	6,904.4	73.7	138.0	92.10	-1,004.9	5,531.5	3,254.5	3,043.0	211.54	15.385	
9,500.0	6,926.0	6,904.0	6,904.0	75.1	138.0	92.07	-1,004.9	5,531.5	3,204.8	2,991.9	212.94	15.050	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,903.5	6,903.5	76.4	138.0	92.04	-1,004.9	5,531.5	3,159.1	2,944.8	214.23	14.746	
9,600.0	6,925.1	6,903.1	6,903.1	77.9	138.0	92.00	-1,004.9	5,531.5	3,108.0	2,892.3	215.67	14.410	
9,645.6	6,924.6	6,902.6	6,902.6	79.1	138.0	91.97	-1,004.9	5,531.5	3,063.8	2,846.9	216.92	14.124	
9,700.0	6,924.1	6,902.1	6,902.1	80.6	138.0	91.93	-1,004.9	5,531.5	3,011.3	2,792.9	218.41	13.787	
9,744.1	6,923.7	6,901.7	6,901.7	81.8	137.9	91.90	-1,004.9	5,531.5	2,968.7	2,749.1	219.62	13.517	
9,800.0	6,923.2	6,901.2	6,901.2	83.4	137.9	91.87	-1,004.9	5,531.5	2,914.8	2,693.6	221.15	13.180	
9,842.5	6,922.9	6,900.9	6,900.9	84.5	137.9	91.84	-1,004.9	5,531.5	2,873.9	2,651.6	222.32	12.927	
9,900.0	6,922.3	6,900.3	6,900.3	86.1	137.9	91.80	-1,004.9	5,531.5	2,818.6	2,594.7	223.90	12.589	
9,940.9	6,922.0	6,900.0	6,900.0	87.2	137.9	91.77	-1,004.9	5,531.5	2,779.3	2,554.3	225.03	12.351	
10,000.0	6,921.4	6,899.4	6,899.4	88.9	137.9	91.73	-1,004.9	5,531.5	2,722.6	2,496.0	226.65	12.013	
10,039.3	6,921.1	6,899.1	6,899.1	90.0	137.9	91.71	-1,004.9	5,531.5	2,685.0	2,457.2	227.73	11.790	
10,100.0	6,920.5	6,898.5	6,898.5	91.6	137.9	91.67	-1,004.9	5,531.5	2,627.0	2,397.6	229.40	11.451	
10,137.8	6,920.2	6,898.2	6,898.2	92.7	137.9	91.64	-1,004.9	5,531.5	2,590.9	2,360.5	230.44	11.243	
10,200.0	6,919.6	6,897.6	6,897.6	94.4	137.9	91.60	-1,004.9	5,531.5	2,531.7	2,299.5	232.16	10.905	
10,236.2	6,919.3	6,897.3	6,897.3	95.4	137.9	91.58	-1,004.9	5,531.5	2,497.3	2,264.1	233.15	10.711	
10,300.0	6,918.7	6,896.7	6,896.7	97.2	137.8	91.53	-1,004.9	5,531.5	2,436.7	2,201.8	234.91	10.373	
10,334.6	6,918.4	6,896.4	6,896.4	98.1	137.8	91.51	-1,004.9	5,531.5	2,404.0	2,168.1	235.87	10.192	
10,400.0	6,917.8	6,895.8	6,895.8	99.9	137.8	91.47	-1,004.9	5,531.5	2,342.2	2,104.6	237.67	9.855	
10,433.0	6,917.5	6,895.5	6,895.5	100.9	137.8	91.45	-1,004.9	5,531.5	2,311.1	2,072.5	238.58	9.687	
10,500.0	6,916.9	6,894.9	6,894.9	102.7	137.8	91.40	-1,004.9	5,531.5	2,248.2	2,007.8	240.43	9.351	
10,531.5	6,916.6	6,894.6	6,894.6	103.6	137.8	91.38	-1,004.9	5,531.5	2,218.7	1,977.4	241.30	9.195	
10,600.0	6,916.0	6,894.0	6,894.0	105.5	137.8	91.33	-1,004.9	5,531.5	2,154.7	1,911.5	243.20	8.860	
10,629.9	6,915.7	6,893.7	6,893.7	106.3	137.8	91.31	-1,004.9	5,531.5	2,126.8	1,882.8	244.02	8.716	
10,700.0	6,915.1	6,893.1	6,893.1	108.3	137.8	91.27	-1,004.9	5,531.5	2,061.8	1,815.8	245.96	8.383	
10,728.3	6,914.8	6,892.8	6,892.8	109.1	137.8	91.25	-1,004.9	5,531.5	2,035.6	1,788.9	246.74	8.250	
10,800.0	6,914.2	6,892.2	6,892.2	111.0	137.8	91.20	-1,004.9	5,531.5	1,969.6	1,720.9	248.73	7.919	
10,826.7	6,913.9	6,891.9	6,891.9	111.8	137.7	91.18	-1,004.9	5,531.5	1,945.1	1,695.6	249.47	7.797	
10,900.0	6,913.3	6,891.3	6,891.3	113.8	137.7	91.14	-1,004.9	5,531.5	1,878.2	1,626.7	251.49	7.468	
10,925.2	6,913.1	6,891.1	6,891.1	114.5	137.7	91.12	-1,004.9	5,531.5	1,855.3	1,603.1	252.19	7.357	
11,000.0	6,912.4	6,890.4	6,890.4	116.6	137.7	91.07	-1,004.9	5,531.5	1,787.7	1,533.5	254.26	7.031	
11,023.6	6,912.2	6,890.2	6,890.2	117.3	137.7	91.05	-1,004.9	5,531.5	1,766.5	1,511.6	254.92	6.930	
11,100.0	6,911.5	6,889.5	6,889.5	119.4	137.7	91.00	-1,004.9	5,531.5	1,698.3	1,441.3	257.03	6.607	
11,122.0	6,911.3	6,889.3	6,889.3	120.0	137.7	90.99	-1,004.9	5,531.5	1,678.8	1,421.1	257.64	6.516	
11,200.0	6,910.6	6,888.6	6,888.6	122.2	137.7	90.94	-1,004.9	5,531.5	1,610.1	1,350.3	259.80	6.198	
11,220.4	6,910.4	6,888.4	6,888.4	122.7	137.7	90.92	-1,004.9	5,531.5	1,592.3	1,331.9	260.37	6.115	
11,300.0	6,909.7	6,887.7	6,887.7	125.0	137.7	90.87	-1,004.9	5,531.5	1,523.4	1,260.9	262.57	5.802	
11,318.9	6,909.5	6,887.5	6,887.5	125.5	137.7	90.86	-1,004.9	5,531.5	1,507.3	1,244.2	263.10	5.729	
11,400.0	6,908.8	6,886.8	6,886.8	127.7	137.6	90.80	-1,004.9	5,531.5	1,438.5	1,173.1	265.35	5.421	
11,417.3	6,908.6	6,886.6	6,886.6	128.2	137.6	90.79	-1,004.9	5,531.5	1,424.0	1,158.1	265.83	5.357	
11,500.0	6,907.9	6,885.9	6,885.9	130.5	137.6	90.74	-1,004.9	5,531.5	1,355.5	1,087.4	268.12	5.056	
11,515.7	6,907.7	6,885.7	6,885.7	131.0	137.6	90.73	-1,004.9	5,531.5	1,342.7	1,074.2	268.56	5.000	
11,600.0	6,907.0	6,885.0	6,885.0	133.3	137.6	90.67	-1,004.9	5,531.5	1,275.1	1,004.2	270.89	4.707	
11,614.1	6,906.8	6,884.8	6,884.8	133.7	137.6	90.66	-1,004.9	5,531.5	1,263.9	992.6	271.29	4.659	
11,700.0	6,906.0	6,884.0	6,884.0	136.1	137.6	90.60	-1,004.9	5,531.5	1,197.5	923.9	273.67	4.376	
11,712.6	6,905.9	6,883.9	6,883.9	136.5	137.6	90.59	-1,004.9	5,531.5	1,188.0	914.0	274.02	4.336	
11,800.0	6,905.1	6,883.1	6,883.1	138.9	137.6	90.54	-1,004.9	5,531.5	1,123.6	847.1	276.44	4.064	
11,811.0	6,905.0	6,883.0	6,883.0	139.2	137.6	90.53	-1,004.9	5,531.5	1,115.7	838.9	276.75	4.031	
11,900.0	6,904.2	6,882.2	6,882.2	141.7	137.6	90.47	-1,004.9	5,531.5	1,053.9	774.7	279.22	3.774	
11,909.4	6,904.2	6,882.2	6,882.2	141.9	137.6	90.46	-1,004.9	5,531.5	1,047.6	768.1	279.48	3.748	
12,000.0	6,903.3	6,881.3	6,881.3	144.5	137.5	90.40	-1,004.9	5,531.5	989.4	707.4	281.99	3.509	
12,007.8	6,903.3	6,881.3	6,881.3	144.7	137.5	90.40	-1,004.9	5,531.5	984.6	702.4	282.21	3.489	
12,100.0	6,902.4	6,880.4	6,880.4	147.3	137.5	90.34	-1,004.9	5,531.5	931.3	646.5	284.77	3.270	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,880.4	6,880.4	147.4	137.5	90.33	-1,004.9	5,531.5	927.9	642.9	284.94	3.256	
12,200.0	6,901.5	6,879.5	6,879.5	150.1	137.5	90.27	-1,004.9	5,531.5	880.7	593.1	287.55	3.063	
12,204.7	6,901.5	6,879.5	6,879.5	150.2	137.5	90.27	-1,004.9	5,531.5	878.5	590.8	287.68	3.054	
12,300.0	6,900.6	6,878.6	6,878.6	152.9	137.5	90.20	-1,004.9	5,531.5	839.0	548.6	290.32	2.890	
12,303.1	6,900.6	6,878.6	6,878.6	152.9	137.5	90.20	-1,004.9	5,531.5	837.8	547.4	290.41	2.885	
12,400.0	6,899.7	6,877.7	6,877.7	155.6	137.5	90.14	-1,004.9	5,531.5	807.6	514.5	293.10	2.755	
12,401.5	6,899.7	6,877.7	6,877.7	155.7	137.5	90.14	-1,004.9	5,531.5	807.2	514.0	293.14	2.753	
12,500.0	6,898.8	6,876.8	6,876.8	158.4	137.4	90.07	-1,004.9	5,531.5	787.7	491.8	295.88	2.662	
12,598.4	6,897.9	6,875.9	6,875.9	161.2	137.4	90.01	-1,004.9	5,531.5	780.2	481.6	298.61	2.613	
12,600.0	6,897.9	6,875.9	6,875.9	161.2	137.4	90.01	-1,004.9	5,531.5	780.2	481.6	298.65	2.612	
12,608.6	6,897.8	6,875.8	6,875.8	161.5	137.4	90.00	-1,004.9	5,531.5	780.2	481.3	298.89	2.610 CC, ES	
12,696.8	6,897.0	6,875.0	6,875.0	163.9	137.4	89.94	-1,004.9	5,531.5	785.1	483.8	301.34	2.605 SF	
12,700.0	6,897.0	6,875.0	6,875.0	164.0	137.4	89.94	-1,004.9	5,531.5	785.5	484.1	301.43	2.606	
12,795.2	6,896.1	6,874.1	6,874.1	166.7	137.4	89.88	-1,004.9	5,531.5	802.2	498.1	304.08	2.638	
12,800.0	6,896.1	6,874.1	6,874.1	166.8	137.4	89.87	-1,004.9	5,531.5	803.3	499.1	304.21	2.641	
12,893.7	6,895.3	6,873.3	6,873.3	169.4	137.4	89.81	-1,004.9	5,531.5	830.6	523.8	306.81	2.707	
12,900.0	6,895.2	6,873.2	6,873.2	169.6	137.4	89.81	-1,004.9	5,531.5	832.8	525.8	306.99	2.713	
12,992.1	6,894.4	6,872.4	6,872.4	172.2	137.4	89.75	-1,004.9	5,531.5	869.3	559.8	309.54	2.808	
13,000.0	6,894.3	6,872.3	6,872.3	172.4	137.4	89.74	-1,004.9	5,531.5	872.8	563.1	309.76	2.818	
13,090.5	6,893.5	6,871.5	6,871.5	175.0	137.3	89.68	-1,004.9	5,531.5	917.0	604.7	312.28	2.937	
13,100.0	6,893.4	6,871.4	6,871.4	175.2	137.3	89.67	-1,004.9	5,531.5	922.0	609.5	312.54	2.950	
13,188.9	6,892.6	6,870.6	6,870.6	177.7	137.3	89.62	-1,004.9	5,531.5	972.4	657.3	315.01	3.087	
13,200.0	6,892.5	6,870.5	6,870.5	178.0	137.3	89.61	-1,004.9	5,531.5	979.0	663.7	315.32	3.105	
13,287.4	6,891.7	6,869.7	6,869.7	180.5	137.3	89.55	-1,004.9	5,531.5	1,034.1	716.4	317.75	3.255	
13,300.0	6,891.6	6,869.6	6,869.6	180.8	137.3	89.54	-1,004.9	5,531.5	1,042.4	724.3	318.10	3.277	
13,385.8	6,890.8	6,868.8	6,868.8	183.2	137.3	89.48	-1,004.9	5,531.5	1,101.2	780.7	320.48	3.436	
13,400.0	6,890.7	6,868.7	6,868.7	183.6	137.3	89.48	-1,004.9	5,531.5	1,111.3	790.4	320.87	3.463	
13,484.2	6,889.9	6,867.9	6,867.9	186.0	137.3	89.42	-1,004.9	5,531.5	1,172.8	849.5	323.21	3.628	
13,500.0	6,889.8	6,867.8	6,867.8	186.4	137.3	89.41	-1,004.9	5,531.5	1,184.6	860.9	323.65	3.660	
13,582.6	6,889.0	6,867.0	6,867.0	188.7	137.2	89.35	-1,004.9	5,531.5	1,248.0	922.0	325.95	3.829	
13,600.0	6,888.9	6,866.9	6,866.9	189.2	137.2	89.34	-1,004.9	5,531.5	1,261.6	935.1	326.43	3.865	
13,681.1	6,888.1	6,866.1	6,866.1	191.5	137.2	89.29	-1,004.9	5,531.5	1,326.2	997.5	328.68	4.035	
13,700.0	6,888.0	6,866.0	6,866.0	192.0	137.2	89.28	-1,004.9	5,531.5	1,341.6	1,012.4	329.20	4.075	
13,779.5	6,887.3	6,865.3	6,865.3	194.2	137.2	89.22	-1,004.9	5,531.5	1,407.0	1,075.6	331.41	4.245	
13,800.0	6,887.1	6,865.1	6,865.1	194.8	137.2	89.21	-1,004.9	5,531.5	1,424.1	1,092.1	331.98	4.290	
13,877.9	6,886.4	6,864.4	6,864.4	197.0	137.2	89.16	-1,004.9	5,531.5	1,489.9	1,155.8	334.14	4.459	
13,900.0	6,886.2	6,864.2	6,864.2	197.6	137.2	89.14	-1,004.9	5,531.5	1,508.7	1,174.0	334.76	4.507	
13,976.3	6,885.5	6,863.5	6,863.5	199.7	137.2	89.09	-1,004.9	5,531.5	1,574.6	1,237.7	336.88	4.674	
14,000.0	6,885.3	6,863.3	6,863.3	200.4	137.2	89.08	-1,004.9	5,531.5	1,595.2	1,257.6	337.53	4.726	
14,074.8	6,884.6	6,862.6	6,862.6	202.5	137.2	89.03	-1,004.9	5,531.5	1,660.8	1,321.2	339.61	4.890	
14,100.0	6,884.4	6,862.4	6,862.4	203.2	137.2	89.01	-1,004.9	5,531.5	1,683.1	1,342.8	340.31	4.946	
14,173.2	6,883.7	6,861.7	6,861.7	205.3	137.1	88.96	-1,004.9	5,531.5	1,748.3	1,406.0	342.34	5.107	
14,200.0	6,883.5	6,861.5	6,861.5	206.0	137.1	88.95	-1,004.9	5,531.5	1,772.3	1,429.2	343.08	5.166	
14,271.6	6,882.8	6,860.8	6,860.8	208.0	137.1	88.90	-1,004.9	5,531.5	1,836.9	1,491.8	345.07	5.323	
14,300.0	6,882.6	6,860.6	6,860.6	208.8	137.1	88.88	-1,004.9	5,531.5	1,862.6	1,516.8	345.86	5.385	
14,370.0	6,881.9	6,859.9	6,859.9	210.8	137.1	88.83	-1,004.9	5,531.5	1,926.5	1,578.6	347.80	5.539	
14,400.0	6,881.7	6,859.7	6,859.7	211.6	137.1	88.81	-1,004.9	5,531.5	1,953.9	1,605.2	348.63	5.604	
14,468.5	6,881.0	6,859.0	6,859.0	213.5	137.1	88.77	-1,004.9	5,531.5	2,016.8	1,666.3	350.53	5.754	
14,500.0	6,880.8	6,858.8	6,858.8	214.4	137.1	88.75	-1,004.9	5,531.5	2,045.9	1,694.5	351.41	5.822	
14,566.9	6,880.2	6,858.2	6,858.2	216.3	137.1	88.70	-1,004.9	5,531.5	2,107.9	1,754.7	353.27	5.967	
14,584.2	6,880.0	6,858.0	6,858.0	216.8	137.1	88.69	-1,004.9	5,531.5	2,124.0	1,770.2	353.74	6.004	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	96.90	-815.1	6,738.1	6,787.3				
98.4	98.4	74.4	74.4	0.1	0.4	96.90	-815.1	6,738.1	6,787.2	6,786.7	0.51	N/A	
100.0	100.0	76.0	76.0	0.1	0.4	96.90	-815.1	6,738.1	6,787.2	6,786.7	0.52	N/A	
196.8	196.8	172.8	172.8	0.3	2.4	96.90	-815.1	6,738.1	6,787.2	6,784.6	2.66	2,547.673	
200.0	200.0	176.0	176.0	0.3	2.4	96.90	-815.1	6,738.1	6,787.2	6,784.5	2.75	2,469.470	
295.3	295.3	271.3	271.3	0.5	4.5	96.90	-815.1	6,738.1	6,787.2	6,782.2	5.03	1,348.248	
300.0	300.0	276.0	276.0	0.5	4.6	96.90	-815.1	6,738.1	6,787.2	6,782.1	5.14	1,319.697	
393.7	393.7	369.7	369.7	0.7	6.5	96.90	-815.1	6,738.1	6,787.2	6,779.9	7.28	932.924	
400.0	400.0	376.0	376.0	0.8	6.7	96.90	-815.1	6,738.1	6,787.2	6,779.8	7.42	914.975	
492.1	492.1	468.1	468.1	1.0	8.5	96.90	-815.1	6,738.1	6,787.2	6,777.7	9.50	714.744	
500.0	500.0	476.0	476.0	1.0	8.7	96.90	-815.1	6,738.1	6,787.2	6,777.6	9.67	701.638	
590.5	590.5	566.5	566.5	1.2	10.5	96.90	-815.1	6,738.1	6,787.2	6,775.5	11.71	579.665	
600.0	600.0	576.0	576.0	1.2	10.7	96.90	-815.1	6,738.1	6,787.2	6,775.3	11.92	569.343	
689.0	689.0	665.0	665.0	1.4	12.5	96.90	-815.1	6,738.1	6,787.2	6,773.3	13.92	487.668	
700.0	700.0	676.0	676.0	1.4	12.7	96.90	-815.1	6,738.1	6,787.2	6,773.1	14.17	479.154	
787.4	787.4	763.4	763.4	1.6	14.5	96.90	-815.1	6,738.1	6,787.2	6,771.1	16.12	420.933	
800.0	800.0	776.0	776.0	1.7	14.7	96.90	-815.1	6,738.1	6,787.2	6,770.8	16.41	413.688	
885.8	885.8	861.8	861.8	1.9	16.5	96.90	-815.1	6,738.1	6,787.2	6,768.9	18.33	370.294	
900.0	900.0	876.0	876.0	1.9	16.8	96.90	-815.1	6,738.1	6,787.2	6,768.6	18.65	363.989	
984.2	984.2	960.2	960.2	2.1	18.5	96.90	-815.1	6,738.1	6,787.2	6,766.7	20.53	330.547	
1,000.0	1,000.0	976.0	976.0	2.1	18.8	96.90	-815.1	6,738.1	6,787.2	6,766.3	20.89	324.966	
1,082.7	1,082.7	1,058.7	1,058.7	2.3	20.4	96.90	-815.1	6,738.1	6,787.2	6,764.5	22.74	298.514	
1,100.0	1,100.0	1,076.0	1,076.0	2.3	20.8	96.90	-815.1	6,738.1	6,787.2	6,764.1	23.12	293.508	
1,181.1	1,181.1	1,157.1	1,157.1	2.5	22.4	96.90	-815.1	6,738.1	6,787.2	6,762.3	24.94	272.147	
1,200.0	1,200.0	1,176.0	1,176.0	2.6	22.8	96.90	-815.1	6,738.1	6,787.2	6,761.9	25.36	267.608	
1,279.5	1,279.5	1,255.5	1,255.5	2.7	24.4	96.90	-815.1	6,738.1	6,787.2	6,760.1	27.14	250.063	
1,300.0	1,300.0	1,276.0	1,276.0	2.8	24.8	96.90	-815.1	6,738.1	6,787.2	6,759.6	27.60	245.912	
1,377.9	1,377.9	1,353.9	1,353.9	3.0	26.4	96.90	-815.1	6,738.1	6,787.2	6,757.9	29.34	231.297	
1,400.0	1,400.0	1,376.0	1,376.0	3.0	26.8	96.90	-815.1	6,738.1	6,787.2	6,757.4	29.84	227.473	
1,476.4	1,476.4	1,452.4	1,452.4	3.2	28.4	96.90	-815.1	6,738.1	6,787.2	6,755.7	31.55	215.152	
1,500.0	1,500.0	1,476.0	1,476.0	3.2	28.8	96.90	-815.1	6,738.1	6,787.2	6,755.1	32.07	211.607	
1,574.8	1,574.8	1,550.8	1,550.8	3.4	30.3	96.90	-815.1	6,738.1	6,787.2	6,753.5	33.75	201.116	
1,600.0	1,600.0	1,576.0	1,576.0	3.5	30.9	96.90	-815.1	6,738.1	6,787.2	6,752.9	34.31	197.812	
1,650.0	1,650.0	1,626.0	1,626.0	3.6	31.9	96.90	-815.1	6,738.1	6,787.2	6,751.8	35.43	191.567	
1,673.2	1,673.2	1,649.2	1,649.2	3.6	32.3	-143.52	-815.1	6,738.1	6,787.3	6,751.4	35.94	188.832	
1,700.0	1,700.0	1,676.0	1,676.0	3.7	32.9	-143.52	-815.1	6,738.1	6,787.6	6,751.0	36.53	185.789	
1,771.6	1,771.6	1,747.6	1,747.6	3.8	34.3	-143.51	-815.1	6,738.1	6,789.3	6,751.2	38.09	178.252	
1,800.0	1,799.9	1,775.9	1,775.9	3.9	34.9	-143.50	-815.1	6,738.1	6,790.4	6,751.7	38.70	175.470	
1,870.1	1,869.9	1,845.9	1,845.9	4.0	36.3	-143.48	-815.1	6,738.1	6,794.0	6,753.8	40.20	169.021	
1,900.0	1,899.7	1,875.7	1,875.7	4.1	36.9	-143.47	-815.1	6,738.1	6,796.0	6,755.2	40.83	166.448	
1,968.5	1,967.8	1,943.8	1,943.8	4.2	38.3	-143.44	-815.1	6,738.1	6,801.5	6,759.2	42.27	160.910	
2,000.0	1,999.1	1,975.1	1,975.1	4.3	38.9	-143.42	-815.1	6,738.1	6,804.4	6,761.5	42.92	158.527	
2,066.9	2,065.5	2,041.5	2,041.5	4.4	40.2	-143.38	-815.1	6,738.1	6,811.6	6,767.3	44.30	153.754	
2,100.0	2,098.2	2,074.2	2,074.2	4.5	40.9	-143.36	-815.1	6,738.1	6,815.6	6,770.6	44.97	151.543	
2,165.3	2,162.6	2,138.6	2,138.6	4.7	42.2	-143.30	-815.1	6,738.1	6,824.4	6,778.2	46.29	147.416	
2,200.0	2,196.6	2,172.6	2,172.6	4.7	42.9	-143.27	-815.1	6,738.1	6,829.6	6,782.6	46.98	145.364	
2,249.9	2,245.5	2,221.5	2,221.5	4.9	43.8	-143.23	-815.1	6,738.1	6,837.6	6,789.7	47.97	142.547	
2,263.8	2,259.1	2,235.1	2,235.1	4.9	44.1	-143.24	-815.1	6,738.1	6,840.0	6,791.7	48.27	141.699	
2,300.0	2,294.5	2,270.5	2,270.5	5.0	44.8	-143.28	-815.1	6,738.1	6,846.1	6,797.0	49.06	139.541	
2,362.2	2,355.4	2,331.4	2,331.4	5.2	46.0	-143.34	-815.1	6,738.1	6,856.5	6,806.1	50.42	135.975	
2,400.0	2,392.3	2,368.3	2,368.3	5.4	46.8	-143.38	-815.1	6,738.1	6,862.9	6,811.6	51.25	133.903	
2,460.6	2,451.6	2,427.6	2,427.6	5.6	48.0	-143.44	-815.1	6,738.1	6,873.1	6,820.5	52.59	130.702	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,466.2	2,466.2	5.7	48.8	-143.48	-815.1	6,738.1	6,879.7	6,826.2	53.45	128.701	
2,559.0	2,547.9	2,523.9	2,523.9	5.9	49.9	-143.54	-815.1	6,738.1	6,889.6	6,834.9	54.76	125.815	
2,600.0	2,588.0	2,564.0	2,564.0	6.1	50.7	-143.58	-815.1	6,738.1	6,896.5	6,840.9	55.67	123.891	
2,657.5	2,644.2	2,620.2	2,620.2	6.3	51.9	-143.64	-815.1	6,738.1	6,906.2	6,849.3	56.94	121.286	
2,700.0	2,685.8	2,661.8	2,661.8	6.4	52.7	-143.69	-815.1	6,738.1	6,913.4	6,855.5	57.89	119.432	
2,755.9	2,740.5	2,716.5	2,716.5	6.6	53.8	-143.74	-815.1	6,738.1	6,922.8	6,863.7	59.13	117.078	
2,800.0	2,783.6	2,759.6	2,759.6	6.8	54.7	-143.79	-815.1	6,738.1	6,930.3	6,870.2	60.11	115.289	
2,854.3	2,836.7	2,812.7	2,812.7	7.0	55.7	-143.84	-815.1	6,738.1	6,939.5	6,878.1	61.32	113.160	
2,900.0	2,881.4	2,857.4	2,857.4	7.2	56.6	-143.89	-815.1	6,738.1	6,947.2	6,884.8	62.34	111.433	
2,952.7	2,933.0	2,909.0	2,909.0	7.4	57.7	-143.94	-815.1	6,738.1	6,956.1	6,892.6	63.52	109.504	
3,000.0	2,979.2	2,955.2	2,955.2	7.6	58.6	-143.99	-815.1	6,738.1	6,964.1	6,899.5	64.58	107.836	
3,051.2	3,029.3	3,005.3	3,005.3	7.8	59.6	-144.04	-815.1	6,738.1	6,972.8	6,907.1	65.73	106.086	
3,100.0	3,077.1	3,053.1	3,053.1	8.0	60.6	-144.09	-815.1	6,738.1	6,981.1	6,914.3	66.82	104.473	
3,149.6	3,125.6	3,101.6	3,101.6	8.2	61.5	-144.14	-815.1	6,738.1	6,989.5	6,921.6	67.94	102.885	
3,200.0	3,174.9	3,150.9	3,150.9	8.4	62.5	-144.19	-815.1	6,738.1	6,998.0	6,929.0	69.07	101.323	
3,248.0	3,221.8	3,197.8	3,197.8	8.6	63.5	-144.23	-815.1	6,738.1	7,006.2	6,936.1	70.15	99.881	
3,300.0	3,272.7	3,248.7	3,248.7	8.9	64.5	-144.28	-815.1	6,738.1	7,015.0	6,943.7	71.31	98.368	
3,346.4	3,318.1	3,294.1	3,294.1	9.0	65.4	-144.33	-815.1	6,738.1	7,022.9	6,950.6	72.36	97.057	
3,400.0	3,370.5	3,346.5	3,346.5	9.3	66.5	-144.38	-815.1	6,738.1	7,032.1	6,958.5	73.56	95.591	
3,444.9	3,414.4	3,390.4	3,390.4	9.5	67.3	-144.43	-815.1	6,738.1	7,039.7	6,965.1	74.57	94.398	
3,500.0	3,468.3	3,444.3	3,444.3	9.7	68.4	-144.48	-815.1	6,738.1	7,049.1	6,973.3	75.82	92.976	
3,543.3	3,510.7	3,486.7	3,486.7	9.9	69.3	-144.52	-815.1	6,738.1	7,056.5	6,979.7	76.79	91.890	
3,600.0	3,566.1	3,542.1	3,542.1	10.1	70.4	-144.58	-815.1	6,738.1	7,066.1	6,988.1	78.07	90.510	
3,641.7	3,606.9	3,582.9	3,582.9	10.3	71.2	-144.62	-815.1	6,738.1	7,073.3	6,994.2	79.01	89.522	
3,700.0	3,664.0	3,640.0	3,640.0	10.6	72.4	-144.67	-815.1	6,738.1	7,083.2	7,002.9	80.33	88.181	
3,740.1	3,703.2	3,679.2	3,679.2	10.7	73.2	-144.71	-815.1	6,738.1	7,090.1	7,008.8	81.23	87.281	
3,800.0	3,761.8	3,737.8	3,737.8	11.0	74.3	-144.77	-815.1	6,738.1	7,100.3	7,017.7	82.58	85.978	
3,837.4	3,798.3	3,774.3	3,774.3	11.2	75.1	-144.81	-815.1	6,738.1	7,106.7	7,023.3	83.43	85.185	
3,838.6	3,799.5	3,775.5	3,775.5	11.2	75.1	-144.81	-815.1	6,738.1	7,106.9	7,023.4	83.46	85.155	
3,900.0	3,859.7	3,835.7	3,835.7	11.4	76.3	-144.98	-815.1	6,738.1	7,116.9	7,031.8	85.04	83.689	
3,937.0	3,896.1	3,872.1	3,872.1	11.5	77.0	-145.08	-815.1	6,738.1	7,122.4	7,036.4	85.97	82.845	
4,000.0	3,958.3	3,934.3	3,934.3	11.7	78.3	-145.22	-815.1	6,738.1	7,130.8	7,043.3	87.55	81.449	
4,035.4	3,993.3	3,969.3	3,969.3	11.8	79.0	-145.29	-815.1	6,738.1	7,135.1	7,046.6	88.42	80.691	
4,100.0	4,057.4	4,033.4	4,033.4	12.0	80.3	-145.41	-815.1	6,738.1	7,141.9	7,051.9	90.01	79.349	
4,133.8	4,091.0	4,067.0	4,067.0	12.1	81.0	-145.46	-815.1	6,738.1	7,145.0	7,054.2	90.82	78.671	
4,200.0	4,156.8	4,132.8	4,132.8	12.2	82.3	-145.55	-815.1	6,738.1	7,150.2	7,057.8	92.40	77.384	
4,232.3	4,189.0	4,165.0	4,165.0	12.3	82.9	-145.58	-815.1	6,738.1	7,152.2	7,059.1	93.15	76.779	
4,300.0	4,256.6	4,232.6	4,232.6	12.4	84.3	-145.64	-815.1	6,738.1	7,155.6	7,060.9	94.72	75.547	
4,330.7	4,287.3	4,263.3	4,263.3	12.5	84.9	-145.66	-815.1	6,738.1	7,156.7	7,061.2	95.41	75.009	
4,400.0	4,356.6	4,332.6	4,332.6	12.6	86.3	-145.68	-815.1	6,738.1	7,158.1	7,061.1	96.95	73.831	
4,429.1	4,385.7	4,361.7	4,361.7	12.6	86.9	-145.68	-815.1	6,738.1	7,158.3	7,060.7	97.59	73.352	
4,437.2	4,393.8	4,369.8	4,369.8	12.7	87.0	94.73	-815.1	6,738.1	7,158.3	7,059.5	98.84	72.427	
4,500.0	4,456.6	4,432.6	4,432.6	12.7	88.3	94.73	-815.1	6,738.1	7,158.3	7,058.1	100.20	71.441	
4,527.5	4,484.1	4,460.1	4,460.1	12.8	88.9	94.73	-815.1	6,738.1	7,158.3	7,057.5	100.80	71.015	
4,600.0	4,556.6	4,532.6	4,532.6	12.9	90.3	94.73	-815.1	6,738.1	7,158.3	7,055.9	102.38	69.919	
4,626.0	4,582.6	4,558.6	4,558.6	12.9	90.8	94.73	-815.1	6,738.1	7,158.3	7,055.3	102.95	69.534	
4,700.0	4,656.6	4,632.6	4,632.6	13.1	92.3	94.73	-815.1	6,738.1	7,158.3	7,053.7	104.56	68.459	
4,724.4	4,681.0	4,657.0	4,657.0	13.1	92.8	94.73	-815.1	6,738.1	7,158.3	7,053.2	105.10	68.112	
4,800.0	4,756.6	4,732.6	4,732.6	13.2	94.3	94.73	-815.1	6,738.1	7,158.3	7,051.5	106.75	67.058	
4,822.8	4,779.4	4,755.4	4,755.4	13.3	94.8	94.73	-815.1	6,738.1	7,158.3	7,051.0	107.25	66.746	
4,900.0	4,856.6	4,832.6	4,832.6	13.4	96.4	94.73	-815.1	6,738.1	7,158.3	7,049.4	108.93	65.712	
4,921.2	4,877.8	4,853.8	4,853.8	13.4	96.8	94.73	-815.1	6,738.1	7,158.3	7,048.9	109.40	65.433	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,932.6	4,932.6	13.6	98.4	94.73	-815.1	6,738.1	7,158.3	7,047.2	111.12	64.418	
5,019.7	4,976.3	4,952.3	4,952.3	13.6	98.8	94.73	-815.1	6,738.1	7,158.3	7,046.7	111.55	64.170	
5,100.0	5,056.6	5,032.6	5,032.6	13.7	100.4	94.73	-815.1	6,738.1	7,158.3	7,045.0	113.31	63.174	
5,118.1	5,074.7	5,050.7	5,050.7	13.8	100.7	94.73	-815.1	6,738.1	7,158.3	7,044.6	113.71	62.953	
5,200.0	5,156.6	5,132.6	5,132.6	13.9	102.4	94.73	-815.1	6,738.1	7,158.3	7,042.8	115.50	61.975	
5,216.5	5,173.1	5,149.1	5,149.1	13.9	102.7	94.73	-815.1	6,738.1	7,158.3	7,042.4	115.86	61.782	
5,300.0	5,256.6	5,232.6	5,232.6	14.1	104.4	94.73	-815.1	6,738.1	7,158.3	7,040.6	117.69	60.821	
5,314.9	5,271.5	5,247.5	5,247.5	14.1	104.7	94.73	-815.1	6,738.1	7,158.3	7,040.3	118.02	60.652	
5,400.0	5,356.6	5,332.6	5,332.6	14.2	106.4	94.73	-815.1	6,738.1	7,158.3	7,038.4	119.89	59.708	
5,413.4	5,370.0	5,346.0	5,346.0	14.3	106.7	94.73	-815.1	6,738.1	7,158.3	7,038.1	120.18	59.562	
5,500.0	5,456.6	5,432.6	5,432.6	14.4	108.4	94.73	-815.1	6,738.1	7,158.3	7,036.2	122.08	58.635	
5,511.8	5,468.4	5,444.4	5,444.4	14.4	108.7	94.73	-815.1	6,738.1	7,158.3	7,035.9	122.34	58.511	
5,600.0	5,556.6	5,532.6	5,532.6	14.6	110.4	94.73	-815.1	6,738.1	7,158.3	7,034.0	124.28	57.599	
5,610.2	5,566.8	5,542.8	5,542.8	14.6	110.6	94.73	-815.1	6,738.1	7,158.3	7,033.8	124.50	57.495	
5,700.0	5,656.6	5,632.6	5,632.6	14.8	112.4	94.73	-815.1	6,738.1	7,158.3	7,031.8	126.48	56.598	
5,708.6	5,665.2	5,641.2	5,641.2	14.8	112.6	94.73	-815.1	6,738.1	7,158.3	7,031.6	126.67	56.513	
5,800.0	5,756.6	5,732.6	5,732.6	14.9	114.5	94.73	-815.1	6,738.1	7,158.3	7,029.6	128.67	55.631	
5,807.1	5,763.7	5,739.7	5,739.7	14.9	114.6	94.73	-815.1	6,738.1	7,158.3	7,029.5	128.83	55.564	
5,900.0	5,856.6	5,832.6	5,832.6	15.1	116.5	94.73	-815.1	6,738.1	7,158.3	7,027.4	130.87	54.696	
5,905.5	5,862.1	5,838.1	5,838.1	15.1	116.6	94.73	-815.1	6,738.1	7,158.3	7,027.3	130.99	54.646	
6,000.0	5,956.6	5,932.6	5,932.6	15.3	118.5	94.73	-815.1	6,738.1	7,158.3	7,025.2	133.07	53.792	
6,003.9	5,960.5	5,936.5	5,936.5	15.3	118.6	94.73	-815.1	6,738.1	7,158.3	7,025.1	133.16	53.757	
6,100.0	6,056.6	6,032.6	6,032.6	15.5	120.5	94.73	-815.1	6,738.1	7,158.3	7,023.0	135.27	52.917	
6,102.3	6,058.9	6,034.9	6,034.9	15.5	120.5	94.73	-815.1	6,738.1	7,158.3	7,023.0	135.33	52.897	
6,200.0	6,156.6	6,132.6	6,132.6	15.7	122.5	94.73	-815.1	6,738.1	7,158.3	7,020.8	137.48	52.069	
6,200.8	6,157.4	6,133.4	6,133.4	15.7	122.5	94.73	-815.1	6,738.1	7,158.3	7,020.8	137.49	52.063	
6,272.2	6,228.8	6,204.8	6,204.8	15.8	123.9	94.73	-815.1	6,738.1	7,158.3	7,019.2	139.07	51.473	
6,299.2	6,255.8	6,231.8	6,231.8	15.8	124.5	4.73	-815.1	6,738.1	7,157.8	7,019.1	138.64	51.627	
6,300.0	6,256.6	6,232.6	6,232.6	15.8	124.5	4.74	-815.1	6,738.1	7,157.8	7,019.1	138.65	51.623	
6,350.0	6,306.4	6,282.4	6,282.4	15.9	125.5	4.76	-815.1	6,738.1	7,154.1	7,015.1	139.00	51.470	
6,397.6	6,353.6	6,329.6	6,329.6	15.9	126.5	4.81	-815.1	6,738.1	7,147.4	7,008.7	138.69	51.537	
6,400.0	6,355.9	6,331.9	6,331.9	15.9	126.5	4.81	-815.1	6,738.1	7,147.0	7,008.3	138.65	51.545	
6,450.0	6,404.8	6,380.8	6,380.8	15.9	127.5	4.90	-815.1	6,738.1	7,136.4	6,998.8	137.62	51.857	
6,496.0	6,449.0	6,425.0	6,425.0	16.0	128.4	5.00	-815.1	6,738.1	7,123.7	6,987.7	136.05	52.362	
6,500.0	6,452.8	6,428.8	6,428.8	16.0	128.5	5.00	-815.1	6,738.1	7,122.5	6,986.6	135.88	52.416	
6,550.0	6,499.7	6,475.7	6,475.7	15.9	129.4	5.15	-815.1	6,738.1	7,105.3	6,971.8	133.45	53.242	
6,594.5	6,540.3	6,516.3	6,516.3	15.9	130.2	5.30	-815.1	6,738.1	7,087.3	6,956.5	130.71	54.223	
6,600.0	6,545.3	6,521.3	6,521.3	15.9	130.3	5.33	-815.1	6,738.1	7,084.8	6,954.5	130.33	54.362	
6,650.0	6,589.3	6,565.3	6,565.3	15.9	131.2	5.55	-815.1	6,738.1	7,061.3	6,934.8	126.53	55.809	
6,692.9	6,625.7	6,601.7	6,601.7	15.9	131.9	5.77	-815.1	6,738.1	7,038.7	6,915.9	122.74	57.346	
6,700.0	6,631.6	6,607.6	6,607.6	15.9	132.0	5.82	-815.1	6,738.1	7,034.7	6,912.7	122.07	57.629	
6,750.0	6,671.9	6,647.9	6,647.9	15.9	132.9	6.15	-815.1	6,738.1	7,005.3	6,888.3	116.99	59.881	
6,791.3	6,703.6	6,679.6	6,679.6	15.9	133.5	6.47	-815.1	6,738.1	6,978.9	6,866.5	112.35	62.119	
6,800.0	6,710.1	6,686.1	6,686.1	15.9	133.6	6.55	-815.1	6,738.1	6,973.1	6,861.8	111.33	62.637	
6,850.0	6,745.9	6,721.9	6,721.9	16.0	134.3	7.04	-815.1	6,738.1	6,938.4	6,833.2	105.14	65.990	
6,889.7	6,772.6	6,748.6	6,748.6	16.1	134.9	7.51	-815.1	6,738.1	6,909.0	6,809.1	99.91	69.152	
6,900.0	6,779.2	6,755.2	6,755.2	16.1	135.0	7.64	-815.1	6,738.1	6,901.2	6,802.7	98.52	70.047	
6,950.0	6,809.8	6,785.8	6,785.8	16.3	135.6	8.40	-815.1	6,738.1	6,861.9	6,770.3	91.59	74.921	
6,988.2	6,831.3	6,807.3	6,807.3	16.4	136.1	9.12	-815.1	6,738.1	6,830.4	6,744.2	86.19	79.245	
7,000.0	6,837.6	6,813.6	6,813.6	16.5	136.2	9.37	-815.1	6,738.1	6,820.5	6,735.9	84.52	80.693	
7,050.0	6,862.5	6,838.5	6,838.5	16.9	136.7	10.63	-815.1	6,738.1	6,777.2	6,699.6	77.64	87.292	
7,086.6	6,878.7	6,854.7	6,854.7	17.2	137.0	11.81	-815.1	6,738.1	6,744.6	6,671.6	73.01	92.374	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,860.2	6,860.2	17.3	137.1	12.32	-815.1	6,738.1	6,732.4	6,660.9	71.48	94.186	
7,150.0	6,902.7	6,878.7	6,878.7	17.8	137.5	14.68	-815.1	6,738.1	6,686.2	6,619.1	67.08	99.675	
7,185.0	6,913.8	6,889.8	6,889.8	18.3	137.7	16.97	-815.1	6,738.1	6,653.1	6,587.0	66.04	100.738	
7,200.0	6,918.0	6,894.0	6,894.0	18.5	137.8	18.18	-815.1	6,738.1	6,638.7	6,572.4	66.40	99.984	
7,250.0	6,929.9	6,905.9	6,905.9	19.2	138.0	23.78	-815.1	6,738.1	6,590.4	6,517.5	72.90	90.400	
7,283.4	6,936.0	6,912.0	6,912.0	19.7	138.2	29.75	-815.1	6,738.1	6,557.6	6,473.7	83.92	78.137	
7,300.0	6,938.4	6,914.4	6,914.4	20.0	138.2	33.81	-815.1	6,738.1	6,541.3	6,449.2	92.14	70.990	
7,350.0	6,943.4	6,919.4	6,919.4	20.9	138.3	54.19	-815.1	6,738.1	6,491.8	6,361.5	130.26	49.835	
7,381.9	6,944.8	6,920.8	6,920.8	21.4	138.3	76.86	-815.1	6,738.1	6,460.1	6,304.3	155.80	41.463	
7,403.7	6,945.0	6,921.0	6,921.0	21.8	138.4	95.63	-815.1	6,738.1	6,438.3	6,279.0	159.38	40.397	
7,480.3	6,944.3	6,920.3	6,920.3	23.3	138.3	95.56	-815.1	6,738.1	6,362.1	6,201.2	160.86	39.550	
7,500.0	6,944.1	6,920.1	6,920.1	23.7	138.3	95.54	-815.1	6,738.1	6,342.5	6,181.2	161.25	39.334	
7,578.7	6,943.4	6,919.4	6,919.4	25.4	138.3	95.48	-815.1	6,738.1	6,264.1	6,101.2	162.89	38.456	
7,600.0	6,943.2	6,919.2	6,919.2	25.8	138.3	95.46	-815.1	6,738.1	6,242.9	6,079.6	163.33	38.222	
7,677.1	6,942.5	6,918.5	6,918.5	27.5	138.3	95.39	-815.1	6,738.1	6,166.1	6,001.1	165.04	37.361	
7,700.0	6,942.3	6,918.3	6,918.3	28.0	138.3	95.37	-815.1	6,738.1	6,143.4	5,977.8	165.55	37.109	
7,775.6	6,941.6	6,917.6	6,917.6	29.8	138.3	95.30	-815.1	6,738.1	6,068.2	5,900.9	167.30	36.271	
7,800.0	6,941.4	6,917.4	6,917.4	30.3	138.3	95.28	-815.1	6,738.1	6,043.8	5,876.0	167.87	36.003	
7,874.0	6,940.7	6,916.7	6,916.7	32.1	138.3	95.22	-815.1	6,738.1	5,970.2	5,800.6	169.64	35.193	
7,900.0	6,940.5	6,916.5	6,916.5	32.7	138.3	95.19	-815.1	6,738.1	5,944.3	5,774.1	170.26	34.912	
7,972.4	6,939.8	6,915.8	6,915.8	34.5	138.2	95.13	-815.1	6,738.1	5,872.3	5,700.2	172.04	34.132	
8,000.0	6,939.6	6,915.6	6,915.6	35.2	138.2	95.11	-815.1	6,738.1	5,844.8	5,672.1	172.72	33.840	
8,070.8	6,938.9	6,914.9	6,914.9	37.0	138.2	95.04	-815.1	6,738.1	5,774.4	5,599.9	174.50	33.092	
8,100.0	6,938.7	6,914.7	6,914.7	37.7	138.2	95.02	-815.1	6,738.1	5,745.4	5,570.1	175.23	32.788	
8,169.3	6,938.0	6,914.0	6,914.0	39.5	138.2	94.96	-815.1	6,738.1	5,676.5	5,499.5	176.99	32.072	
8,200.0	6,937.7	6,913.7	6,913.7	40.3	138.2	94.93	-815.1	6,738.1	5,645.9	5,468.1	177.77	31.759	
8,267.7	6,937.1	6,913.1	6,913.1	42.0	138.2	94.87	-815.1	6,738.1	5,578.6	5,399.1	179.52	31.075	
8,300.0	6,936.8	6,912.8	6,912.8	42.8	138.2	94.84	-815.1	6,738.1	5,546.5	5,366.1	180.35	30.754	
8,366.1	6,936.2	6,912.2	6,912.2	44.6	138.2	94.78	-815.1	6,738.1	5,480.7	5,298.7	182.07	30.102	
8,400.0	6,935.9	6,911.9	6,911.9	45.5	138.2	94.75	-815.1	6,738.1	5,447.1	5,264.1	182.96	29.772	
8,464.5	6,935.3	6,911.3	6,911.3	47.2	138.2	94.70	-815.1	6,738.1	5,382.9	5,198.2	184.65	29.151	
8,500.0	6,935.0	6,911.0	6,911.0	48.1	138.2	94.67	-815.1	6,738.1	5,347.7	5,162.1	185.59	28.815	
8,563.0	6,934.5	6,910.5	6,910.5	49.8	138.1	94.61	-815.1	6,738.1	5,285.1	5,097.8	187.25	28.224	
8,600.0	6,934.1	6,910.1	6,910.1	50.7	138.1	94.58	-815.1	6,738.1	5,248.3	5,060.1	188.23	27.882	
8,661.4	6,933.6	6,909.6	6,909.6	52.4	138.1	94.52	-815.1	6,738.1	5,187.3	4,997.4	189.87	27.320	
8,700.0	6,933.2	6,909.2	6,909.2	53.4	138.1	94.49	-815.1	6,738.1	5,148.9	4,958.0	190.90	26.972	
8,759.8	6,932.7	6,908.7	6,908.7	55.0	138.1	94.44	-815.1	6,738.1	5,089.5	4,897.0	192.50	26.439	
8,800.0	6,932.3	6,908.3	6,908.3	56.1	138.1	94.40	-815.1	6,738.1	5,049.6	4,856.0	193.58	26.086	
8,858.2	6,931.8	6,907.8	6,907.8	57.7	138.1	94.35	-815.1	6,738.1	4,991.8	4,796.6	195.14	25.580	
8,900.0	6,931.4	6,907.4	6,907.4	58.8	138.1	94.31	-815.1	6,738.1	4,950.3	4,754.1	196.27	25.222	
8,956.7	6,930.9	6,906.9	6,906.9	60.3	138.1	94.27	-815.1	6,738.1	4,894.1	4,696.3	197.80	24.743	
9,000.0	6,930.5	6,906.5	6,906.5	61.5	138.1	94.23	-815.1	6,738.1	4,851.1	4,652.1	198.97	24.381	
9,055.1	6,930.0	6,906.0	6,906.0	63.0	138.0	94.18	-815.1	6,738.1	4,796.4	4,595.9	200.46	23.927	
9,100.0	6,929.6	6,905.6	6,905.6	64.2	138.0	94.14	-815.1	6,738.1	4,751.8	4,550.1	201.68	23.561	
9,153.5	6,929.1	6,905.1	6,905.1	65.6	138.0	94.09	-815.1	6,738.1	4,698.7	4,495.6	203.13	23.131	
9,200.0	6,928.7	6,904.7	6,904.7	66.9	138.0	94.05	-815.1	6,738.1	4,652.6	4,448.2	204.40	22.763	
9,251.9	6,928.2	6,904.2	6,904.2	68.3	138.0	94.01	-815.1	6,738.1	4,601.1	4,395.3	205.81	22.356	
9,300.0	6,927.8	6,903.8	6,903.8	69.6	138.0	93.96	-815.1	6,738.1	4,553.4	4,346.3	207.12	21.984	
9,350.4	6,927.3	6,903.3	6,903.3	71.0	138.0	93.92	-815.1	6,738.1	4,503.5	4,295.0	208.50	21.600	
9,400.0	6,926.9	6,902.9	6,902.9	72.4	138.0	93.88	-815.1	6,738.1	4,454.3	4,244.5	209.86	21.226	
9,448.8	6,926.4	6,902.4	6,902.4	73.7	138.0	93.83	-815.1	6,738.1	4,405.9	4,194.8	211.19	20.862	
9,500.0	6,926.0	6,902.0	6,902.0	75.1	138.0	93.79	-815.1	6,738.1	4,355.2	4,142.6	212.59	20.486	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,901.5	6,901.5	76.4	138.0	93.75	-815.1	6,738.1	4,308.4	4,094.5	213.89	20.143	
9,600.0	6,925.1	6,901.1	6,901.1	77.9	138.0	93.70	-815.1	6,738.1	4,256.2	4,040.8	215.34	19.765	
9,645.6	6,924.6	6,900.6	6,900.6	79.1	137.9	93.66	-815.1	6,738.1	4,211.0	3,994.4	216.59	19.442	
9,700.0	6,924.1	6,900.1	6,900.1	80.6	137.9	93.61	-815.1	6,738.1	4,157.2	3,939.1	218.08	19.062	
9,744.1	6,923.7	6,899.7	6,899.7	81.8	137.9	93.57	-815.1	6,738.1	4,113.5	3,894.2	219.30	18.758	
9,800.0	6,923.2	6,899.2	6,899.2	83.4	137.9	93.52	-815.1	6,738.1	4,058.2	3,837.4	220.83	18.377	
9,842.5	6,922.9	6,898.9	6,898.9	84.5	137.9	93.49	-815.1	6,738.1	4,016.2	3,794.2	222.00	18.090	
9,900.0	6,922.3	6,898.3	6,898.3	86.1	137.9	93.44	-815.1	6,738.1	3,959.3	3,735.7	223.59	17.708	
9,940.9	6,922.0	6,898.0	6,898.0	87.2	137.9	93.40	-815.1	6,738.1	3,918.8	3,694.1	224.72	17.439	
10,000.0	6,921.4	6,897.4	6,897.4	88.9	137.9	93.35	-815.1	6,738.1	3,860.4	3,634.1	226.35	17.055	
10,039.3	6,921.1	6,897.1	6,897.1	90.0	137.9	93.31	-815.1	6,738.1	3,821.6	3,594.1	227.43	16.803	
10,100.0	6,920.5	6,896.5	6,896.5	91.6	137.9	93.26	-815.1	6,738.1	3,761.7	3,532.6	229.11	16.419	
10,137.8	6,920.2	6,896.2	6,896.2	92.7	137.9	93.23	-815.1	6,738.1	3,724.4	3,494.2	230.15	16.182	
10,200.0	6,919.6	6,895.6	6,895.6	94.4	137.8	93.17	-815.1	6,738.1	3,662.9	3,431.1	231.87	15.797	
10,236.2	6,919.3	6,895.3	6,895.3	95.4	137.8	93.14	-815.1	6,738.1	3,627.2	3,394.3	232.87	15.576	
10,300.0	6,918.7	6,894.7	6,894.7	97.2	137.8	93.09	-815.1	6,738.1	3,564.3	3,329.6	234.64	15.191	
10,334.6	6,918.4	6,894.4	6,894.4	98.1	137.8	93.05	-815.1	6,738.1	3,530.1	3,294.5	235.60	14.984	
10,400.0	6,917.8	6,893.8	6,893.8	99.9	137.8	93.00	-815.1	6,738.1	3,465.7	3,228.3	237.41	14.598	
10,433.0	6,917.5	6,893.5	6,893.5	100.9	137.8	92.97	-815.1	6,738.1	3,433.2	3,194.8	238.32	14.406	
10,500.0	6,916.9	6,892.9	6,892.9	102.7	137.8	92.91	-815.1	6,738.1	3,367.2	3,127.0	240.18	14.020	
10,531.5	6,916.6	6,892.6	6,892.6	103.6	137.8	92.88	-815.1	6,738.1	3,336.2	3,095.2	241.05	13.841	
10,600.0	6,916.0	6,892.0	6,892.0	105.5	137.8	92.82	-815.1	6,738.1	3,268.8	3,025.9	242.95	13.455	
10,629.9	6,915.7	6,891.7	6,891.7	106.3	137.8	92.80	-815.1	6,738.1	3,239.4	2,995.6	243.78	13.288	
10,700.0	6,915.1	6,891.1	6,891.1	108.3	137.8	92.73	-815.1	6,738.1	3,170.5	2,924.8	245.72	12.903	
10,728.3	6,914.8	6,890.8	6,890.8	109.1	137.7	92.71	-815.1	6,738.1	3,142.7	2,896.2	246.51	12.749	
10,800.0	6,914.2	6,890.2	6,890.2	111.0	137.7	92.65	-815.1	6,738.1	3,072.3	2,823.8	248.50	12.364	
10,826.7	6,913.9	6,889.9	6,889.9	111.8	137.7	92.62	-815.1	6,738.1	3,046.1	2,796.8	249.24	12.222	
10,900.0	6,913.3	6,889.3	6,889.3	113.8	137.7	92.56	-815.1	6,738.1	2,974.3	2,723.0	251.27	11.837	
10,925.2	6,913.1	6,889.1	6,889.1	114.5	137.7	92.54	-815.1	6,738.1	2,949.6	2,697.6	251.97	11.706	
11,000.0	6,912.4	6,888.4	6,888.4	116.6	137.7	92.47	-815.1	6,738.1	2,876.3	2,622.3	254.05	11.322	
11,023.6	6,912.2	6,888.2	6,888.2	117.3	137.7	92.45	-815.1	6,738.1	2,853.2	2,598.5	254.71	11.202	
11,100.0	6,911.5	6,887.5	6,887.5	119.4	137.7	92.38	-815.1	6,738.1	2,778.5	2,521.7	256.83	10.819	
11,122.0	6,911.3	6,887.3	6,887.3	120.0	137.7	92.36	-815.1	6,738.1	2,757.0	2,499.6	257.44	10.709	
11,200.0	6,910.6	6,886.6	6,886.6	122.2	137.7	92.29	-815.1	6,738.1	2,680.9	2,421.3	259.61	10.327	
11,220.4	6,910.4	6,886.4	6,886.4	122.7	137.7	92.28	-815.1	6,738.1	2,661.0	2,400.8	260.18	10.227	
11,300.0	6,909.7	6,885.7	6,885.7	125.0	137.6	92.21	-815.1	6,738.1	2,583.5	2,321.1	262.39	9.846	
11,318.9	6,909.5	6,885.5	6,885.5	125.5	137.6	92.19	-815.1	6,738.1	2,565.1	2,302.2	262.91	9.756	
11,400.0	6,908.8	6,884.8	6,884.8	127.7	137.6	92.12	-815.1	6,738.1	2,486.2	2,221.0	265.17	9.376	
11,417.3	6,908.6	6,884.6	6,884.6	128.2	137.6	92.10	-815.1	6,738.1	2,469.4	2,203.8	265.65	9.296	
11,500.0	6,907.9	6,883.9	6,883.9	130.5	137.6	92.03	-815.1	6,738.1	2,389.2	2,121.2	267.95	8.916	
11,515.7	6,907.7	6,883.7	6,883.7	131.0	137.6	92.02	-815.1	6,738.1	2,374.0	2,105.6	268.39	8.845	
11,600.0	6,907.0	6,883.0	6,883.0	133.3	137.6	91.94	-815.1	6,738.1	2,292.4	2,021.7	270.74	8.467	
11,614.1	6,906.8	6,882.8	6,882.8	133.7	137.6	91.93	-815.1	6,738.1	2,278.8	2,007.6	271.13	8.405	
11,700.0	6,906.0	6,882.0	6,882.0	136.1	137.6	91.86	-815.1	6,738.1	2,196.0	1,922.4	273.52	8.029	
11,712.6	6,905.9	6,881.9	6,881.9	136.5	137.6	91.84	-815.1	6,738.1	2,183.9	1,910.0	273.87	7.974	
11,800.0	6,905.1	6,881.1	6,881.1	138.9	137.6	91.77	-815.1	6,738.1	2,099.8	1,823.5	276.30	7.600	
11,811.0	6,905.0	6,881.0	6,881.0	139.2	137.5	91.76	-815.1	6,738.1	2,089.3	1,812.7	276.61	7.553	
11,900.0	6,904.2	6,880.2	6,880.2	141.7	137.5	91.68	-815.1	6,738.1	2,004.1	1,725.0	279.09	7.181	
11,909.4	6,904.2	6,880.2	6,880.2	141.9	137.5	91.67	-815.1	6,738.1	1,995.1	1,715.7	279.35	7.142	
12,000.0	6,903.3	6,879.3	6,879.3	144.5	137.5	91.59	-815.1	6,738.1	1,908.7	1,626.9	281.87	6.772	
12,007.8	6,903.3	6,879.3	6,879.3	144.7	137.5	91.59	-815.1	6,738.1	1,901.3	1,619.2	282.09	6.740	
12,100.0	6,902.4	6,878.4	6,878.4	147.3	137.5	91.50	-815.1	6,738.1	1,813.9	1,529.2	284.66	6.372	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
12,106.3	6,902.4	6,878.4	6,878.4	147.4	137.5	91.50	-815.1	6,738.1	1,808.0	1,523.1	284.83	6.348	
12,200.0	6,901.5	6,877.5	6,877.5	150.1	137.5	91.42	-815.1	6,738.1	1,719.7	1,432.2	287.44	5.983	
12,204.7	6,901.5	6,877.5	6,877.5	150.2	137.5	91.41	-815.1	6,738.1	1,715.2	1,427.7	287.57	5.965	
12,300.0	6,900.6	6,876.6	6,876.6	152.9	137.5	91.33	-815.1	6,738.1	1,626.1	1,335.9	290.23	5.603	
12,303.1	6,900.6	6,876.6	6,876.6	152.9	137.5	91.33	-815.1	6,738.1	1,623.2	1,332.9	290.31	5.591	
12,400.0	6,899.7	6,875.7	6,875.7	155.6	137.4	91.24	-815.1	6,738.1	1,533.4	1,240.3	293.01	5.233	
12,401.5	6,899.7	6,875.7	6,875.7	155.7	137.4	91.24	-815.1	6,738.1	1,531.9	1,238.9	293.05	5.227	
12,500.0	6,898.8	6,874.8	6,874.8	158.4	137.4	91.15	-815.1	6,738.1	1,441.6	1,145.8	295.80	4.874	
12,598.4	6,897.9	6,873.9	6,873.9	161.2	137.4	91.07	-815.1	6,738.1	1,352.4	1,053.9	298.54	4.530	
12,600.0	6,897.9	6,873.9	6,873.9	161.2	137.4	91.07	-815.1	6,738.1	1,351.0	1,052.4	298.58	4.525	
12,696.8	6,897.0	6,873.0	6,873.0	163.9	137.4	90.98	-815.1	6,738.1	1,264.6	963.3	301.28	4.197	
12,700.0	6,897.0	6,873.0	6,873.0	164.0	137.4	90.98	-815.1	6,738.1	1,261.8	960.4	301.37	4.187	
12,795.2	6,896.1	6,872.1	6,872.1	166.7	137.4	90.89	-815.1	6,738.1	1,178.5	874.4	304.02	3.876	
12,800.0	6,896.1	6,872.1	6,872.1	166.8	137.4	90.89	-815.1	6,738.1	1,174.4	870.2	304.15	3.861	
12,893.7	6,895.3	6,871.3	6,871.3	169.4	137.4	90.81	-815.1	6,738.1	1,094.4	787.6	306.76	3.568	
12,900.0	6,895.2	6,871.2	6,871.2	169.6	137.4	90.80	-815.1	6,738.1	1,089.1	782.1	306.94	3.548	
12,992.1	6,894.4	6,870.4	6,870.4	172.2	137.3	90.72	-815.1	6,738.1	1,012.9	703.4	309.50	3.273	
13,000.0	6,894.3	6,870.3	6,870.3	172.4	137.3	90.71	-815.1	6,738.1	1,006.5	696.8	309.72	3.250	
13,090.5	6,893.5	6,869.5	6,869.5	175.0	137.3	90.64	-815.1	6,738.1	934.7	622.5	312.24	2.994	
13,100.0	6,893.4	6,869.4	6,869.4	175.2	137.3	90.63	-815.1	6,738.1	927.4	614.9	312.51	2.968	
13,188.9	6,892.6	6,868.6	6,868.6	177.7	137.3	90.55	-815.1	6,738.1	860.7	545.7	314.98	2.732	
13,200.0	6,892.5	6,868.5	6,868.5	178.0	137.3	90.54	-815.1	6,738.1	852.7	537.4	315.29	2.704	
13,287.4	6,891.7	6,867.7	6,867.7	180.5	137.3	90.46	-815.1	6,738.1	791.9	474.2	317.72	2.493	
13,300.0	6,891.6	6,867.6	6,867.6	180.8	137.3	90.45	-815.1	6,738.1	783.6	465.5	318.07	2.463	
13,385.8	6,890.8	6,866.8	6,866.8	183.2	137.3	90.38	-815.1	6,738.1	730.0	409.6	320.46	2.278	
13,400.0	6,890.7	6,866.7	6,866.7	183.6	137.3	90.36	-815.1	6,738.1	721.8	400.9	320.86	2.250	
13,484.2	6,889.9	6,865.9	6,865.9	186.0	137.2	90.29	-815.1	6,738.1	676.8	353.6	323.20	2.094	
13,500.0	6,889.8	6,865.8	6,865.8	186.4	137.2	90.28	-815.1	6,738.1	669.3	345.6	323.64	2.068	
13,582.6	6,889.0	6,865.0	6,865.0	188.7	137.2	90.20	-815.1	6,738.1	634.6	308.6	325.94	1.947	
13,600.0	6,888.9	6,864.9	6,864.9	189.2	137.2	90.19	-815.1	6,738.1	628.4	302.0	326.42	1.925	
13,681.1	6,888.1	6,864.1	6,864.1	191.5	137.2	90.12	-815.1	6,738.1	605.5	276.8	328.68	1.842	
13,700.0	6,888.0	6,864.0	6,864.0	192.0	137.2	90.10	-815.1	6,738.1	601.5	272.3	329.21	1.827	
13,779.5	6,887.3	6,863.3	6,863.3	194.2	137.2	90.03	-815.1	6,738.1	591.5	260.1	331.42	1.785	
13,800.0	6,887.1	6,863.1	6,863.1	194.8	137.2	90.01	-815.1	6,738.1	590.6	258.6	331.99	1.779	
13,815.2	6,886.9	6,862.9	6,862.9	195.2	137.2	90.00	-815.1	6,738.1	590.4	258.0	332.41	1.776 CC, ES, SF	
13,877.9	6,886.4	6,862.4	6,862.4	197.0	137.2	89.95	-815.1	6,738.1	593.7	259.6	334.16	1.777	
13,900.0	6,886.2	6,862.2	6,862.2	197.6	137.2	89.93	-815.1	6,738.1	596.5	261.7	334.77	1.782	
13,976.3	6,885.5	6,861.5	6,861.5	199.7	137.2	89.86	-815.1	6,738.1	612.0	275.1	336.90	1.817	
14,000.0	6,885.3	6,861.3	6,861.3	200.4	137.2	89.84	-815.1	6,738.1	618.7	281.1	337.55	1.833	
14,074.8	6,884.6	6,860.6	6,860.6	202.5	137.1	89.77	-815.1	6,738.1	645.0	305.3	339.63	1.899	
14,100.0	6,884.4	6,860.4	6,860.4	203.2	137.1	89.75	-815.1	6,738.1	655.5	315.2	340.33	1.926	
14,173.2	6,883.7	6,859.7	6,859.7	205.3	137.1	89.69	-815.1	6,738.1	690.5	348.1	342.37	2.017	
14,200.0	6,883.5	6,859.5	6,859.5	206.0	137.1	89.66	-815.1	6,738.1	704.7	361.6	343.11	2.054	
14,271.6	6,882.8	6,858.8	6,858.8	208.0	137.1	89.60	-815.1	6,738.1	746.3	401.2	345.10	2.162	
14,300.0	6,882.6	6,858.6	6,858.6	208.8	137.1	89.58	-815.1	6,738.1	763.9	418.1	345.89	2.209	
14,370.0	6,881.9	6,857.9	6,857.9	210.8	137.1	89.51	-815.1	6,738.1	810.2	462.4	347.84	2.329	
14,400.0	6,881.7	6,857.7	6,857.7	211.6	137.1	89.49	-815.1	6,738.1	831.0	482.3	348.67	2.383	
14,468.5	6,881.0	6,857.0	6,857.0	213.5	137.1	89.43	-815.1	6,738.1	880.5	530.0	350.57	2.512	
14,500.0	6,880.8	6,856.8	6,856.8	214.4	137.1	89.40	-815.1	6,738.1	904.2	552.7	351.45	2.573	
14,566.9	6,880.2	6,856.2	6,856.2	216.3	137.0	89.34	-815.1	6,738.1	955.8	602.5	353.31	2.705	
14,584.2	6,880.0	6,856.0	6,856.0	216.8	137.0	89.33	-815.1	6,738.1	969.5	615.7	353.79	2.740	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	97.31	-1,224.1	9,547.5	9,625.6				
98.4	98.4	83.4	83.4	0.1	0.4	97.31	-1,224.1	9,547.5	9,625.6	9,625.2	0.46	N/A	
100.0	100.0	85.0	85.0	0.1	0.4	97.31	-1,224.1	9,547.5	9,625.6	9,625.1	0.47	N/A	
196.8	196.8	181.8	181.8	0.3	2.5	97.31	-1,224.1	9,547.5	9,625.6	9,622.8	2.80	3,442.119	
200.0	200.0	185.0	185.0	0.3	2.6	97.31	-1,224.1	9,547.5	9,625.6	9,622.7	2.88	3,339.916	
295.3	295.3	280.3	280.3	0.5	4.6	97.31	-1,224.1	9,547.5	9,625.6	9,620.5	5.14	1,873.483	
300.0	300.0	285.0	285.0	0.5	4.7	97.31	-1,224.1	9,547.5	9,625.6	9,620.4	5.25	1,834.635	
393.7	393.7	378.7	378.7	0.7	6.6	97.31	-1,224.1	9,547.5	9,625.6	9,618.2	7.37	1,305.398	
400.0	400.0	385.0	385.0	0.8	6.8	97.31	-1,224.1	9,547.5	9,625.6	9,618.1	7.52	1,280.627	
492.1	492.1	477.1	477.1	1.0	8.6	97.31	-1,224.1	9,547.5	9,625.6	9,616.0	9.59	1,003.475	
500.0	500.0	485.0	485.0	1.0	8.8	97.31	-1,224.1	9,547.5	9,625.6	9,615.8	9.77	985.265	
590.5	590.5	575.5	575.5	1.2	10.6	97.31	-1,224.1	9,547.5	9,625.6	9,613.8	11.80	815.462	
600.0	600.0	585.0	585.0	1.2	10.8	97.31	-1,224.1	9,547.5	9,625.6	9,613.6	12.02	801.060	
689.0	689.0	674.0	674.0	1.4	12.6	97.31	-1,224.1	9,547.5	9,625.6	9,611.6	14.01	686.959	
700.0	700.0	685.0	685.0	1.4	12.8	97.31	-1,224.1	9,547.5	9,625.6	9,611.4	14.26	675.048	
787.4	787.4	772.4	772.4	1.6	14.6	97.31	-1,224.1	9,547.5	9,625.6	9,609.4	16.22	593.519	
800.0	800.0	785.0	785.0	1.7	14.8	97.31	-1,224.1	9,547.5	9,625.6	9,609.1	16.50	583.363	
885.8	885.8	870.8	870.8	1.9	16.6	97.31	-1,224.1	9,547.5	9,625.6	9,607.2	18.42	522.492	
900.0	900.0	885.0	885.0	1.9	16.9	97.31	-1,224.1	9,547.5	9,625.6	9,606.9	18.74	513.641	
984.2	984.2	969.2	969.2	2.1	18.6	97.31	-1,224.1	9,547.5	9,625.6	9,605.0	20.63	466.668	
1,000.0	1,000.0	985.0	985.0	2.1	18.9	97.31	-1,224.1	9,547.5	9,625.6	9,604.6	20.98	458.824	
1,082.7	1,082.7	1,067.7	1,067.7	2.3	20.5	97.31	-1,224.1	9,547.5	9,625.6	9,602.8	22.83	421.633	
1,100.0	1,100.0	1,085.0	1,085.0	2.3	20.9	97.31	-1,224.1	9,547.5	9,625.6	9,602.4	23.22	414.591	
1,181.1	1,181.1	1,166.1	1,166.1	2.5	22.5	97.31	-1,224.1	9,547.5	9,625.6	9,600.6	25.03	384.532	
1,200.0	1,200.0	1,185.0	1,185.0	2.6	22.9	97.31	-1,224.1	9,547.5	9,625.6	9,600.2	25.45	378.143	
1,279.5	1,279.5	1,264.5	1,264.5	2.7	24.5	97.31	-1,224.1	9,547.5	9,625.6	9,598.4	27.23	353.437	
1,300.0	1,300.0	1,285.0	1,285.0	2.8	24.9	97.31	-1,224.1	9,547.5	9,625.6	9,597.9	27.69	347.590	
1,377.9	1,377.9	1,362.9	1,362.9	3.0	26.5	97.31	-1,224.1	9,547.5	9,625.6	9,596.2	29.44	326.998	
1,400.0	1,400.0	1,385.0	1,385.0	3.0	26.9	97.31	-1,224.1	9,547.5	9,625.6	9,595.7	29.93	321.608	
1,476.4	1,476.4	1,461.4	1,461.4	3.2	28.5	97.31	-1,224.1	9,547.5	9,625.6	9,594.0	31.64	304.241	
1,500.0	1,500.0	1,485.0	1,485.0	3.2	28.9	97.31	-1,224.1	9,547.5	9,625.6	9,593.4	32.17	299.242	
1,574.8	1,574.8	1,559.8	1,559.8	3.4	30.4	97.31	-1,224.1	9,547.5	9,625.6	9,591.8	33.84	284.447	
1,600.0	1,600.0	1,585.0	1,585.0	3.5	30.9	97.31	-1,224.1	9,547.5	9,625.6	9,591.2	34.40	279.786	
1,650.0	1,650.0	1,635.0	1,635.0	3.6	32.0	97.31	-1,224.1	9,547.5	9,625.6	9,590.1	35.52	270.977	
1,673.2	1,673.2	1,658.2	1,658.2	3.6	32.4	-143.11	-1,224.1	9,547.5	9,625.7	9,589.7	36.04	267.117	
1,700.0	1,700.0	1,685.0	1,685.0	3.7	33.0	-143.11	-1,224.1	9,547.5	9,626.0	9,589.3	36.63	262.820	
1,771.6	1,771.6	1,756.6	1,756.6	3.8	34.4	-143.09	-1,224.1	9,547.5	9,627.7	9,589.5	38.18	252.164	
1,800.0	1,799.9	1,784.9	1,784.9	3.9	35.0	-143.09	-1,224.1	9,547.5	9,628.8	9,590.0	38.79	248.226	
1,870.1	1,869.9	1,854.9	1,854.9	4.0	36.4	-143.06	-1,224.1	9,547.5	9,632.4	9,592.1	40.29	239.084	
1,900.0	1,899.7	1,884.7	1,884.7	4.1	37.0	-143.04	-1,224.1	9,547.5	9,634.3	9,593.4	40.92	235.432	
1,968.5	1,967.8	1,952.8	1,952.8	4.2	38.3	-143.00	-1,224.1	9,547.5	9,639.8	9,597.4	42.36	227.558	
2,000.0	1,999.1	1,984.1	1,984.1	4.3	39.0	-142.98	-1,224.1	9,547.5	9,642.7	9,599.7	43.02	224.163	
2,066.9	2,065.5	2,050.5	2,050.5	4.4	40.3	-142.93	-1,224.1	9,547.5	9,649.9	9,605.5	44.40	217.355	
2,100.0	2,098.2	2,083.2	2,083.2	4.5	41.0	-142.89	-1,224.1	9,547.5	9,653.8	9,608.8	45.07	214.196	
2,165.3	2,162.6	2,147.6	2,147.6	4.7	42.3	-142.83	-1,224.1	9,547.5	9,662.6	9,616.2	46.39	208.287	
2,200.0	2,196.6	2,181.6	2,181.6	4.7	42.9	-142.79	-1,224.1	9,547.5	9,667.8	9,620.7	47.08	205.343	
2,249.9	2,245.5	2,230.5	2,230.5	4.9	43.9	-142.72	-1,224.1	9,547.5	9,675.7	9,627.7	48.07	201.294	
2,263.8	2,259.1	2,244.1	2,244.1	4.9	44.2	-142.73	-1,224.1	9,547.5	9,678.1	9,629.7	48.37	200.078	
2,300.0	2,294.5	2,279.5	2,279.5	5.0	44.9	-142.76	-1,224.1	9,547.5	9,684.1	9,634.9	49.16	196.982	
2,362.2	2,355.4	2,340.4	2,340.4	5.2	46.1	-142.81	-1,224.1	9,547.5	9,694.5	9,643.9	50.53	191.868	
2,400.0	2,392.3	2,377.3	2,377.3	5.4	46.9	-142.84	-1,224.1	9,547.5	9,700.8	9,649.4	51.36	188.896	
2,460.6	2,451.6	2,436.6	2,436.6	5.6	48.1	-142.88	-1,224.1	9,547.5	9,710.9	9,658.2	52.69	184.303	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,475.2	2,475.2	5.7	48.9	-142.91	-1,224.1	9,547.5	9,717.5	9,663.9	53.56	181.433	
2,559.0	2,547.9	2,532.9	2,532.9	5.9	50.0	-142.95	-1,224.1	9,547.5	9,727.4	9,672.5	54.87	177.291	
2,600.0	2,588.0	2,573.0	2,573.0	6.1	50.8	-142.98	-1,224.1	9,547.5	9,734.2	9,678.4	55.77	174.530	
2,657.5	2,644.2	2,629.2	2,629.2	6.3	52.0	-143.02	-1,224.1	9,547.5	9,743.8	9,686.8	57.05	170.792	
2,700.0	2,685.8	2,670.8	2,670.8	6.4	52.8	-143.05	-1,224.1	9,547.5	9,750.9	9,693.0	58.00	168.131	
2,755.9	2,740.5	2,725.5	2,725.5	6.6	53.9	-143.10	-1,224.1	9,547.5	9,760.3	9,701.1	59.24	164.753	
2,800.0	2,783.6	2,768.6	2,768.6	6.8	54.8	-143.13	-1,224.1	9,547.5	9,767.7	9,707.5	60.23	162.185	
2,854.3	2,836.7	2,821.7	2,821.7	7.0	55.8	-143.17	-1,224.1	9,547.5	9,776.8	9,715.4	61.44	159.128	
2,900.0	2,881.4	2,866.4	2,866.4	7.2	56.7	-143.20	-1,224.1	9,547.5	9,784.5	9,722.0	62.46	156.650	
2,952.7	2,933.0	2,918.0	2,918.0	7.4	57.8	-143.24	-1,224.1	9,547.5	9,793.3	9,729.7	63.64	153.880	
3,000.0	2,979.2	2,964.2	2,964.2	7.6	58.7	-143.27	-1,224.1	9,547.5	9,801.2	9,736.5	64.70	151.485	
3,051.2	3,029.3	3,014.3	3,014.3	7.8	59.7	-143.31	-1,224.1	9,547.5	9,809.8	9,744.0	65.85	148.973	
3,100.0	3,077.1	3,062.1	3,062.1	8.0	60.7	-143.34	-1,224.1	9,547.5	9,818.0	9,751.1	66.95	146.656	
3,149.6	3,125.6	3,110.6	3,110.6	8.2	61.6	-143.38	-1,224.1	9,547.5	9,826.4	9,758.3	68.06	144.375	
3,200.0	3,174.9	3,159.9	3,159.9	8.4	62.6	-143.42	-1,224.1	9,547.5	9,834.9	9,765.7	69.19	142.133	
3,248.0	3,221.8	3,206.8	3,206.8	8.6	63.6	-143.45	-1,224.1	9,547.5	9,842.9	9,772.7	70.28	140.061	
3,300.0	3,272.7	3,257.7	3,257.7	8.9	64.6	-143.49	-1,224.1	9,547.5	9,851.7	9,780.2	71.45	137.889	
3,346.4	3,318.1	3,303.1	3,303.1	9.0	65.5	-143.52	-1,224.1	9,547.5	9,859.5	9,787.0	72.49	136.005	
3,400.0	3,370.5	3,355.5	3,355.5	9.3	66.6	-143.56	-1,224.1	9,547.5	9,868.5	9,794.8	73.70	133.899	
3,444.9	3,414.4	3,399.4	3,399.4	9.5	67.4	-143.59	-1,224.1	9,547.5	9,876.1	9,801.4	74.71	132.185	
3,500.0	3,468.3	3,453.3	3,453.3	9.7	68.5	-143.63	-1,224.1	9,547.5	9,885.4	9,809.4	75.96	130.143	
3,543.3	3,510.7	3,495.7	3,495.7	9.9	69.4	-143.66	-1,224.1	9,547.5	9,892.7	9,815.8	76.94	128.583	
3,600.0	3,566.1	3,551.1	3,551.1	10.1	70.5	-143.70	-1,224.1	9,547.5	9,902.3	9,824.0	78.22	126.599	
3,641.7	3,606.9	3,591.9	3,591.9	10.3	71.3	-143.73	-1,224.1	9,547.5	9,909.3	9,830.1	79.16	125.180	
3,700.0	3,664.0	3,649.0	3,649.0	10.6	72.5	-143.77	-1,224.1	9,547.5	9,919.2	9,838.7	80.48	123.253	
3,740.1	3,703.2	3,688.2	3,688.2	10.7	73.2	-143.80	-1,224.1	9,547.5	9,925.9	9,844.6	81.39	121.960	
3,800.0	3,761.8	3,746.8	3,746.8	11.0	74.4	-143.84	-1,224.1	9,547.5	9,936.1	9,853.3	82.74	120.087	
3,837.4	3,798.3	3,783.3	3,783.3	11.2	75.2	-143.87	-1,224.1	9,547.5	9,942.4	9,858.8	83.59	118.948	
3,886.6	3,799.5	3,784.5	3,784.5	11.2	75.2	-143.87	-1,224.1	9,547.5	9,942.6	9,859.0	83.62	118.906	
3,900.0	3,859.7	3,844.7	3,844.7	11.4	76.4	-144.03	-1,224.1	9,547.5	9,952.4	9,867.2	85.20	116.817	
3,937.0	3,896.1	3,881.1	3,881.1	11.5	77.1	-144.12	-1,224.1	9,547.5	9,957.9	9,871.7	86.13	115.617	
4,000.0	3,958.3	3,943.3	3,943.3	11.7	78.4	-144.25	-1,224.1	9,547.5	9,966.2	9,878.5	87.70	113.637	
4,035.4	3,993.3	3,978.3	3,978.3	11.8	79.1	-144.32	-1,224.1	9,547.5	9,970.4	9,881.8	88.58	112.563	
4,100.0	4,057.4	4,042.4	4,042.4	12.0	80.4	-144.42	-1,224.1	9,547.5	9,977.2	9,887.0	90.15	110.667	
4,133.8	4,091.0	4,076.0	4,076.0	12.1	81.0	-144.47	-1,224.1	9,547.5	9,980.3	9,889.3	90.97	109.710	
4,200.0	4,156.8	4,141.8	4,141.8	12.2	82.4	-144.55	-1,224.1	9,547.5	9,985.4	9,892.8	92.54	107.899	
4,232.3	4,189.0	4,174.0	4,174.0	12.3	83.0	-144.58	-1,224.1	9,547.5	9,987.4	9,894.1	93.30	107.048	
4,300.0	4,256.6	4,241.6	4,241.6	12.4	84.4	-144.63	-1,224.1	9,547.5	9,990.7	9,895.8	94.86	105.320	
4,330.7	4,287.3	4,272.3	4,272.3	12.5	85.0	-144.65	-1,224.1	9,547.5	9,991.7	9,896.2	95.55	104.567	
4,400.0	4,356.6	4,341.6	4,341.6	12.6	86.4	-144.67	-1,224.1	9,547.5	9,993.2	9,896.1	97.09	102.922	
4,429.1	4,385.7	4,370.7	4,370.7	12.6	87.0	-144.68	-1,224.1	9,547.5	9,993.4	9,895.6	97.73	102.255	
4,437.2	4,393.8	4,378.8	4,378.8	12.7	87.1	95.74	-1,224.1	9,547.5	9,993.4	9,894.5	98.88	101.066	
4,500.0	4,456.6	4,441.6	4,441.6	12.7	88.4	95.74	-1,224.1	9,547.5	9,993.4	9,893.1	100.24	99.691	
4,527.5	4,484.1	4,469.1	4,469.1	12.8	89.0	95.74	-1,224.1	9,547.5	9,993.4	9,892.5	100.84	99.096	
4,600.0	4,556.6	4,541.6	4,541.6	12.9	90.4	95.74	-1,224.1	9,547.5	9,993.4	9,890.9	102.43	97.567	
4,626.0	4,582.6	4,567.6	4,567.6	12.9	90.9	95.74	-1,224.1	9,547.5	9,993.4	9,890.4	102.99	97.030	
4,700.0	4,656.6	4,641.6	4,641.6	13.1	92.4	95.74	-1,224.1	9,547.5	9,993.4	9,888.8	104.61	95.530	
4,724.4	4,681.0	4,666.0	4,666.0	13.1	92.9	95.74	-1,224.1	9,547.5	9,993.4	9,888.2	105.14	95.046	
4,800.0	4,756.6	4,741.6	4,741.6	13.2	94.4	95.74	-1,224.1	9,547.5	9,993.4	9,886.6	106.79	93.576	
4,822.8	4,779.4	4,764.4	4,764.4	13.3	94.9	95.74	-1,224.1	9,547.5	9,993.4	9,886.1	107.29	93.140	
4,900.0	4,856.6	4,841.6	4,841.6	13.4	96.4	95.74	-1,224.1	9,547.5	9,993.4	9,884.4	108.98	91.698	
4,921.2	4,877.8	4,862.8	4,862.8	13.4	96.9	95.74	-1,224.1	9,547.5	9,993.4	9,883.9	109.45	91.308	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
5,000.0	4,956.6	4,941.6	4,941.6	13.6	98.5	95.74	-1,224.1	9,547.5	9,993.4	9,882.2	111.17	89.893	
5,019.7	4,976.3	4,961.3	4,961.3	13.6	98.9	95.74	-1,224.1	9,547.5	9,993.4	9,881.8	111.60	89.546	
5,100.0	5,056.6	5,041.6	5,041.6	13.7	100.5	95.74	-1,224.1	9,547.5	9,993.4	9,880.0	113.36	88.156	
5,118.1	5,074.7	5,059.7	5,059.7	13.8	100.8	95.74	-1,224.1	9,547.5	9,993.4	9,879.6	113.76	87.849	
5,200.0	5,156.6	5,141.6	5,141.6	13.9	102.5	95.74	-1,224.1	9,547.5	9,993.4	9,877.8	115.55	86.484	
5,216.5	5,173.1	5,158.1	5,158.1	13.9	102.8	95.74	-1,224.1	9,547.5	9,993.4	9,877.4	115.91	86.214	
5,300.0	5,256.6	5,241.6	5,241.6	14.1	104.5	95.74	-1,224.1	9,547.5	9,993.4	9,875.6	117.74	84.874	
5,314.9	5,271.5	5,256.5	5,256.5	14.1	104.8	95.74	-1,224.1	9,547.5	9,993.4	9,875.3	118.07	84.638	
5,400.0	5,356.6	5,341.6	5,341.6	14.2	106.5	95.74	-1,224.1	9,547.5	9,993.4	9,873.4	119.94	83.321	
5,413.4	5,370.0	5,355.0	5,355.0	14.3	106.8	95.74	-1,224.1	9,547.5	9,993.4	9,873.1	120.23	83.118	
5,500.0	5,456.6	5,441.6	5,441.6	14.4	108.5	95.74	-1,224.1	9,547.5	9,993.4	9,871.2	122.13	81.824	
5,511.8	5,468.4	5,453.4	5,453.4	14.4	108.7	95.74	-1,224.1	9,547.5	9,993.4	9,871.0	122.39	81.650	
5,600.0	5,556.6	5,541.6	5,541.6	14.6	110.5	95.74	-1,224.1	9,547.5	9,993.4	9,869.0	124.33	80.378	
5,610.2	5,566.8	5,551.8	5,551.8	14.6	110.7	95.74	-1,224.1	9,547.5	9,993.4	9,868.8	124.55	80.233	
5,700.0	5,656.6	5,641.6	5,641.6	14.8	112.5	95.74	-1,224.1	9,547.5	9,993.4	9,866.8	126.53	78.982	
5,708.6	5,665.2	5,650.2	5,650.2	14.8	112.7	95.74	-1,224.1	9,547.5	9,993.4	9,866.6	126.72	78.863	
5,800.0	5,756.6	5,741.6	5,741.6	14.9	114.5	95.74	-1,224.1	9,547.5	9,993.4	9,864.6	128.73	77.633	
5,807.1	5,763.7	5,748.7	5,748.7	14.9	114.7	95.74	-1,224.1	9,547.5	9,993.4	9,864.5	128.88	77.539	
5,900.0	5,856.6	5,841.6	5,841.6	15.1	116.6	95.74	-1,224.1	9,547.5	9,993.4	9,862.4	130.93	76.329	
5,905.5	5,862.1	5,847.1	5,847.1	15.1	116.7	95.74	-1,224.1	9,547.5	9,993.4	9,862.3	131.05	76.258	
6,000.0	5,956.6	5,941.6	5,941.6	15.3	118.6	95.74	-1,224.1	9,547.5	9,993.4	9,860.2	133.13	75.067	
6,003.9	5,960.5	5,945.5	5,945.5	15.3	118.6	95.74	-1,224.1	9,547.5	9,993.4	9,860.2	133.21	75.018	
6,100.0	6,056.6	6,041.6	6,041.6	15.5	120.6	95.74	-1,224.1	9,547.5	9,993.4	9,858.0	135.33	73.846	
6,102.3	6,058.9	6,043.9	6,043.9	15.5	120.6	95.74	-1,224.1	9,547.5	9,993.4	9,858.0	135.38	73.817	
6,200.0	6,156.6	6,141.6	6,141.6	15.7	122.6	95.74	-1,224.1	9,547.5	9,993.4	9,855.8	137.55	72.663	
6,200.8	6,157.4	6,142.4	6,142.4	15.7	122.6	95.74	-1,224.1	9,547.5	9,993.4	9,855.8	137.55	72.654	
6,272.2	6,228.8	6,213.8	6,213.8	15.8	124.0	95.74	-1,224.1	9,547.5	9,993.4	9,854.2	139.12	71.832	
6,299.2	6,255.8	6,240.8	6,240.8	15.8	124.6	5.74	-1,224.1	9,547.5	9,992.9	9,854.1	138.77	72.009	
6,300.0	6,256.6	6,241.6	6,241.6	15.8	124.6	5.74	-1,224.1	9,547.5	9,992.8	9,854.0	138.78	72.003	
6,350.0	6,306.4	6,291.4	6,291.4	15.9	125.6	5.78	-1,224.1	9,547.5	9,989.2	9,850.0	139.13	71.799	
6,397.6	6,353.6	6,338.6	6,338.6	15.9	126.5	5.83	-1,224.1	9,547.5	9,982.5	9,843.6	138.82	71.909	
6,400.0	6,355.9	6,340.9	6,340.9	15.9	126.6	5.84	-1,224.1	9,547.5	9,982.1	9,843.3	138.79	71.922	
6,450.0	6,404.8	6,389.8	6,389.8	15.9	127.6	5.93	-1,224.1	9,547.5	9,971.5	9,833.8	137.76	72.383	
6,496.0	6,449.0	6,434.0	6,434.0	16.0	128.5	6.05	-1,224.1	9,547.5	9,958.8	9,822.6	136.20	73.121	
6,500.0	6,452.8	6,437.8	6,437.8	16.0	128.5	6.06	-1,224.1	9,547.5	9,957.6	9,821.6	136.04	73.198	
6,550.0	6,499.7	6,484.7	6,484.7	15.9	129.5	6.23	-1,224.1	9,547.5	9,940.4	9,806.8	133.62	74.395	
6,594.5	6,540.3	6,525.3	6,525.3	15.9	130.3	6.41	-1,224.1	9,547.5	9,922.4	9,791.6	130.89	75.809	
6,600.0	6,545.3	6,530.3	6,530.3	15.9	130.4	6.44	-1,224.1	9,547.5	9,920.0	9,789.5	130.51	76.009	
6,650.0	6,589.3	6,574.3	6,574.3	15.9	131.3	6.70	-1,224.1	9,547.5	9,896.5	9,769.8	126.74	78.088	
6,692.9	6,625.7	6,610.7	6,610.7	15.9	132.0	6.97	-1,224.1	9,547.5	9,873.9	9,751.0	122.98	80.289	
6,700.0	6,631.6	6,616.6	6,616.6	15.9	132.1	7.02	-1,224.1	9,547.5	9,870.0	9,747.7	122.31	80.694	
6,750.0	6,671.9	6,656.9	6,656.9	15.9	133.0	7.40	-1,224.1	9,547.5	9,840.6	9,723.3	117.28	83.906	
6,791.3	6,703.6	6,688.6	6,688.6	15.9	133.6	7.79	-1,224.1	9,547.5	9,814.3	9,701.6	112.70	87.085	
6,800.0	6,710.1	6,695.1	6,695.1	15.9	133.7	7.87	-1,224.1	9,547.5	9,808.5	9,696.8	111.69	87.819	
6,850.0	6,745.9	6,730.9	6,730.9	16.0	134.4	8.45	-1,224.1	9,547.5	9,773.8	9,668.2	105.61	92.548	
6,889.7	6,772.6	6,757.6	6,757.6	16.1	135.0	9.00	-1,224.1	9,547.5	9,744.5	9,644.0	100.49	96.970	
6,900.0	6,779.2	6,764.2	6,764.2	16.1	135.1	9.16	-1,224.1	9,547.5	9,736.7	9,637.6	99.14	98.215	
6,950.0	6,809.8	6,794.8	6,794.8	16.3	135.7	10.05	-1,224.1	9,547.5	9,697.4	9,605.0	92.42	104.924	
6,988.2	6,831.3	6,816.3	6,816.3	16.4	136.2	10.88	-1,224.1	9,547.5	9,666.0	9,578.8	87.27	110.757	
7,000.0	6,837.6	6,822.6	6,822.6	16.5	136.3	11.18	-1,224.1	9,547.5	9,656.1	9,570.4	85.70	112.678	
7,050.0	6,862.5	6,847.5	6,847.5	16.9	136.8	12.64	-1,224.1	9,547.5	9,612.9	9,533.6	79.34	121.164	
7,086.6	6,878.7	6,863.7	6,863.7	17.2	137.1	14.01	-1,224.1	9,547.5	9,580.3	9,505.0	75.29	127.253	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,869.2	6,869.2	17.3	137.2	14.60	-1,224.1	9,547.5	9,568.2	9,494.2	74.01	129.277	
7,150.0	6,902.7	6,887.7	6,887.7	17.8	137.6	17.32	-1,224.1	9,547.5	9,522.0	9,451.1	70.91	134.280	
7,185.0	6,913.8	6,898.8	6,898.8	18.3	137.8	19.94	-1,224.1	9,547.5	9,489.0	9,417.8	71.13	133.402	
7,200.0	6,918.0	6,903.0	6,903.0	18.5	137.9	21.31	-1,224.1	9,547.5	9,474.7	9,402.6	72.11	131.400	
7,250.0	6,929.9	6,914.9	6,914.9	19.2	138.1	27.58	-1,224.1	9,547.5	9,426.4	9,345.5	80.86	116.573	
7,283.4	6,936.0	6,921.0	6,921.0	19.7	138.3	34.07	-1,224.1	9,547.5	9,393.7	9,300.5	93.15	100.847	
7,300.0	6,938.4	6,923.4	6,923.4	20.0	138.3	38.38	-1,224.1	9,547.5	9,377.4	9,275.7	101.66	92.239	
7,350.0	6,943.4	6,928.4	6,928.4	20.9	138.4	58.56	-1,224.1	9,547.5	9,327.9	9,191.1	136.81	68.183	
7,381.9	6,944.8	6,929.8	6,929.8	21.4	138.4	78.79	-1,224.1	9,547.5	9,296.3	9,139.3	156.98	59.218	
7,403.7	6,945.0	6,930.0	6,930.0	21.8	138.4	94.79	-1,224.1	9,547.5	9,274.6	9,114.9	159.68	58.081	
7,480.3	6,944.3	6,929.3	6,929.3	23.3	138.4	94.75	-1,224.1	9,547.5	9,198.4	9,037.3	161.16	57.076	
7,500.0	6,944.1	6,929.1	6,929.1	23.7	138.4	94.74	-1,224.1	9,547.5	9,178.9	9,017.3	161.54	56.820	
7,578.7	6,943.4	6,928.4	6,928.4	25.4	138.4	94.70	-1,224.1	9,547.5	9,100.6	8,937.4	163.18	55.771	
7,600.0	6,943.2	6,928.2	6,928.2	25.8	138.4	94.68	-1,224.1	9,547.5	9,079.5	8,915.8	163.62	55.491	
7,677.1	6,942.5	6,927.5	6,927.5	27.5	138.4	94.64	-1,224.1	9,547.5	9,002.8	8,837.5	165.32	54.456	
7,700.0	6,942.3	6,927.3	6,927.3	28.0	138.4	94.63	-1,224.1	9,547.5	8,980.1	8,814.3	165.83	54.153	
7,775.6	6,941.6	6,926.6	6,926.6	29.8	138.4	94.59	-1,224.1	9,547.5	8,905.0	8,737.4	167.57	53.141	
7,800.0	6,941.4	6,926.4	6,926.4	30.3	138.4	94.58	-1,224.1	9,547.5	8,880.7	8,712.6	168.14	52.818	
7,874.0	6,940.7	6,925.7	6,925.7	32.1	138.4	94.54	-1,224.1	9,547.5	8,807.2	8,637.3	169.90	51.836	
7,900.0	6,940.5	6,925.5	6,925.5	32.7	138.4	94.53	-1,224.1	9,547.5	8,781.4	8,610.8	170.52	51.496	
7,972.4	6,939.8	6,924.8	6,924.8	34.5	138.3	94.49	-1,224.1	9,547.5	8,709.4	8,537.1	172.30	50.549	
8,000.0	6,939.6	6,924.6	6,924.6	35.2	138.3	94.48	-1,224.1	9,547.5	8,682.0	8,509.1	172.97	50.193	
8,070.8	6,938.9	6,923.9	6,923.9	37.0	138.3	94.44	-1,224.1	9,547.5	8,611.7	8,436.9	174.74	49.282	
8,100.0	6,938.7	6,923.7	6,923.7	37.7	138.3	94.42	-1,224.1	9,547.5	8,582.7	8,407.2	175.47	48.913	
8,169.3	6,938.0	6,923.0	6,923.0	39.5	138.3	94.39	-1,224.1	9,547.5	8,513.9	8,336.7	177.23	48.040	
8,200.0	6,937.7	6,922.7	6,922.7	40.3	138.3	94.37	-1,224.1	9,547.5	8,483.4	8,305.4	178.01	47.658	
8,267.7	6,937.1	6,922.1	6,922.1	42.0	138.3	94.34	-1,224.1	9,547.5	8,416.2	8,236.4	179.74	46.823	
8,300.0	6,936.8	6,921.8	6,921.8	42.8	138.3	94.32	-1,224.1	9,547.5	8,384.1	8,203.5	180.57	46.430	
8,366.1	6,936.2	6,921.2	6,921.2	44.6	138.3	94.29	-1,224.1	9,547.5	8,318.5	8,136.2	182.29	45.633	
8,400.0	6,935.9	6,920.9	6,920.9	45.5	138.3	94.27	-1,224.1	9,547.5	8,284.8	8,101.7	183.17	45.230	
8,464.5	6,935.3	6,920.3	6,920.3	47.2	138.2	94.23	-1,224.1	9,547.5	8,220.8	8,035.9	184.86	44.470	
8,500.0	6,935.0	6,920.0	6,920.0	48.1	138.2	94.22	-1,224.1	9,547.5	8,185.6	7,999.8	185.79	44.058	
8,563.0	6,934.5	6,919.5	6,919.5	49.8	138.2	94.18	-1,224.1	9,547.5	8,123.1	7,935.6	187.45	43.334	
8,600.0	6,934.1	6,919.1	6,919.1	50.7	138.2	94.16	-1,224.1	9,547.5	8,086.3	7,897.9	188.43	42.914	
8,661.4	6,933.6	6,918.6	6,918.6	52.4	138.2	94.13	-1,224.1	9,547.5	8,025.4	7,835.4	190.06	42.226	
8,700.0	6,933.2	6,918.2	6,918.2	53.4	138.2	94.11	-1,224.1	9,547.5	7,987.1	7,796.0	191.08	41.799	
8,759.8	6,932.7	6,917.7	6,917.7	55.0	138.2	94.08	-1,224.1	9,547.5	7,927.8	7,735.1	192.68	41.144	
8,800.0	6,932.3	6,917.3	6,917.3	56.1	138.2	94.06	-1,224.1	9,547.5	7,887.9	7,694.2	193.75	40.711	
8,858.2	6,931.8	6,916.8	6,916.8	57.7	138.2	94.03	-1,224.1	9,547.5	7,830.1	7,634.8	195.32	40.090	
8,900.0	6,931.4	6,916.4	6,916.4	58.8	138.2	94.01	-1,224.1	9,547.5	7,788.7	7,592.3	196.43	39.650	
8,956.7	6,930.9	6,915.9	6,915.9	60.3	138.2	93.98	-1,224.1	9,547.5	7,732.5	7,534.6	197.96	39.061	
9,000.0	6,930.5	6,915.5	6,915.5	61.5	138.2	93.96	-1,224.1	9,547.5	7,689.6	7,490.4	199.13	38.616	
9,055.1	6,930.0	6,915.0	6,915.0	63.0	138.1	93.93	-1,224.1	9,547.5	7,634.9	7,434.3	200.62	38.058	
9,100.0	6,929.6	6,914.6	6,914.6	64.2	138.1	93.90	-1,224.1	9,547.5	7,590.4	7,388.6	201.83	37.608	
9,153.5	6,929.1	6,914.1	6,914.1	65.6	138.1	93.88	-1,224.1	9,547.5	7,537.4	7,334.1	203.28	37.079	
9,200.0	6,928.7	6,913.7	6,913.7	66.9	138.1	93.85	-1,224.1	9,547.5	7,491.3	7,286.8	204.54	36.626	
9,251.9	6,928.2	6,913.2	6,913.2	68.3	138.1	93.82	-1,224.1	9,547.5	7,439.8	7,233.9	205.95	36.125	
9,300.0	6,927.8	6,912.8	6,912.8	69.6	138.1	93.80	-1,224.1	9,547.5	7,392.2	7,185.0	207.25	35.667	
9,350.4	6,927.3	6,912.3	6,912.3	71.0	138.1	93.77	-1,224.1	9,547.5	7,342.3	7,133.7	208.63	35.194	
9,400.0	6,926.9	6,911.9	6,911.9	72.4	138.1	93.75	-1,224.1	9,547.5	7,293.2	7,083.2	209.98	34.733	
9,448.8	6,926.4	6,911.4	6,911.4	73.7	138.1	93.72	-1,224.1	9,547.5	7,244.8	7,033.5	211.31	34.286	
9,500.0	6,926.0	6,911.0	6,911.0	75.1	138.1	93.70	-1,224.1	9,547.5	7,194.1	6,981.4	212.71	33.822	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
9,547.2	6,925.5	6,910.5	6,910.5	76.4	138.1	93.67	-1,224.1	9,547.5	7,147.4	6,933.4	214.00	33.399	
9,600.0	6,925.1	6,910.1	6,910.1	77.9	138.0	93.64	-1,224.1	9,547.5	7,095.1	6,879.7	215.44	32.933	
9,645.6	6,924.6	6,909.6	6,909.6	79.1	138.0	93.62	-1,224.1	9,547.5	7,049.9	6,833.2	216.69	32.535	
9,700.0	6,924.1	6,909.1	6,909.1	80.6	138.0	93.59	-1,224.1	9,547.5	6,996.1	6,778.0	218.18	32.066	
9,744.1	6,923.7	6,908.7	6,908.7	81.8	138.0	93.57	-1,224.1	9,547.5	6,952.5	6,733.1	219.39	31.691	
9,800.0	6,923.2	6,908.2	6,908.2	83.4	138.0	93.54	-1,224.1	9,547.5	6,897.2	6,676.3	220.92	31.220	
9,842.5	6,922.9	6,907.9	6,907.9	84.5	138.0	93.52	-1,224.1	9,547.5	6,855.1	6,633.0	222.09	30.867	
9,900.0	6,922.3	6,907.3	6,907.3	86.1	138.0	93.49	-1,224.1	9,547.5	6,798.3	6,574.6	223.67	30.394	
9,940.9	6,922.0	6,907.0	6,907.0	87.2	138.0	93.47	-1,224.1	9,547.5	6,757.8	6,533.0	224.79	30.062	
10,000.0	6,921.4	6,906.4	6,906.4	88.9	138.0	93.44	-1,224.1	9,547.5	6,699.4	6,472.9	226.42	29.589	
10,039.3	6,921.1	6,906.1	6,906.1	90.0	138.0	93.41	-1,224.1	9,547.5	6,660.5	6,433.0	227.50	29.277	
10,100.0	6,920.5	6,905.5	6,905.5	91.6	138.0	93.38	-1,224.1	9,547.5	6,600.5	6,371.3	229.17	28.802	
10,137.8	6,920.2	6,905.2	6,905.2	92.7	137.9	93.36	-1,224.1	9,547.5	6,563.2	6,333.0	230.21	28.509	
10,200.0	6,919.6	6,904.6	6,904.6	94.4	137.9	93.33	-1,224.1	9,547.5	6,501.7	6,269.7	231.93	28.033	
10,236.2	6,919.3	6,904.3	6,904.3	95.4	137.9	93.31	-1,224.1	9,547.5	6,465.9	6,233.0	232.92	27.760	
10,300.0	6,918.7	6,903.7	6,903.7	97.2	137.9	93.28	-1,224.1	9,547.5	6,402.9	6,168.2	234.68	27.283	
10,334.6	6,918.4	6,903.4	6,903.4	98.1	137.9	93.26	-1,224.1	9,547.5	6,368.7	6,133.0	235.64	27.027	
10,400.0	6,917.8	6,902.8	6,902.8	99.9	137.9	93.23	-1,224.1	9,547.5	6,304.1	6,066.7	237.45	26.550	
10,433.0	6,917.5	6,902.5	6,902.5	100.9	137.9	93.21	-1,224.1	9,547.5	6,271.5	6,033.1	238.36	26.311	
10,500.0	6,916.9	6,901.9	6,901.9	102.7	137.9	93.18	-1,224.1	9,547.5	6,205.4	5,965.2	240.21	25.833	
10,531.5	6,916.6	6,901.6	6,901.6	103.6	137.9	93.16	-1,224.1	9,547.5	6,174.4	5,933.3	241.08	25.611	
10,600.0	6,916.0	6,901.0	6,901.0	105.5	137.9	93.12	-1,224.1	9,547.5	6,106.8	5,863.8	242.97	25.133	
10,629.9	6,915.7	6,900.7	6,900.7	106.3	137.9	93.11	-1,224.1	9,547.5	6,077.3	5,833.5	243.80	24.927	
10,700.0	6,915.1	6,900.1	6,900.1	108.3	137.8	93.07	-1,224.1	9,547.5	6,008.1	5,762.4	245.74	24.449	
10,728.3	6,914.8	6,899.8	6,899.8	109.1	137.8	93.06	-1,224.1	9,547.5	5,980.2	5,733.7	246.52	24.258	
10,800.0	6,914.2	6,899.2	6,899.2	111.0	137.8	93.02	-1,224.1	9,547.5	5,909.5	5,661.0	248.51	23.780	
10,826.7	6,913.9	6,898.9	6,898.9	111.8	137.8	93.01	-1,224.1	9,547.5	5,883.2	5,633.9	249.25	23.604	
10,900.0	6,913.3	6,898.3	6,898.3	113.8	137.8	92.97	-1,224.1	9,547.5	5,811.0	5,559.7	251.28	23.126	
10,925.2	6,913.1	6,898.1	6,898.1	114.5	137.8	92.95	-1,224.1	9,547.5	5,786.2	5,534.2	251.98	22.963	
11,000.0	6,912.4	6,897.4	6,897.4	116.6	137.8	92.92	-1,224.1	9,547.5	5,712.5	5,458.5	254.05	22.486	
11,023.6	6,912.2	6,897.2	6,897.2	117.3	137.8	92.90	-1,224.1	9,547.5	5,689.3	5,434.6	254.70	22.337	
11,100.0	6,911.5	6,896.5	6,896.5	119.4	137.8	92.86	-1,224.1	9,547.5	5,614.1	5,357.3	256.82	21.860	
11,122.0	6,911.3	6,896.3	6,896.3	120.0	137.8	92.85	-1,224.1	9,547.5	5,592.4	5,335.0	257.43	21.724	
11,200.0	6,910.6	6,895.6	6,895.6	122.2	137.8	92.81	-1,224.1	9,547.5	5,515.7	5,256.1	259.60	21.247	
11,220.4	6,910.4	6,895.4	6,895.4	122.7	137.7	92.80	-1,224.1	9,547.5	5,495.6	5,235.5	260.17	21.124	
11,300.0	6,909.7	6,894.7	6,894.7	125.0	137.7	92.76	-1,224.1	9,547.5	5,417.4	5,155.1	262.37	20.648	
11,318.9	6,909.5	6,894.5	6,894.5	125.5	137.7	92.75	-1,224.1	9,547.5	5,398.9	5,136.0	262.90	20.536	
11,400.0	6,908.8	6,893.8	6,893.8	127.7	137.7	92.71	-1,224.1	9,547.5	5,319.2	5,054.0	265.15	20.061	
11,417.3	6,908.6	6,893.6	6,893.6	128.2	137.7	92.70	-1,224.1	9,547.5	5,302.2	5,036.6	265.63	19.961	
11,500.0	6,907.9	6,892.9	6,892.9	130.5	137.7	92.66	-1,224.1	9,547.5	5,221.0	4,953.1	267.93	19.487	
11,515.7	6,907.7	6,892.7	6,892.7	131.0	137.7	92.65	-1,224.1	9,547.5	5,205.6	4,937.2	268.36	19.397	
11,600.0	6,907.0	6,892.0	6,892.0	133.3	137.7	92.60	-1,224.1	9,547.5	5,122.9	4,852.2	270.71	18.924	
11,614.1	6,906.8	6,891.8	6,891.8	133.7	137.7	92.60	-1,224.1	9,547.5	5,109.0	4,837.9	271.10	18.846	
11,700.0	6,906.0	6,891.0	6,891.0	136.1	137.7	92.55	-1,224.1	9,547.5	5,024.8	4,751.4	273.48	18.373	
11,712.6	6,905.9	6,890.9	6,890.9	136.5	137.7	92.54	-1,224.1	9,547.5	5,012.5	4,738.7	273.83	18.305	
11,800.0	6,905.1	6,890.1	6,890.1	138.9	137.6	92.50	-1,224.1	9,547.5	4,926.9	4,650.6	276.26	17.834	
11,811.0	6,905.0	6,890.0	6,890.0	139.2	137.6	92.49	-1,224.1	9,547.5	4,916.1	4,639.6	276.57	17.775	
11,900.0	6,904.2	6,889.2	6,889.2	141.7	137.6	92.45	-1,224.1	9,547.5	4,829.0	4,550.0	279.05	17.305	
11,909.4	6,904.2	6,889.2	6,889.2	141.9	137.6	92.44	-1,224.1	9,547.5	4,819.8	4,540.5	279.31	17.256	
12,000.0	6,903.3	6,888.3	6,888.3	144.5	137.6	92.40	-1,224.1	9,547.5	4,731.2	4,449.4	281.83	16.788	
12,007.8	6,903.3	6,888.3	6,888.3	144.7	137.6	92.39	-1,224.1	9,547.5	4,723.6	4,441.5	282.05	16.747	
12,100.0	6,902.4	6,887.4	6,887.4	147.3	137.6	92.34	-1,224.1	9,547.5	4,633.5	4,348.9	284.61	16.280	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,106.3	6,902.4	6,887.4	6,887.4	147.4	137.6	92.34	-1,224.1	9,547.5	4,627.4	4,342.6	284.78	16.249	
12,200.0	6,901.5	6,886.5	6,886.5	150.1	137.6	92.29	-1,224.1	9,547.5	4,535.9	4,248.6	287.39	15.783	
12,204.7	6,901.5	6,886.5	6,886.5	150.2	137.6	92.29	-1,224.1	9,547.5	4,531.4	4,243.8	287.52	15.760	
12,300.0	6,900.6	6,885.6	6,885.6	152.9	137.6	92.24	-1,224.1	9,547.5	4,438.5	4,148.3	290.18	15.296	
12,303.1	6,900.6	6,885.6	6,885.6	152.9	137.5	92.24	-1,224.1	9,547.5	4,435.4	4,145.2	290.26	15.281	
12,400.0	6,899.7	6,884.7	6,884.7	155.6	137.5	92.19	-1,224.1	9,547.5	4,341.1	4,048.1	292.96	14.818	
12,401.5	6,899.7	6,884.7	6,884.7	155.7	137.5	92.19	-1,224.1	9,547.5	4,339.6	4,046.6	293.00	14.811	
12,500.0	6,898.8	6,883.8	6,883.8	158.4	137.5	92.14	-1,224.1	9,547.5	4,243.8	3,948.1	295.74	14.350	
12,598.4	6,897.9	6,882.9	6,882.9	161.2	137.5	92.08	-1,224.1	9,547.5	4,148.3	3,849.8	298.49	13.898	
12,600.0	6,897.9	6,882.9	6,882.9	161.2	137.5	92.08	-1,224.1	9,547.5	4,146.7	3,848.2	298.53	13.891	
12,696.8	6,897.0	6,882.0	6,882.0	163.9	137.5	92.03	-1,224.1	9,547.5	4,052.8	3,751.6	301.23	13.454	
12,700.0	6,897.0	6,882.0	6,882.0	164.0	137.5	92.03	-1,224.1	9,547.5	4,049.8	3,748.4	301.32	13.440	
12,795.2	6,896.1	6,881.1	6,881.1	166.7	137.5	91.98	-1,224.1	9,547.5	3,957.5	3,653.6	303.97	13.020	
12,800.0	6,896.1	6,881.1	6,881.1	166.8	137.5	91.98	-1,224.1	9,547.5	3,952.9	3,648.8	304.10	12.999	
12,893.7	6,895.3	6,880.3	6,880.3	169.4	137.4	91.93	-1,224.1	9,547.5	3,862.4	3,555.7	306.71	12.593	
12,900.0	6,895.2	6,880.2	6,880.2	169.6	137.4	91.93	-1,224.1	9,547.5	3,856.3	3,549.4	306.89	12.566	
12,992.1	6,894.4	6,879.4	6,879.4	172.2	137.4	91.88	-1,224.1	9,547.5	3,767.4	3,457.9	309.45	12.174	
13,000.0	6,894.3	6,879.3	6,879.3	172.4	137.4	91.88	-1,224.1	9,547.5	3,759.8	3,450.1	309.67	12.141	
13,090.5	6,893.5	6,878.5	6,878.5	175.0	137.4	91.83	-1,224.1	9,547.5	3,672.6	3,360.4	312.20	11.764	
13,100.0	6,893.4	6,878.4	6,878.4	175.2	137.4	91.82	-1,224.1	9,547.5	3,663.5	3,351.0	312.46	11.725	
13,188.9	6,892.6	6,877.6	6,877.6	177.7	137.4	91.78	-1,224.1	9,547.5	3,578.0	3,263.0	314.94	11.361	
13,200.0	6,892.5	6,877.5	6,877.5	178.0	137.4	91.77	-1,224.1	9,547.5	3,567.4	3,252.1	315.25	11.316	
13,287.4	6,891.7	6,876.7	6,876.7	180.5	137.4	91.73	-1,224.1	9,547.5	3,483.6	3,165.9	317.68	10.966	
13,300.0	6,891.6	6,876.6	6,876.6	180.8	137.4	91.72	-1,224.1	9,547.5	3,471.5	3,153.5	318.04	10.915	
13,385.8	6,890.8	6,875.8	6,875.8	183.2	137.4	91.68	-1,224.1	9,547.5	3,389.4	3,069.0	320.43	10.578	
13,400.0	6,890.7	6,875.7	6,875.7	183.6	137.4	91.67	-1,224.1	9,547.5	3,375.8	3,055.0	320.82	10.522	
13,484.2	6,889.9	6,874.9	6,874.9	186.0	137.3	91.63	-1,224.1	9,547.5	3,295.5	2,972.3	323.17	10.197	
13,500.0	6,889.8	6,874.8	6,874.8	186.4	137.3	91.62	-1,224.1	9,547.5	3,280.5	2,956.9	323.61	10.137	
13,582.6	6,889.0	6,874.0	6,874.0	188.7	137.3	91.57	-1,224.1	9,547.5	3,201.8	2,875.9	325.92	9.824	
13,600.0	6,888.9	6,873.9	6,873.9	189.2	137.3	91.57	-1,224.1	9,547.5	3,185.4	2,859.0	326.40	9.759	
13,681.1	6,888.1	6,873.1	6,873.1	191.5	137.3	91.52	-1,224.1	9,547.5	3,108.5	2,779.8	328.66	9.458	
13,700.0	6,888.0	6,873.0	6,873.0	192.0	137.3	91.51	-1,224.1	9,547.5	3,090.6	2,761.4	329.19	9.389	
13,779.5	6,887.3	6,872.3	6,872.3	194.2	137.3	91.47	-1,224.1	9,547.5	3,015.5	2,684.1	331.40	9.099	
13,800.0	6,887.1	6,872.1	6,872.1	194.8	137.3	91.46	-1,224.1	9,547.5	2,996.1	2,664.2	331.98	9.025	
13,877.9	6,886.4	6,871.4	6,871.4	197.0	137.3	91.42	-1,224.1	9,547.5	2,922.8	2,588.6	334.15	8.747	
13,900.0	6,886.2	6,871.2	6,871.2	197.6	137.3	91.41	-1,224.1	9,547.5	2,902.1	2,567.3	334.76	8.669	
13,976.3	6,885.5	6,870.5	6,870.5	199.7	137.2	91.37	-1,224.1	9,547.5	2,830.5	2,493.6	336.89	8.402	
14,000.0	6,885.3	6,870.3	6,870.3	200.4	137.2	91.36	-1,224.1	9,547.5	2,808.4	2,470.8	337.55	8.320	
14,074.8	6,884.6	6,869.6	6,869.6	202.5	137.2	91.32	-1,224.1	9,547.5	2,738.6	2,399.0	339.64	8.063	
14,100.0	6,884.4	6,869.4	6,869.4	203.2	137.2	91.31	-1,224.1	9,547.5	2,715.2	2,374.8	340.34	7.978	
14,173.2	6,883.7	6,868.7	6,868.7	205.3	137.2	91.27	-1,224.1	9,547.5	2,647.2	2,304.9	342.38	7.732	
14,200.0	6,883.5	6,868.5	6,868.5	206.0	137.2	91.25	-1,224.1	9,547.5	2,622.4	2,279.3	343.13	7.643	
14,271.6	6,882.8	6,867.8	6,867.8	208.0	137.2	91.22	-1,224.1	9,547.5	2,556.4	2,211.2	345.13	7.407	
14,300.0	6,882.6	6,867.6	6,867.6	208.8	137.2	91.20	-1,224.1	9,547.5	2,530.3	2,184.4	345.92	7.315	
14,370.0	6,881.9	6,866.9	6,866.9	210.8	137.2	91.17	-1,224.1	9,547.5	2,466.1	2,118.2	347.87	7.089	
14,400.0	6,881.7	6,866.7	6,866.7	211.6	137.2	91.15	-1,224.1	9,547.5	2,438.7	2,090.0	348.71	6.994	
14,468.5	6,881.0	6,866.0	6,866.0	213.5	137.2	91.12	-1,224.1	9,547.5	2,376.4	2,025.8	350.62	6.778	
14,500.0	6,880.8	6,865.8	6,865.8	214.4	137.2	91.10	-1,224.1	9,547.5	2,347.9	1,996.4	351.50	6.680	
14,566.9	6,880.2	6,865.2	6,865.2	216.3	137.1	91.06	-1,224.1	9,547.5	2,287.5	1,934.2	353.36	6.474	
14,584.2	6,880.0	6,865.0	6,865.0	216.8	137.1	91.06	-1,224.1	9,547.5	2,272.0	1,918.2	353.84	6.421 CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	98.29	-1,260.8	8,650.4	8,741.9				
98.4	98.4	80.4	80.4	0.1	0.4	98.29	-1,260.8	8,650.4	8,741.8	8,741.4	0.48	N/A	
100.0	100.0	82.0	82.0	0.1	0.4	98.29	-1,260.8	8,650.4	8,741.8	8,741.4	0.49	N/A	
196.8	196.8	178.8	178.8	0.3	2.4	98.29	-1,260.8	8,650.4	8,741.8	8,739.1	2.75	3,177.332	
200.0	200.0	182.0	182.0	0.3	2.5	98.29	-1,260.8	8,650.4	8,741.8	8,739.0	2.84	3,081.937	
295.3	295.3	277.3	277.3	0.5	4.6	98.29	-1,260.8	8,650.4	8,741.8	8,736.7	5.10	1,713.044	
300.0	300.0	282.0	282.0	0.5	4.7	98.29	-1,260.8	8,650.4	8,741.8	8,736.6	5.21	1,677.271	
393.7	393.7	375.7	375.7	0.7	6.6	98.29	-1,260.8	8,650.4	8,741.8	8,734.5	7.34	1,190.861	
400.0	400.0	382.0	382.0	0.8	6.7	98.29	-1,260.8	8,650.4	8,741.8	8,734.4	7.48	1,168.159	
492.1	492.1	474.1	474.1	1.0	8.6	98.29	-1,260.8	8,650.4	8,741.8	8,732.3	9.56	914.407	
500.0	500.0	482.0	482.0	1.0	8.8	98.29	-1,260.8	8,650.4	8,741.8	8,732.1	9.74	897.756	
590.5	590.5	572.5	572.5	1.2	10.6	98.29	-1,260.8	8,650.4	8,741.8	8,730.1	11.77	742.587	
600.0	600.0	582.0	582.0	1.2	10.8	98.29	-1,260.8	8,650.4	8,741.8	8,729.9	11.98	729.436	
689.0	689.0	671.0	671.0	1.4	12.6	98.29	-1,260.8	8,650.4	8,741.8	8,727.9	13.98	625.290	
700.0	700.0	682.0	682.0	1.4	12.8	98.29	-1,260.8	8,650.4	8,741.8	8,727.6	14.23	614.423	
787.4	787.4	769.4	769.4	1.6	14.6	98.29	-1,260.8	8,650.4	8,741.8	8,725.7	16.19	540.066	
800.0	800.0	782.0	782.0	1.7	14.8	98.29	-1,260.8	8,650.4	8,741.8	8,725.4	16.47	530.807	
885.8	885.8	867.8	867.8	1.9	16.5	98.29	-1,260.8	8,650.4	8,741.8	8,723.5	18.39	475.323	
900.0	900.0	882.0	882.0	1.9	16.8	98.29	-1,260.8	8,650.4	8,741.8	8,723.1	18.71	467.257	
984.2	984.2	966.2	966.2	2.1	18.5	98.29	-1,260.8	8,650.4	8,741.8	8,721.3	20.60	424.459	
1,000.0	1,000.0	982.0	982.0	2.1	18.8	98.29	-1,260.8	8,650.4	8,741.8	8,720.9	20.95	417.314	
1,082.7	1,082.7	1,064.7	1,064.7	2.3	20.5	98.29	-1,260.8	8,650.4	8,741.8	8,719.0	22.80	383.440	
1,100.0	1,100.0	1,082.0	1,082.0	2.3	20.9	98.29	-1,260.8	8,650.4	8,741.8	8,718.7	23.19	377.028	
1,181.1	1,181.1	1,163.1	1,163.1	2.5	22.5	98.29	-1,260.8	8,650.4	8,741.8	8,716.8	25.00	349.658	
1,200.0	1,200.0	1,182.0	1,182.0	2.6	22.9	98.29	-1,260.8	8,650.4	8,741.8	8,716.4	25.42	343.841	
1,279.5	1,279.5	1,261.5	1,261.5	2.7	24.5	98.29	-1,260.8	8,650.4	8,741.8	8,714.6	27.20	321.350	
1,300.0	1,300.0	1,282.0	1,282.0	2.8	24.9	98.29	-1,260.8	8,650.4	8,741.8	8,714.2	27.66	316.028	
1,377.9	1,377.9	1,359.9	1,359.9	3.0	26.4	98.29	-1,260.8	8,650.4	8,741.8	8,712.4	29.41	297.285	
1,400.0	1,400.0	1,382.0	1,382.0	3.0	26.9	98.29	-1,260.8	8,650.4	8,741.8	8,711.9	29.90	292.380	
1,476.4	1,476.4	1,458.4	1,458.4	3.2	28.4	98.29	-1,260.8	8,650.4	8,741.8	8,710.2	31.61	276.575	
1,500.0	1,500.0	1,482.0	1,482.0	3.2	28.9	98.29	-1,260.8	8,650.4	8,741.8	8,709.7	32.14	272.027	
1,574.8	1,574.8	1,556.8	1,556.8	3.4	30.4	98.29	-1,260.8	8,650.4	8,741.8	8,708.0	33.81	258.565	
1,600.0	1,600.0	1,582.0	1,582.0	3.5	30.9	98.29	-1,260.8	8,650.4	8,741.8	8,707.5	34.37	254.324	
1,650.0	1,650.0	1,632.0	1,632.0	3.6	31.9	98.29	-1,260.8	8,650.4	8,741.8	8,706.4	35.49	246.310	
1,673.2	1,673.2	1,655.2	1,655.2	3.6	32.4	-142.12	-1,260.8	8,650.4	8,741.9	8,705.9	36.00	242.798	
1,700.0	1,700.0	1,682.0	1,682.0	3.7	32.9	-142.12	-1,260.8	8,650.4	8,742.2	8,705.6	36.60	238.889	
1,771.6	1,771.6	1,753.6	1,753.6	3.8	34.4	-142.11	-1,260.8	8,650.4	8,743.9	8,705.7	38.15	229.196	
1,800.0	1,799.9	1,781.9	1,781.9	3.9	34.9	-142.10	-1,260.8	8,650.4	8,744.9	8,706.2	38.76	225.615	
1,870.1	1,869.9	1,851.9	1,851.9	4.0	36.3	-142.08	-1,260.8	8,650.4	8,748.5	8,708.3	40.26	217.300	
1,900.0	1,899.7	1,881.7	1,881.7	4.1	36.9	-142.06	-1,260.8	8,650.4	8,750.5	8,709.6	40.89	213.978	
1,968.5	1,967.8	1,949.8	1,949.8	4.2	38.3	-142.02	-1,260.8	8,650.4	8,755.8	8,713.5	42.34	206.818	
2,000.0	1,999.1	1,981.1	1,981.1	4.3	38.9	-142.00	-1,260.8	8,650.4	8,758.7	8,715.7	42.99	203.731	
2,066.9	2,065.5	2,047.5	2,047.5	4.4	40.3	-141.95	-1,260.8	8,650.4	8,765.8	8,721.4	44.37	197.540	
2,100.0	2,098.2	2,080.2	2,080.2	4.5	40.9	-141.92	-1,260.8	8,650.4	8,769.7	8,724.7	45.05	194.668	
2,165.3	2,162.6	2,144.6	2,144.6	4.7	42.2	-141.86	-1,260.8	8,650.4	8,778.4	8,732.0	46.37	189.294	
2,200.0	2,196.6	2,178.6	2,178.6	4.7	42.9	-141.82	-1,260.8	8,650.4	8,783.5	8,736.4	47.07	186.617	
2,249.9	2,245.5	2,227.5	2,227.5	4.9	43.9	-141.76	-1,260.8	8,650.4	8,791.3	8,743.3	48.06	182.936	
2,263.8	2,259.1	2,241.1	2,241.1	4.9	44.2	-141.77	-1,260.8	8,650.4	8,793.6	8,745.3	48.36	181.834	
2,300.0	2,294.5	2,276.5	2,276.5	5.0	44.9	-141.80	-1,260.8	8,650.4	8,799.6	8,750.4	49.15	179.026	
2,362.2	2,355.4	2,337.4	2,337.4	5.2	46.1	-141.85	-1,260.8	8,650.4	8,809.8	8,759.3	50.52	174.389	
2,400.0	2,392.3	2,374.3	2,374.3	5.4	46.9	-141.88	-1,260.8	8,650.4	8,816.1	8,764.7	51.35	171.694	
2,460.6	2,451.6	2,433.6	2,433.6	5.6	48.0	-141.93	-1,260.8	8,650.4	8,826.1	8,773.4	52.68	167.529	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,472.2	2,472.2	5.7	48.8	-141.97	-1,260.8	8,650.4	8,832.6	8,779.0	53.55	164.927	
2,559.0	2,547.9	2,529.9	2,529.9	5.9	50.0	-142.02	-1,260.8	8,650.4	8,842.3	8,787.4	54.86	161.171	
2,600.0	2,588.0	2,570.0	2,570.0	6.1	50.8	-142.05	-1,260.8	8,650.4	8,849.1	8,793.3	55.77	158.668	
2,657.5	2,644.2	2,626.2	2,626.2	6.3	51.9	-142.10	-1,260.8	8,650.4	8,858.6	8,801.5	57.05	155.278	
2,700.0	2,685.8	2,667.8	2,667.8	6.4	52.8	-142.13	-1,260.8	8,650.4	8,865.6	8,807.6	58.00	152.866	
2,755.9	2,740.5	2,722.5	2,722.5	6.6	53.9	-142.18	-1,260.8	8,650.4	8,874.9	8,815.6	59.24	149.803	
2,800.0	2,783.6	2,765.6	2,765.6	6.8	54.7	-142.21	-1,260.8	8,650.4	8,882.2	8,821.9	60.23	147.475	
2,854.3	2,836.7	2,818.7	2,818.7	7.0	55.8	-142.26	-1,260.8	8,650.4	8,891.2	8,829.7	61.44	144.704	
2,900.0	2,881.4	2,863.4	2,863.4	7.2	56.7	-142.29	-1,260.8	8,650.4	8,898.7	8,836.3	62.47	142.456	
2,952.7	2,933.0	2,915.0	2,915.0	7.4	57.7	-142.34	-1,260.8	8,650.4	8,907.5	8,843.8	63.65	139.946	
3,000.0	2,979.2	2,961.2	2,961.2	7.6	58.7	-142.38	-1,260.8	8,650.4	8,915.3	8,850.6	64.71	137.774	
3,051.2	3,029.3	3,011.3	3,011.3	7.8	59.7	-142.42	-1,260.8	8,650.4	8,923.8	8,858.0	65.86	135.497	
3,100.0	3,077.1	3,059.1	3,059.1	8.0	60.6	-142.46	-1,260.8	8,650.4	8,931.9	8,865.0	66.96	133.397	
3,149.6	3,125.6	3,107.6	3,107.6	8.2	61.6	-142.50	-1,260.8	8,650.4	8,940.2	8,872.1	68.07	131.330	
3,200.0	3,174.9	3,156.9	3,156.9	8.4	62.6	-142.54	-1,260.8	8,650.4	8,948.6	8,879.3	69.21	129.298	
3,248.0	3,221.8	3,203.8	3,203.8	8.6	63.5	-142.58	-1,260.8	8,650.4	8,956.5	8,886.3	70.29	127.420	
3,300.0	3,272.7	3,254.7	3,254.7	8.9	64.6	-142.62	-1,260.8	8,650.4	8,965.2	8,893.7	71.46	125.451	
3,346.4	3,318.1	3,300.1	3,300.1	9.0	65.5	-142.65	-1,260.8	8,650.4	8,972.9	8,900.4	72.51	123.744	
3,400.0	3,370.5	3,352.5	3,352.5	9.3	66.5	-142.70	-1,260.8	8,650.4	8,981.9	8,908.1	73.72	121.836	
3,444.9	3,414.4	3,396.4	3,396.4	9.5	67.4	-142.73	-1,260.8	8,650.4	8,989.3	8,914.6	74.74	120.283	
3,500.0	3,468.3	3,450.3	3,450.3	9.7	68.5	-142.78	-1,260.8	8,650.4	8,998.5	8,922.6	75.98	118.432	
3,543.3	3,510.7	3,492.7	3,492.7	9.9	69.3	-142.81	-1,260.8	8,650.4	9,005.8	8,928.8	76.96	117.018	
3,600.0	3,566.1	3,548.1	3,548.1	10.1	70.5	-142.86	-1,260.8	8,650.4	9,015.2	8,937.0	78.24	115.221	
3,641.7	3,606.9	3,588.9	3,588.9	10.3	71.3	-142.89	-1,260.8	8,650.4	9,022.2	8,943.0	79.19	113.935	
3,700.0	3,664.0	3,646.0	3,646.0	10.6	72.4	-142.93	-1,260.8	8,650.4	9,031.9	8,951.4	80.51	112.189	
3,740.1	3,703.2	3,685.2	3,685.2	10.7	73.2	-142.97	-1,260.8	8,650.4	9,038.7	8,957.2	81.42	111.019	
3,800.0	3,761.8	3,743.8	3,743.8	11.0	74.4	-143.01	-1,260.8	8,650.4	9,048.7	8,965.9	82.77	109.321	
3,837.4	3,798.3	3,780.3	3,780.3	11.2	75.1	-143.04	-1,260.8	8,650.4	9,054.9	8,971.3	83.62	108.289	
3,888.6	3,799.5	3,781.5	3,781.5	11.2	75.2	-143.05	-1,260.8	8,650.4	9,055.1	8,971.5	83.65	108.251	
3,900.0	3,859.7	3,841.7	3,841.7	11.4	76.4	-143.21	-1,260.8	8,650.4	9,064.9	8,979.6	85.22	106.364	
3,937.0	3,896.1	3,878.1	3,878.1	11.5	77.1	-143.30	-1,260.8	8,650.4	9,070.2	8,984.1	86.15	105.280	
4,000.0	3,958.3	3,940.3	3,940.3	11.7	78.3	-143.44	-1,260.8	8,650.4	9,078.5	8,990.8	87.72	103.488	
4,035.4	3,993.3	3,975.3	3,975.3	11.8	79.1	-143.51	-1,260.8	8,650.4	9,082.7	8,994.1	88.60	102.517	
4,100.0	4,057.4	4,039.4	4,039.4	12.0	80.3	-143.62	-1,260.8	8,650.4	9,089.4	8,999.2	90.17	100.800	
4,133.8	4,091.0	4,073.0	4,073.0	12.1	81.0	-143.67	-1,260.8	8,650.4	9,092.4	9,001.4	90.99	99.933	
4,200.0	4,156.8	4,138.8	4,138.8	12.2	82.3	-143.75	-1,260.8	8,650.4	9,097.5	9,004.9	92.56	98.289	
4,232.3	4,189.0	4,171.0	4,171.0	12.3	83.0	-143.78	-1,260.8	8,650.4	9,099.5	9,006.2	93.31	97.518	
4,300.0	4,256.6	4,238.6	4,238.6	12.4	84.3	-143.84	-1,260.8	8,650.4	9,102.7	9,007.9	94.87	95.948	
4,330.7	4,287.3	4,269.3	4,269.3	12.5	85.0	-143.86	-1,260.8	8,650.4	9,103.8	9,008.2	95.56	95.264	
4,400.0	4,356.6	4,338.6	4,338.6	12.6	86.4	-143.88	-1,260.8	8,650.4	9,105.2	9,008.1	97.11	93.766	
4,429.1	4,385.7	4,367.7	4,367.7	12.6	86.9	-143.88	-1,260.8	8,650.4	9,105.4	9,007.6	97.74	93.159	
4,437.2	4,393.8	4,375.8	4,375.8	12.7	87.1	96.53	-1,260.8	8,650.4	9,105.4	9,006.6	98.81	92.148	
4,500.0	4,456.6	4,438.6	4,438.6	12.7	88.4	96.53	-1,260.8	8,650.4	9,105.4	9,005.2	100.18	90.893	
4,527.5	4,484.1	4,466.1	4,466.1	12.8	88.9	96.53	-1,260.8	8,650.4	9,105.4	9,004.6	100.78	90.351	
4,600.0	4,556.6	4,538.6	4,538.6	12.9	90.4	96.53	-1,260.8	8,650.4	9,105.4	9,003.0	102.36	88.955	
4,626.0	4,582.6	4,564.6	4,564.6	12.9	90.9	96.53	-1,260.8	8,650.4	9,105.4	9,002.5	102.93	88.465	
4,700.0	4,656.6	4,638.6	4,638.6	13.1	92.4	96.53	-1,260.8	8,650.4	9,105.4	9,000.8	104.54	87.097	
4,724.4	4,681.0	4,663.0	4,663.0	13.1	92.9	96.53	-1,260.8	8,650.4	9,105.4	9,000.3	105.08	86.655	
4,800.0	4,756.6	4,738.6	4,738.6	13.2	94.4	96.53	-1,260.8	8,650.4	9,105.4	8,998.7	106.73	85.313	
4,822.8	4,779.4	4,761.4	4,761.4	13.3	94.9	96.53	-1,260.8	8,650.4	9,105.4	8,998.2	107.23	84.916	
4,900.0	4,856.6	4,838.6	4,838.6	13.4	96.4	96.53	-1,260.8	8,650.4	9,105.4	8,996.5	108.92	83.600	
4,921.2	4,877.8	4,859.8	4,859.8	13.4	96.8	96.53	-1,260.8	8,650.4	9,105.4	8,996.0	109.38	83.244	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,938.6	4,938.6	13.6	98.4	96.53	-1,260.8	8,650.4	9,105.4	8,994.3	111.11	81.953	
5,019.7	4,976.3	4,958.3	4,958.3	13.6	98.8	96.53	-1,260.8	8,650.4	9,105.4	8,993.9	111.54	81.636	
5,100.0	5,056.6	5,038.6	5,038.6	13.7	100.4	96.53	-1,260.8	8,650.4	9,105.4	8,992.1	113.30	80.368	
5,118.1	5,074.7	5,056.7	5,056.7	13.8	100.8	96.53	-1,260.8	8,650.4	9,105.4	8,991.7	113.69	80.088	
5,200.0	5,156.6	5,138.6	5,138.6	13.9	102.4	96.53	-1,260.8	8,650.4	9,105.4	8,989.9	115.49	78.843	
5,216.5	5,173.1	5,155.1	5,155.1	13.9	102.8	96.53	-1,260.8	8,650.4	9,105.4	8,989.5	115.85	78.597	
5,300.0	5,256.6	5,238.6	5,238.6	14.1	104.5	96.53	-1,260.8	8,650.4	9,105.4	8,987.7	117.68	77.374	
5,314.9	5,271.5	5,253.5	5,253.5	14.1	104.8	96.53	-1,260.8	8,650.4	9,105.4	8,987.4	118.01	77.159	
5,400.0	5,356.6	5,338.6	5,338.6	14.2	106.5	96.53	-1,260.8	8,650.4	9,105.4	8,985.5	119.87	75.957	
5,413.4	5,370.0	5,352.0	5,352.0	14.3	106.7	96.53	-1,260.8	8,650.4	9,105.4	8,985.2	120.17	75.772	
5,500.0	5,456.6	5,438.6	5,438.6	14.4	108.5	96.53	-1,260.8	8,650.4	9,105.4	8,983.3	122.07	74.591	
5,511.8	5,468.4	5,450.4	5,450.4	14.4	108.7	96.53	-1,260.8	8,650.4	9,105.4	8,983.1	122.33	74.433	
5,600.0	5,556.6	5,538.6	5,538.6	14.6	110.5	96.53	-1,260.8	8,650.4	9,105.4	8,981.1	124.27	73.273	
5,610.2	5,566.8	5,548.8	5,548.8	14.6	110.7	96.53	-1,260.8	8,650.4	9,105.4	8,980.9	124.49	73.140	
5,700.0	5,656.6	5,638.6	5,638.6	14.8	112.5	96.53	-1,260.8	8,650.4	9,105.4	8,978.9	126.47	71.999	
5,708.6	5,665.2	5,647.2	5,647.2	14.8	112.7	96.53	-1,260.8	8,650.4	9,105.4	8,978.7	126.66	71.891	
5,800.0	5,756.6	5,738.6	5,738.6	14.9	114.5	96.53	-1,260.8	8,650.4	9,105.4	8,976.7	128.66	70.769	
5,807.1	5,763.7	5,745.7	5,745.7	14.9	114.7	96.53	-1,260.8	8,650.4	9,105.4	8,976.6	128.82	70.683	
5,900.0	5,856.6	5,838.6	5,838.6	15.1	116.5	96.53	-1,260.8	8,650.4	9,105.4	8,974.5	130.86	69.579	
5,905.5	5,862.1	5,844.1	5,844.1	15.1	116.6	96.53	-1,260.8	8,650.4	9,105.4	8,974.4	130.99	69.514	
6,000.0	5,956.6	5,938.6	5,938.6	15.3	118.5	96.53	-1,260.8	8,650.4	9,105.4	8,972.3	133.07	68.428	
6,003.9	5,960.5	5,942.5	5,942.5	15.3	118.6	96.53	-1,260.8	8,650.4	9,105.4	8,972.2	133.15	68.383	
6,100.0	6,056.6	6,038.6	6,038.6	15.5	120.5	96.53	-1,260.8	8,650.4	9,105.4	8,970.1	135.27	67.314	
6,102.3	6,058.9	6,040.9	6,040.9	15.5	120.6	96.53	-1,260.8	8,650.4	9,105.4	8,970.1	135.32	67.288	
6,200.0	6,156.6	6,138.6	6,138.6	15.7	122.6	96.53	-1,260.8	8,650.4	9,105.4	8,967.9	137.47	66.235	
6,200.8	6,157.4	6,139.4	6,139.4	15.7	122.6	96.53	-1,260.8	8,650.4	9,105.4	8,967.9	137.49	66.227	
6,272.2	6,228.8	6,210.8	6,210.8	15.8	124.0	96.53	-1,260.8	8,650.4	9,105.4	8,966.3	139.06	65.477	
6,299.2	6,255.8	6,237.8	6,237.8	15.8	124.6	6.54	-1,260.8	8,650.4	9,104.9	8,966.1	138.77	65.609	
6,300.0	6,256.6	6,238.6	6,238.6	15.8	124.6	6.54	-1,260.8	8,650.4	9,104.9	8,966.1	138.79	65.604	
6,350.0	6,306.4	6,288.4	6,288.4	15.9	125.6	6.58	-1,260.8	8,650.4	9,101.2	8,962.1	139.13	65.414	
6,397.6	6,353.6	6,335.6	6,335.6	15.9	126.5	6.64	-1,260.8	8,650.4	9,094.5	8,955.7	138.83	65.508	
6,400.0	6,355.9	6,337.9	6,337.9	15.9	126.6	6.65	-1,260.8	8,650.4	9,094.1	8,955.3	138.80	65.520	
6,450.0	6,404.8	6,386.8	6,386.8	15.9	127.5	6.75	-1,260.8	8,650.4	9,083.6	8,945.8	137.78	65.929	
6,496.0	6,449.0	6,431.0	6,431.0	16.0	128.4	6.89	-1,260.8	8,650.4	9,070.9	8,934.7	136.22	66.588	
6,500.0	6,452.8	6,434.8	6,434.8	16.0	128.5	6.90	-1,260.8	8,650.4	9,069.7	8,933.6	136.06	66.658	
6,550.0	6,499.7	6,481.7	6,481.7	15.9	129.5	7.09	-1,260.8	8,650.4	9,052.5	8,918.9	133.66	67.728	
6,594.5	6,540.3	6,522.3	6,522.3	15.9	130.3	7.31	-1,260.8	8,650.4	9,034.6	8,903.6	130.95	68.993	
6,600.0	6,545.3	6,527.3	6,527.3	15.9	130.4	7.33	-1,260.8	8,650.4	9,032.2	8,901.6	130.57	69.172	
6,650.0	6,589.3	6,571.3	6,571.3	15.9	131.3	7.63	-1,260.8	8,650.4	9,008.7	8,881.9	126.83	71.031	
6,692.9	6,625.7	6,607.7	6,607.7	15.9	132.0	7.94	-1,260.8	8,650.4	8,986.1	8,863.0	123.10	72.997	
6,700.0	6,631.6	6,613.6	6,613.6	15.9	132.1	7.99	-1,260.8	8,650.4	8,982.2	8,859.8	122.44	73.358	
6,750.0	6,671.9	6,653.9	6,653.9	15.9	132.9	8.44	-1,260.8	8,650.4	8,952.9	8,835.4	117.46	76.218	
6,791.3	6,703.6	6,685.6	6,685.6	15.9	133.6	8.87	-1,260.8	8,650.4	8,926.6	8,813.6	112.94	79.038	
6,800.0	6,710.1	6,692.1	6,692.1	15.9	133.7	8.97	-1,260.8	8,650.4	8,920.8	8,808.9	111.95	79.688	
6,850.0	6,745.9	6,727.9	6,727.9	16.0	134.4	9.63	-1,260.8	8,650.4	8,886.2	8,780.2	105.97	83.855	
6,889.7	6,772.6	6,754.6	6,754.6	16.1	134.9	10.26	-1,260.8	8,650.4	8,856.9	8,756.0	100.97	87.721	
6,900.0	6,779.2	6,761.2	6,761.2	16.1	135.1	10.44	-1,260.8	8,650.4	8,849.1	8,749.5	99.65	88.801	
6,950.0	6,809.8	6,791.8	6,791.8	16.3	135.7	11.45	-1,260.8	8,650.4	8,809.9	8,716.7	93.16	94.566	
6,988.2	6,831.3	6,813.3	6,813.3	16.4	136.1	12.40	-1,260.8	8,650.4	8,778.6	8,690.3	88.26	99.466	
7,000.0	6,837.6	6,819.6	6,819.6	16.5	136.3	12.73	-1,260.8	8,650.4	8,768.6	8,681.9	86.77	101.051	
7,050.0	6,862.5	6,844.5	6,844.5	16.9	136.8	14.39	-1,260.8	8,650.4	8,725.6	8,644.6	80.94	107.807	
7,086.6	6,878.7	6,860.7	6,860.7	17.2	137.1	15.94	-1,260.8	8,650.4	8,693.0	8,615.6	77.44	112.260	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,866.2	6,866.2	17.3	137.2	16.60	-1,260.8	8,650.4	8,680.9	8,604.5	76.41	113.606	
7,150.0	6,902.7	6,884.7	6,884.7	17.8	137.6	19.66	-1,260.8	8,650.4	8,634.8	8,560.3	74.50	115.905	
7,185.0	6,913.8	6,895.8	6,895.8	18.3	137.8	22.57	-1,260.8	8,650.4	8,601.8	8,526.0	75.80	113.478	
7,200.0	6,918.0	6,900.0	6,900.0	18.5	137.9	24.08	-1,260.8	8,650.4	8,587.5	8,510.2	77.29	111.110	
7,250.0	6,929.9	6,911.9	6,911.9	19.2	138.1	30.92	-1,260.8	8,650.4	8,539.3	8,451.6	87.75	97.314	
7,283.4	6,936.0	6,918.0	6,918.0	19.7	138.2	37.80	-1,260.8	8,650.4	8,506.7	8,405.9	100.76	84.423	
7,300.0	6,938.4	6,920.4	6,920.4	20.0	138.3	42.26	-1,260.8	8,650.4	8,490.4	8,381.2	109.28	77.694	
7,350.0	6,943.4	6,925.4	6,925.4	20.9	138.4	61.95	-1,260.8	8,650.4	8,441.1	8,299.8	141.30	59.740	
7,381.9	6,944.8	6,926.8	6,926.8	21.4	138.4	80.21	-1,260.8	8,650.4	8,409.5	8,251.8	157.65	53.344	
7,403.7	6,945.0	6,927.0	6,927.0	21.8	138.4	94.17	-1,260.8	8,650.4	8,387.8	8,228.0	159.79	52.493	
7,480.3	6,944.3	6,926.3	6,926.3	23.3	138.4	94.13	-1,260.8	8,650.4	8,311.8	8,150.5	161.27	51.540	
7,500.0	6,944.1	6,926.1	6,926.1	23.7	138.4	94.12	-1,260.8	8,650.4	8,292.3	8,130.6	161.65	51.298	
7,578.7	6,943.4	6,925.4	6,925.4	25.4	138.4	94.08	-1,260.8	8,650.4	8,214.2	8,050.9	163.28	50.306	
7,600.0	6,943.2	6,925.2	6,925.2	25.8	138.4	94.07	-1,260.8	8,650.4	8,193.1	8,029.3	163.73	50.041	
7,677.1	6,942.5	6,924.5	6,924.5	27.5	138.4	94.03	-1,260.8	8,650.4	8,116.5	7,951.1	165.43	49.064	
7,700.0	6,942.3	6,924.3	6,924.3	28.0	138.4	94.02	-1,260.8	8,650.4	8,093.9	7,927.9	165.93	48.778	
7,775.6	6,941.6	6,923.6	6,923.6	29.8	138.3	93.98	-1,260.8	8,650.4	8,018.9	7,851.3	167.68	47.823	
7,800.0	6,941.4	6,923.4	6,923.4	30.3	138.3	93.97	-1,260.8	8,650.4	7,994.7	7,826.5	168.24	47.519	
7,874.0	6,940.7	6,922.7	6,922.7	32.1	138.3	93.93	-1,260.8	8,650.4	7,921.3	7,751.3	170.01	46.594	
7,900.0	6,940.5	6,922.5	6,922.5	32.7	138.3	93.92	-1,260.8	8,650.4	7,895.6	7,724.9	170.63	46.273	
7,972.4	6,939.8	6,921.8	6,921.8	34.5	138.3	93.88	-1,260.8	8,650.4	7,823.8	7,651.4	172.40	45.381	
8,000.0	6,939.6	6,921.6	6,921.6	35.2	138.3	93.87	-1,260.8	8,650.4	7,796.5	7,623.4	173.08	45.046	
8,070.8	6,938.9	6,920.9	6,920.9	37.0	138.3	93.83	-1,260.8	8,650.4	7,726.2	7,551.4	174.85	44.189	
8,100.0	6,938.7	6,920.7	6,920.7	37.7	138.3	93.82	-1,260.8	8,650.4	7,697.4	7,521.8	175.57	43.841	
8,169.3	6,938.0	6,920.0	6,920.0	39.5	138.3	93.79	-1,260.8	8,650.4	7,628.7	7,451.4	177.33	43.020	
8,200.0	6,937.7	6,919.7	6,919.7	40.3	138.3	93.77	-1,260.8	8,650.4	7,598.3	7,420.2	178.11	42.661	
8,267.7	6,937.1	6,919.1	6,919.1	42.0	138.3	93.74	-1,260.8	8,650.4	7,531.2	7,351.4	179.85	41.875	
8,300.0	6,936.8	6,918.8	6,918.8	42.8	138.2	93.72	-1,260.8	8,650.4	7,499.2	7,318.6	180.68	41.506	
8,366.1	6,936.2	6,918.2	6,918.2	44.6	138.2	93.69	-1,260.8	8,650.4	7,433.7	7,251.4	182.40	40.756	
8,400.0	6,935.9	6,917.9	6,917.9	45.5	138.2	93.67	-1,260.8	8,650.4	7,400.2	7,216.9	183.27	40.378	
8,464.5	6,935.3	6,917.3	6,917.3	47.2	138.2	93.64	-1,260.8	8,650.4	7,336.3	7,151.3	184.97	39.663	
8,500.0	6,935.0	6,917.0	6,917.0	48.1	138.2	93.62	-1,260.8	8,650.4	7,301.2	7,115.3	185.89	39.276	
8,563.0	6,934.5	6,916.5	6,916.5	49.8	138.2	93.59	-1,260.8	8,650.4	7,238.9	7,051.3	187.55	38.596	
8,600.0	6,934.1	6,916.1	6,916.1	50.7	138.2	93.57	-1,260.8	8,650.4	7,202.2	7,013.7	188.53	38.202	
8,661.4	6,933.6	6,915.6	6,915.6	52.4	138.2	93.54	-1,260.8	8,650.4	7,141.5	6,951.3	190.16	37.555	
8,700.0	6,933.2	6,915.2	6,915.2	53.4	138.2	93.52	-1,260.8	8,650.4	7,103.3	6,912.1	191.19	37.154	
8,759.8	6,932.7	6,914.7	6,914.7	55.0	138.2	93.49	-1,260.8	8,650.4	7,044.1	6,851.3	192.78	36.539	
8,800.0	6,932.3	6,914.3	6,914.3	56.1	138.2	93.47	-1,260.8	8,650.4	7,004.4	6,810.5	193.86	36.132	
8,858.2	6,931.8	6,913.8	6,913.8	57.7	138.1	93.44	-1,260.8	8,650.4	6,946.8	6,751.4	195.42	35.549	
8,900.0	6,931.4	6,913.4	6,913.4	58.8	138.1	93.42	-1,260.8	8,650.4	6,905.5	6,709.0	196.54	35.136	
8,956.7	6,930.9	6,912.9	6,912.9	60.3	138.1	93.39	-1,260.8	8,650.4	6,849.5	6,651.4	198.06	34.583	
9,000.0	6,930.5	6,912.5	6,912.5	61.5	138.1	93.37	-1,260.8	8,650.4	6,806.7	6,607.4	199.23	34.165	
9,055.1	6,930.0	6,912.0	6,912.0	63.0	138.1	93.34	-1,260.8	8,650.4	6,752.2	6,551.5	200.72	33.641	
9,100.0	6,929.6	6,911.6	6,911.6	64.2	138.1	93.32	-1,260.8	8,650.4	6,707.8	6,505.9	201.93	33.219	
9,153.5	6,929.1	6,911.1	6,911.1	65.6	138.1	93.29	-1,260.8	8,650.4	6,655.0	6,451.6	203.38	32.722	
9,200.0	6,928.7	6,910.7	6,910.7	66.9	138.1	93.27	-1,260.8	8,650.4	6,609.1	6,404.4	204.64	32.297	
9,251.9	6,928.2	6,910.2	6,910.2	68.3	138.1	93.24	-1,260.8	8,650.4	6,557.8	6,351.7	206.05	31.826	
9,300.0	6,927.8	6,909.8	6,909.8	69.6	138.1	93.22	-1,260.8	8,650.4	6,510.3	6,303.0	207.35	31.397	
9,350.4	6,927.3	6,909.3	6,909.3	71.0	138.1	93.19	-1,260.8	8,650.4	6,460.6	6,251.9	208.72	30.953	
9,400.0	6,926.9	6,908.9	6,908.9	72.4	138.0	93.17	-1,260.8	8,650.4	6,411.6	6,201.6	210.08	30.521	
9,448.8	6,926.4	6,908.4	6,908.4	73.7	138.0	93.14	-1,260.8	8,650.4	6,363.5	6,152.1	211.41	30.101	
9,500.0	6,926.0	6,908.0	6,908.0	75.1	138.0	93.12	-1,260.8	8,650.4	6,313.0	6,100.2	212.80	29.666	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,907.5	6,907.5	76.4	138.0	93.09	-1,260.8	8,650.4	6,266.4	6,052.3	214.09	29.269	
9,600.0	6,925.1	6,907.1	6,907.1	77.9	138.0	93.07	-1,260.8	8,650.4	6,214.3	5,998.8	215.54	28.832	
9,645.6	6,924.6	6,906.6	6,906.6	79.1	138.0	93.04	-1,260.8	8,650.4	6,169.3	5,952.6	216.79	28.458	
9,700.0	6,924.1	6,906.1	6,906.1	80.6	138.0	93.02	-1,260.8	8,650.4	6,115.8	5,897.5	218.27	28.019	
9,744.1	6,923.7	6,905.7	6,905.7	81.8	138.0	92.99	-1,260.8	8,650.4	6,072.3	5,852.9	219.48	27.667	
9,800.0	6,923.2	6,905.2	6,905.2	83.4	138.0	92.97	-1,260.8	8,650.4	6,017.2	5,796.2	221.02	27.225	
9,842.5	6,922.9	6,904.9	6,904.9	84.5	138.0	92.94	-1,260.8	8,650.4	5,975.4	5,753.2	222.18	26.894	
9,900.0	6,922.3	6,904.3	6,904.3	86.1	138.0	92.92	-1,260.8	8,650.4	5,918.8	5,695.0	223.76	26.451	
9,940.9	6,922.0	6,904.0	6,904.0	87.2	137.9	92.90	-1,260.8	8,650.4	5,878.5	5,653.6	224.89	26.140	
10,000.0	6,921.4	6,903.4	6,903.4	88.9	137.9	92.87	-1,260.8	8,650.4	5,820.3	5,593.8	226.51	25.696	
10,039.3	6,921.1	6,903.1	6,903.1	90.0	137.9	92.85	-1,260.8	8,650.4	5,781.6	5,554.0	227.59	25.403	
10,100.0	6,920.5	6,902.5	6,902.5	91.6	137.9	92.82	-1,260.8	8,650.4	5,722.0	5,492.7	229.26	24.958	
10,137.8	6,920.2	6,902.2	6,902.2	92.7	137.9	92.80	-1,260.8	8,650.4	5,684.8	5,454.5	230.30	24.684	
10,200.0	6,919.6	6,901.6	6,901.6	94.4	137.9	92.77	-1,260.8	8,650.4	5,623.7	5,391.6	232.02	24.238	
10,236.2	6,919.3	6,901.3	6,901.3	95.4	137.9	92.75	-1,260.8	8,650.4	5,588.1	5,355.1	233.01	23.982	
10,300.0	6,918.7	6,900.7	6,900.7	97.2	137.9	92.72	-1,260.8	8,650.4	5,525.4	5,290.6	234.77	23.535	
10,334.6	6,918.4	6,900.4	6,900.4	98.1	137.9	92.70	-1,260.8	8,650.4	5,491.4	5,255.7	235.73	23.295	
10,400.0	6,917.8	6,899.8	6,899.8	99.9	137.9	92.66	-1,260.8	8,650.4	5,427.2	5,189.7	237.53	22.848	
10,433.0	6,917.5	6,899.5	6,899.5	100.9	137.9	92.65	-1,260.8	8,650.4	5,394.8	5,156.3	238.45	22.625	
10,500.0	6,916.9	6,898.9	6,898.9	102.7	137.8	92.61	-1,260.8	8,650.4	5,329.1	5,088.8	240.30	22.177	
10,531.5	6,916.6	6,898.6	6,898.6	103.6	137.8	92.60	-1,260.8	8,650.4	5,298.2	5,057.1	241.17	21.969	
10,600.0	6,916.0	6,898.0	6,898.0	105.5	137.8	92.56	-1,260.8	8,650.4	5,231.0	4,988.0	243.06	21.522	
10,629.9	6,915.7	6,897.7	6,897.7	106.3	137.8	92.55	-1,260.8	8,650.4	5,201.7	4,957.9	243.89	21.329	
10,700.0	6,915.1	6,897.1	6,897.1	108.3	137.8	92.51	-1,260.8	8,650.4	5,133.1	4,887.2	245.82	20.881	
10,728.3	6,914.8	6,896.8	6,896.8	109.1	137.8	92.50	-1,260.8	8,650.4	5,105.3	4,858.7	246.61	20.702	
10,800.0	6,914.2	6,896.2	6,896.2	111.0	137.8	92.46	-1,260.8	8,650.4	5,035.2	4,786.6	248.59	20.255	
10,826.7	6,913.9	6,895.9	6,895.9	111.8	137.8	92.45	-1,260.8	8,650.4	5,009.0	4,759.7	249.33	20.090	
10,900.0	6,913.3	6,895.3	6,895.3	113.8	137.8	92.41	-1,260.8	8,650.4	4,937.4	4,686.0	251.36	19.643	
10,925.2	6,913.1	6,895.1	6,895.1	114.5	137.8	92.40	-1,260.8	8,650.4	4,912.7	4,660.7	252.06	19.491	
11,000.0	6,912.4	6,894.4	6,894.4	116.6	137.8	92.36	-1,260.8	8,650.4	4,839.6	4,585.5	254.13	19.044	
11,023.6	6,912.2	6,894.2	6,894.2	117.3	137.8	92.35	-1,260.8	8,650.4	4,816.6	4,561.8	254.79	18.904	
11,100.0	6,911.5	6,893.5	6,893.5	119.4	137.7	92.31	-1,260.8	8,650.4	4,742.0	4,485.1	256.90	18.458	
11,122.0	6,911.3	6,893.3	6,893.3	120.0	137.7	92.30	-1,260.8	8,650.4	4,720.5	4,463.0	257.51	18.331	
11,200.0	6,910.6	6,892.6	6,892.6	122.2	137.7	92.26	-1,260.8	8,650.4	4,644.5	4,384.8	259.68	17.886	
11,220.4	6,910.4	6,892.4	6,892.4	122.7	137.7	92.25	-1,260.8	8,650.4	4,624.5	4,364.3	260.24	17.770	
11,300.0	6,909.7	6,891.7	6,891.7	125.0	137.7	92.21	-1,260.8	8,650.4	4,547.1	4,284.6	262.45	17.325	
11,318.9	6,909.5	6,891.5	6,891.5	125.5	137.7	92.20	-1,260.8	8,650.4	4,528.7	4,265.7	262.97	17.221	
11,400.0	6,908.8	6,890.8	6,890.8	127.7	137.7	92.16	-1,260.8	8,650.4	4,449.7	4,184.5	265.22	16.777	
11,417.3	6,908.6	6,890.6	6,890.6	128.2	137.7	92.15	-1,260.8	8,650.4	4,432.9	4,167.2	265.70	16.684	
11,500.0	6,907.9	6,889.9	6,889.9	130.5	137.7	92.11	-1,260.8	8,650.4	4,352.6	4,084.6	268.00	16.241	
11,515.7	6,907.7	6,889.7	6,889.7	131.0	137.7	92.11	-1,260.8	8,650.4	4,337.3	4,068.9	268.44	16.158	
11,600.0	6,907.0	6,889.0	6,889.0	133.3	137.6	92.06	-1,260.8	8,650.4	4,255.5	3,984.7	270.78	15.716	
11,614.1	6,906.8	6,888.8	6,888.8	133.7	137.6	92.06	-1,260.8	8,650.4	4,241.8	3,970.6	271.17	15.643	
11,700.0	6,906.0	6,888.0	6,888.0	136.1	137.6	92.01	-1,260.8	8,650.4	4,158.6	3,885.0	273.55	15.202	
11,712.6	6,905.9	6,887.9	6,887.9	136.5	137.6	92.01	-1,260.8	8,650.4	4,146.4	3,872.5	273.90	15.138	
11,800.0	6,905.1	6,887.1	6,887.1	138.9	137.6	91.96	-1,260.8	8,650.4	4,061.8	3,785.5	276.33	14.699	
11,811.0	6,905.0	6,887.0	6,887.0	139.2	137.6	91.96	-1,260.8	8,650.4	4,051.2	3,774.6	276.64	14.644	
11,900.0	6,904.2	6,886.2	6,886.2	141.7	137.6	91.91	-1,260.8	8,650.4	3,965.2	3,686.1	279.11	14.207	
11,909.4	6,904.2	6,886.2	6,886.2	141.9	137.6	91.91	-1,260.8	8,650.4	3,956.1	3,676.7	279.37	14.161	
12,000.0	6,903.3	6,885.3	6,885.3	144.5	137.6	91.86	-1,260.8	8,650.4	3,868.8	3,586.9	281.89	13.724	
12,007.8	6,903.3	6,885.3	6,885.3	144.7	137.6	91.86	-1,260.8	8,650.4	3,861.2	3,579.1	282.11	13.687	
12,100.0	6,902.4	6,884.4	6,884.4	147.3	137.6	91.81	-1,260.8	8,650.4	3,772.5	3,487.9	284.67	13.252	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,884.4	6,884.4	147.4	137.6	91.81	-1,260.8	8,650.4	3,766.5	3,481.7	284.85	13.223	
12,200.0	6,901.5	6,883.5	6,883.5	150.1	137.5	91.76	-1,260.8	8,650.4	3,676.5	3,389.0	287.45	12.790	
12,204.7	6,901.5	6,883.5	6,883.5	150.2	137.5	91.76	-1,260.8	8,650.4	3,672.0	3,384.4	287.58	12.768	
12,300.0	6,900.6	6,882.6	6,882.6	152.9	137.5	91.71	-1,260.8	8,650.4	3,580.7	3,290.4	290.24	12.337	
12,303.1	6,900.6	6,882.6	6,882.6	152.9	137.5	91.71	-1,260.8	8,650.4	3,577.7	3,287.3	290.32	12.323	
12,400.0	6,899.7	6,881.7	6,881.7	155.6	137.5	91.66	-1,260.8	8,650.4	3,485.1	3,192.0	293.02	11.894	
12,401.5	6,899.7	6,881.7	6,881.7	155.7	137.5	91.66	-1,260.8	8,650.4	3,483.6	3,190.5	293.06	11.887	
12,500.0	6,898.8	6,880.8	6,880.8	158.4	137.5	91.61	-1,260.8	8,650.4	3,389.7	3,093.9	295.80	11.459	
12,598.4	6,897.9	6,879.9	6,879.9	161.2	137.5	91.56	-1,260.8	8,650.4	3,296.2	2,997.6	298.54	11.041	
12,600.0	6,897.9	6,879.9	6,879.9	161.2	137.5	91.56	-1,260.8	8,650.4	3,294.6	2,996.1	298.58	11.034	
12,696.8	6,897.0	6,879.0	6,879.0	163.9	137.4	91.51	-1,260.8	8,650.4	3,202.9	2,901.6	301.28	10.631	
12,700.0	6,897.0	6,879.0	6,879.0	164.0	137.4	91.51	-1,260.8	8,650.4	3,199.9	2,898.5	301.37	10.618	
12,795.2	6,896.1	6,878.1	6,878.1	166.7	137.4	91.46	-1,260.8	8,650.4	3,109.9	2,805.9	304.02	10.229	
12,800.0	6,896.1	6,878.1	6,878.1	166.8	137.4	91.46	-1,260.8	8,650.4	3,105.4	2,801.3	304.15	10.210	
12,893.7	6,895.3	6,877.3	6,877.3	169.4	137.4	91.42	-1,260.8	8,650.4	3,017.3	2,710.5	306.76	9.836	
12,900.0	6,895.2	6,877.2	6,877.2	169.6	137.4	91.41	-1,260.8	8,650.4	3,011.4	2,704.4	306.94	9.811	
12,992.1	6,894.4	6,876.4	6,876.4	172.2	137.4	91.37	-1,260.8	8,650.4	2,925.1	2,615.6	309.50	9.451	
13,000.0	6,894.3	6,876.3	6,876.3	172.4	137.4	91.36	-1,260.8	8,650.4	2,917.7	2,607.9	309.72	9.420	
13,090.5	6,893.5	6,875.5	6,875.5	175.0	137.4	91.32	-1,260.8	8,650.4	2,833.2	2,521.0	312.24	9.074	
13,100.0	6,893.4	6,875.4	6,875.4	175.2	137.4	91.31	-1,260.8	8,650.4	2,824.4	2,511.9	312.50	9.038	
13,188.9	6,892.6	6,874.6	6,874.6	177.7	137.4	91.27	-1,260.8	8,650.4	2,741.9	2,426.9	314.98	8.705	
13,200.0	6,892.5	6,874.5	6,874.5	178.0	137.4	91.26	-1,260.8	8,650.4	2,731.6	2,416.3	315.29	8.664	
13,287.4	6,891.7	6,873.7	6,873.7	180.5	137.3	91.22	-1,260.8	8,650.4	2,651.0	2,333.3	317.72	8.344	
13,300.0	6,891.6	6,873.6	6,873.6	180.8	137.3	91.21	-1,260.8	8,650.4	2,639.4	2,321.3	318.08	8.298	
13,385.8	6,890.8	6,872.8	6,872.8	183.2	137.3	91.17	-1,260.8	8,650.4	2,560.7	2,240.2	320.46	7.991	
13,400.0	6,890.7	6,872.7	6,872.7	183.6	137.3	91.16	-1,260.8	8,650.4	2,547.7	2,226.9	320.86	7.940	
13,484.2	6,889.9	6,871.9	6,871.9	186.0	137.3	91.12	-1,260.8	8,650.4	2,471.0	2,147.8	323.21	7.645	
13,500.0	6,889.8	6,871.8	6,871.8	186.4	137.3	91.11	-1,260.8	8,650.4	2,456.7	2,133.1	323.65	7.591	
13,582.6	6,889.0	6,871.0	6,871.0	188.7	137.3	91.07	-1,260.8	8,650.4	2,382.0	2,056.1	325.95	7.308	
13,600.0	6,888.9	6,870.9	6,870.9	189.2	137.3	91.06	-1,260.8	8,650.4	2,366.4	2,040.0	326.43	7.249	
13,681.1	6,888.1	6,870.1	6,870.1	191.5	137.3	91.02	-1,260.8	8,650.4	2,293.8	1,965.1	328.69	6.979	
13,700.0	6,888.0	6,870.0	6,870.0	192.0	137.3	91.01	-1,260.8	8,650.4	2,276.9	1,947.7	329.22	6.916	
13,779.5	6,887.3	6,869.3	6,869.3	194.2	137.3	90.97	-1,260.8	8,650.4	2,206.4	1,875.0	331.43	6.657	
13,800.0	6,887.1	6,869.1	6,869.1	194.8	137.2	90.96	-1,260.8	8,650.4	2,188.4	1,856.3	332.00	6.591	
13,877.9	6,886.4	6,868.4	6,868.4	197.0	137.2	90.92	-1,260.8	8,650.4	2,120.0	1,785.9	334.18	6.344	
13,900.0	6,886.2	6,868.2	6,868.2	197.6	137.2	90.91	-1,260.8	8,650.4	2,100.8	1,766.0	334.79	6.275	
13,976.3	6,885.5	6,867.5	6,867.5	199.7	137.2	90.87	-1,260.8	8,650.4	2,034.7	1,697.8	336.92	6.039	
14,000.0	6,885.3	6,867.3	6,867.3	200.4	137.2	90.86	-1,260.8	8,650.4	2,014.4	1,676.8	337.58	5.967	
14,074.8	6,884.6	6,866.6	6,866.6	202.5	137.2	90.82	-1,260.8	8,650.4	1,950.7	1,611.0	339.66	5.743	
14,100.0	6,884.4	6,866.4	6,866.4	203.2	137.2	90.81	-1,260.8	8,650.4	1,929.4	1,589.0	340.36	5.669	
14,173.2	6,883.7	6,865.7	6,865.7	205.3	137.2	90.78	-1,260.8	8,650.4	1,868.0	1,525.6	342.40	5.456	
14,200.0	6,883.5	6,865.5	6,865.5	206.0	137.2	90.76	-1,260.8	8,650.4	1,845.8	1,502.6	343.15	5.379	
14,271.6	6,882.8	6,864.8	6,864.8	208.0	137.2	90.73	-1,260.8	8,650.4	1,787.0	1,441.8	345.15	5.177	
14,300.0	6,882.6	6,864.6	6,864.6	208.8	137.2	90.71	-1,260.8	8,650.4	1,763.9	1,418.0	345.94	5.099	
14,370.0	6,881.9	6,863.9	6,863.9	210.8	137.1	90.68	-1,260.8	8,650.4	1,707.7	1,359.8	347.89	4.909	
14,400.0	6,881.7	6,863.7	6,863.7	211.6	137.1	90.66	-1,260.8	8,650.4	1,684.0	1,335.3	348.72	4.829	
14,468.5	6,881.0	6,863.0	6,863.0	213.5	137.1	90.63	-1,260.8	8,650.4	1,630.6	1,279.9	350.63	4.650	
14,500.0	6,880.8	6,862.8	6,862.8	214.4	137.1	90.61	-1,260.8	8,650.4	1,606.4	1,254.9	351.51	4.570	
14,566.9	6,880.2	6,862.2	6,862.2	216.3	137.1	90.58	-1,260.8	8,650.4	1,555.8	1,202.5	353.37	4.403	
14,584.2	6,880.0	6,862.0	6,862.0	216.8	137.1	90.57	-1,260.8	8,650.4	1,543.0	1,189.2	353.85	4.361 CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	96.08	-855.6	8,026.4	8,071.9				
98.4	98.4	72.4	72.4	0.1	0.4	96.08	-855.6	8,026.4	8,071.8	8,071.3	0.52	N/A	
100.0	100.0	74.0	74.0	0.1	0.4	96.08	-855.6	8,026.4	8,071.8	8,071.3	0.53	N/A	
196.8	196.8	170.8	170.8	0.3	2.3	96.08	-855.6	8,026.4	8,071.8	8,069.2	2.64	3,062.319	
200.0	200.0	174.0	174.0	0.3	2.4	96.08	-855.6	8,026.4	8,071.8	8,069.1	2.72	2,967.625	
295.3	295.3	269.3	269.3	0.5	4.5	96.08	-855.6	8,026.4	8,071.8	8,066.8	5.01	1,610.748	
300.0	300.0	274.0	274.0	0.5	4.6	96.08	-855.6	8,026.4	8,071.8	8,066.7	5.12	1,576.480	
393.7	393.7	367.7	367.7	0.7	6.5	96.08	-855.6	8,026.4	8,071.8	8,064.6	7.25	1,112.829	
400.0	400.0	374.0	374.0	0.8	6.6	96.08	-855.6	8,026.4	8,071.8	8,064.4	7.40	1,091.353	
492.1	492.1	466.1	466.1	1.0	8.5	96.08	-855.6	8,026.4	8,071.8	8,062.4	9.47	851.934	
500.0	500.0	474.0	474.0	1.0	8.7	96.08	-855.6	8,026.4	8,071.8	8,062.2	9.65	836.278	
590.5	590.5	564.5	564.5	1.2	10.5	96.08	-855.6	8,026.4	8,071.8	8,060.2	11.69	690.619	
600.0	600.0	574.0	574.0	1.2	10.7	96.08	-855.6	8,026.4	8,071.8	8,059.9	11.90	678.299	
689.0	689.0	663.0	663.0	1.4	12.5	96.08	-855.6	8,026.4	8,071.8	8,057.9	13.90	580.840	
700.0	700.0	674.0	674.0	1.4	12.7	96.08	-855.6	8,026.4	8,071.8	8,057.7	14.14	570.684	
787.4	787.4	761.4	761.4	1.6	14.5	96.08	-855.6	8,026.4	8,071.8	8,055.7	16.10	501.249	
800.0	800.0	774.0	774.0	1.7	14.7	96.08	-855.6	8,026.4	8,071.8	8,055.5	16.39	492.610	
885.8	885.8	859.8	859.8	1.9	16.5	96.08	-855.6	8,026.4	8,071.8	8,053.5	18.31	440.877	
900.0	900.0	874.0	874.0	1.9	16.7	96.08	-855.6	8,026.4	8,071.8	8,053.2	18.63	433.362	
984.2	984.2	958.2	958.2	2.1	18.4	96.08	-855.6	8,026.4	8,071.8	8,051.3	20.51	393.504	
1,000.0	1,000.0	974.0	974.0	2.1	18.8	96.08	-855.6	8,026.4	8,071.8	8,051.0	20.87	386.853	
1,082.7	1,082.7	1,056.7	1,056.7	2.3	20.4	96.08	-855.6	8,026.4	8,071.8	8,049.1	22.72	355.335	
1,100.0	1,100.0	1,074.0	1,074.0	2.3	20.8	96.08	-855.6	8,026.4	8,071.8	8,048.7	23.10	349.371	
1,181.1	1,181.1	1,155.1	1,155.1	2.5	22.4	96.08	-855.6	8,026.4	8,071.8	8,046.9	24.92	323.923	
1,200.0	1,200.0	1,174.0	1,174.0	2.6	22.8	96.08	-855.6	8,026.4	8,071.8	8,046.5	25.34	318.516	
1,279.5	1,279.5	1,253.5	1,253.5	2.7	24.4	96.08	-855.6	8,026.4	8,071.8	8,044.7	27.12	297.617	
1,300.0	1,300.0	1,274.0	1,274.0	2.8	24.8	96.08	-855.6	8,026.4	8,071.8	8,044.3	27.58	292.674	
1,377.9	1,377.9	1,351.9	1,351.9	3.0	26.4	96.08	-855.6	8,026.4	8,071.8	8,042.5	29.32	275.267	
1,400.0	1,400.0	1,374.0	1,374.0	3.0	26.8	96.08	-855.6	8,026.4	8,071.8	8,042.0	29.82	270.712	
1,476.4	1,476.4	1,450.4	1,450.4	3.2	28.3	96.08	-855.6	8,026.4	8,071.8	8,040.3	31.53	256.040	
1,500.0	1,500.0	1,474.0	1,474.0	3.2	28.8	96.08	-855.6	8,026.4	8,071.8	8,039.8	32.05	251.819	
1,574.8	1,574.8	1,548.8	1,548.8	3.4	30.3	96.08	-855.6	8,026.4	8,071.8	8,038.1	33.73	239.326	
1,600.0	1,600.0	1,574.0	1,574.0	3.5	30.8	96.08	-855.6	8,026.4	8,071.8	8,037.6	34.29	235.391	
1,650.0	1,650.0	1,624.0	1,624.0	3.6	31.8	96.08	-855.6	8,026.4	8,071.8	8,036.4	35.41	227.956	
1,673.2	1,673.2	1,647.2	1,647.2	3.6	32.3	-144.33	-855.6	8,026.4	8,071.9	8,036.0	35.92	224.699	
1,700.0	1,700.0	1,674.0	1,674.0	3.7	32.8	-144.33	-855.6	8,026.4	8,072.2	8,035.7	36.51	221.075	
1,771.6	1,771.6	1,745.6	1,745.6	3.8	34.3	-144.32	-855.6	8,026.4	8,073.9	8,035.9	38.07	212.095	
1,800.0	1,799.9	1,773.9	1,773.9	3.9	34.9	-144.31	-855.6	8,026.4	8,075.0	8,036.4	38.68	208.781	
1,870.1	1,869.9	1,843.9	1,843.9	4.0	36.3	-144.29	-855.6	8,026.4	8,078.7	8,038.5	40.17	201.091	
1,900.0	1,899.7	1,873.7	1,873.7	4.1	36.9	-144.27	-855.6	8,026.4	8,080.7	8,039.9	40.81	198.022	
1,968.5	1,967.8	1,941.8	1,941.8	4.2	38.2	-144.24	-855.6	8,026.4	8,086.2	8,044.0	42.24	191.413	
2,000.0	1,999.1	1,973.1	1,973.1	4.3	38.9	-144.22	-855.6	8,026.4	8,089.2	8,046.3	42.90	188.568	
2,066.9	2,065.5	2,039.5	2,039.5	4.4	40.2	-144.17	-855.6	8,026.4	8,096.5	8,052.2	44.28	182.866	
2,100.0	2,098.2	2,072.2	2,072.2	4.5	40.9	-144.14	-855.6	8,026.4	8,100.5	8,055.6	44.95	180.225	
2,165.3	2,162.6	2,136.6	2,136.6	4.7	42.2	-144.08	-855.6	8,026.4	8,109.4	8,063.2	46.26	175.290	
2,200.0	2,196.6	2,170.6	2,170.6	4.7	42.8	-144.04	-855.6	8,026.4	8,114.7	8,067.7	46.95	172.834	
2,249.9	2,245.5	2,219.5	2,219.5	4.9	43.8	-143.99	-855.6	8,026.4	8,122.8	8,074.8	47.93	169.462	
2,263.8	2,259.1	2,233.1	2,233.1	4.9	44.1	-144.00	-855.6	8,026.4	8,125.1	8,076.9	48.24	168.446	
2,300.0	2,294.5	2,268.5	2,268.5	5.0	44.8	-144.03	-855.6	8,026.4	8,131.3	8,082.2	49.03	165.857	
2,362.2	2,355.4	2,329.4	2,329.4	5.2	46.0	-144.09	-855.6	8,026.4	8,141.8	8,091.4	50.39	161.582	
2,400.0	2,392.3	2,366.3	2,366.3	5.4	46.8	-144.12	-855.6	8,026.4	8,148.2	8,097.0	51.22	159.098	
2,460.6	2,451.6	2,425.6	2,425.6	5.6	48.0	-144.17	-855.6	8,026.4	8,158.5	8,106.0	52.55	155.259	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,464.2	2,464.2	5.7	48.7	-144.20	-855.6	8,026.4	8,165.2	8,111.8	53.42	152.861	
2,559.0	2,547.9	2,521.9	2,521.9	5.9	49.9	-144.25	-855.6	8,026.4	8,175.2	8,120.5	54.72	149.400	
2,600.0	2,588.0	2,562.0	2,562.0	6.1	50.7	-144.29	-855.6	8,026.4	8,182.2	8,126.6	55.63	147.093	
2,657.5	2,644.2	2,618.2	2,618.2	6.3	51.8	-144.34	-855.6	8,026.4	8,192.0	8,135.1	56.90	143.970	
2,700.0	2,685.8	2,659.8	2,659.8	6.4	52.7	-144.37	-855.6	8,026.4	8,199.2	8,141.4	57.84	141.747	
2,755.9	2,740.5	2,714.5	2,714.5	6.6	53.8	-144.42	-855.6	8,026.4	8,208.7	8,149.6	59.09	138.925	
2,800.0	2,783.6	2,757.6	2,757.6	6.8	54.6	-144.45	-855.6	8,026.4	8,216.2	8,156.2	60.07	136.781	
2,854.3	2,836.7	2,810.7	2,810.7	7.0	55.7	-144.50	-855.6	8,026.4	8,225.5	8,164.2	61.28	134.228	
2,900.0	2,881.4	2,855.4	2,855.4	7.2	56.6	-144.54	-855.6	8,026.4	8,233.3	8,171.0	62.30	132.158	
2,952.7	2,933.0	2,907.0	2,907.0	7.4	57.6	-144.58	-855.6	8,026.4	8,242.3	8,178.8	63.48	129.845	
3,000.0	2,979.2	2,953.2	2,953.2	7.6	58.6	-144.62	-855.6	8,026.4	8,250.3	8,185.8	64.53	127.845	
3,051.2	3,029.3	3,003.3	3,003.3	7.8	59.6	-144.66	-855.6	8,026.4	8,259.1	8,193.4	65.68	125.747	
3,100.0	3,077.1	3,051.1	3,051.1	8.0	60.5	-144.70	-855.6	8,026.4	8,267.4	8,200.6	66.77	123.813	
3,149.6	3,125.6	3,099.6	3,099.6	8.2	61.5	-144.75	-855.6	8,026.4	8,275.9	8,208.0	67.89	121.908	
3,200.0	3,174.9	3,148.9	3,148.9	8.4	62.5	-144.79	-855.6	8,026.4	8,284.5	8,215.5	69.02	120.036	
3,248.0	3,221.8	3,195.8	3,195.8	8.6	63.5	-144.83	-855.6	8,026.4	8,292.7	8,222.6	70.10	118.306	
3,300.0	3,272.7	3,246.7	3,246.7	8.9	64.5	-144.87	-855.6	8,026.4	8,301.6	8,230.4	71.26	116.493	
3,346.4	3,318.1	3,292.1	3,292.1	9.0	65.4	-144.91	-855.6	8,026.4	8,309.6	8,237.3	72.31	114.920	
3,400.0	3,370.5	3,344.5	3,344.5	9.3	66.4	-144.95	-855.6	8,026.4	8,318.8	8,245.3	73.51	113.162	
3,444.9	3,414.4	3,388.4	3,388.4	9.5	67.3	-144.99	-855.6	8,026.4	8,326.5	8,251.9	74.52	111.732	
3,500.0	3,468.3	3,442.3	3,442.3	9.7	68.4	-145.03	-855.6	8,026.4	8,335.9	8,260.1	75.76	110.026	
3,543.3	3,510.7	3,484.7	3,484.7	9.9	69.3	-145.07	-855.6	8,026.4	8,343.3	8,266.6	76.74	108.724	
3,600.0	3,566.1	3,540.1	3,540.1	10.1	70.4	-145.11	-855.6	8,026.4	8,353.1	8,275.1	78.02	107.069	
3,641.7	3,606.9	3,580.9	3,580.9	10.3	71.2	-145.15	-855.6	8,026.4	8,360.2	8,281.3	78.96	105.884	
3,700.0	3,664.0	3,638.0	3,638.0	10.6	72.3	-145.19	-855.6	8,026.4	8,370.3	8,290.0	80.27	104.275	
3,740.1	3,703.2	3,677.2	3,677.2	10.7	73.1	-145.23	-855.6	8,026.4	8,377.2	8,296.0	81.18	103.197	
3,800.0	3,761.8	3,735.8	3,735.8	11.0	74.3	-145.27	-855.6	8,026.4	8,387.5	8,304.9	82.53	101.633	
3,837.4	3,798.3	3,772.3	3,772.3	11.2	75.1	-145.30	-855.6	8,026.4	8,393.9	8,310.5	83.37	100.682	
3,838.6	3,799.5	3,773.5	3,773.5	11.2	75.1	-145.31	-855.6	8,026.4	8,394.1	8,310.7	83.40	100.647	
3,900.0	3,859.7	3,833.7	3,833.7	11.4	76.3	-145.47	-855.6	8,026.4	8,404.1	8,319.1	84.99	98.888	
3,937.0	3,896.1	3,870.1	3,870.1	11.5	77.0	-145.56	-855.6	8,026.4	8,409.6	8,323.7	85.92	97.878	
4,000.0	3,958.3	3,932.3	3,932.3	11.7	78.3	-145.69	-855.6	8,026.4	8,418.1	8,330.6	87.50	96.208	
4,035.4	3,993.3	3,967.3	3,967.3	11.8	79.0	-145.76	-855.6	8,026.4	8,422.4	8,334.1	88.38	95.302	
4,100.0	4,057.4	4,031.4	4,031.4	12.0	80.3	-145.87	-855.6	8,026.4	8,429.3	8,339.4	89.96	93.702	
4,133.8	4,091.0	4,065.0	4,065.0	12.1	80.9	-145.92	-855.6	8,026.4	8,432.4	8,341.7	90.78	92.894	
4,200.0	4,156.8	4,130.8	4,130.8	12.2	82.3	-146.00	-855.6	8,026.4	8,437.6	8,345.3	92.35	91.363	
4,232.3	4,189.0	4,163.0	4,163.0	12.3	82.9	-146.04	-855.6	8,026.4	8,439.7	8,346.6	93.11	90.643	
4,300.0	4,256.6	4,230.6	4,230.6	12.4	84.3	-146.09	-855.6	8,026.4	8,443.0	8,348.4	94.67	89.181	
4,330.7	4,287.3	4,261.3	4,261.3	12.5	84.9	-146.11	-855.6	8,026.4	8,444.1	8,348.8	95.37	88.543	
4,400.0	4,356.6	4,330.6	4,330.6	12.6	86.3	-146.13	-855.6	8,026.4	8,445.6	8,348.7	96.91	87.149	
4,429.1	4,385.7	4,359.7	4,359.7	12.6	86.9	-146.13	-855.6	8,026.4	8,445.8	8,348.2	97.55	86.583	
4,437.2	4,393.8	4,367.8	4,367.8	12.7	87.0	94.28	-855.6	8,026.4	8,445.8	8,346.9	98.84	85.453	
4,500.0	4,456.6	4,430.6	4,430.6	12.7	88.3	94.28	-855.6	8,026.4	8,445.8	8,345.6	100.20	84.290	
4,527.5	4,484.1	4,458.1	4,458.1	12.8	88.8	94.28	-855.6	8,026.4	8,445.8	8,345.0	100.80	83.788	
4,600.0	4,556.6	4,530.6	4,530.6	12.9	90.3	94.28	-855.6	8,026.4	8,445.8	8,343.4	102.38	82.494	
4,626.0	4,582.6	4,556.6	4,556.6	12.9	90.8	94.28	-855.6	8,026.4	8,445.8	8,342.8	102.95	82.040	
4,700.0	4,656.6	4,630.6	4,630.6	13.1	92.3	94.28	-855.6	8,026.4	8,445.8	8,341.2	104.56	80.772	
4,724.4	4,681.0	4,655.0	4,655.0	13.1	92.8	94.28	-855.6	8,026.4	8,445.8	8,340.7	105.10	80.363	
4,800.0	4,756.6	4,730.6	4,730.6	13.2	94.3	94.28	-855.6	8,026.4	8,445.8	8,339.0	106.75	79.119	
4,822.8	4,779.4	4,753.4	4,753.4	13.3	94.8	94.28	-855.6	8,026.4	8,445.8	8,338.5	107.25	78.751	
4,900.0	4,856.6	4,830.6	4,830.6	13.4	96.3	94.28	-855.6	8,026.4	8,445.8	8,336.8	108.93	77.532	
4,921.2	4,877.8	4,851.8	4,851.8	13.4	96.8	94.28	-855.6	8,026.4	8,445.8	8,336.4	109.40	77.202	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,930.6	4,930.6	13.6	98.3	94.28	-855.6	8,026.4	8,445.8	8,334.6	111.12	76.005	
5,019.7	4,976.3	4,950.3	4,950.3	13.6	98.7	94.28	-855.6	8,026.4	8,445.8	8,334.2	111.55	75.712	
5,100.0	5,056.6	5,030.6	5,030.6	13.7	100.4	94.28	-855.6	8,026.4	8,445.8	8,332.5	113.31	74.537	
5,118.1	5,074.7	5,048.7	5,048.7	13.8	100.7	94.28	-855.6	8,026.4	8,445.8	8,332.1	113.71	74.277	
5,200.0	5,156.6	5,130.6	5,130.6	13.9	102.4	94.28	-855.6	8,026.4	8,445.8	8,330.3	115.50	73.123	
5,216.5	5,173.1	5,147.1	5,147.1	13.9	102.7	94.28	-855.6	8,026.4	8,445.8	8,329.9	115.86	72.895	
5,300.0	5,256.6	5,230.6	5,230.6	14.1	104.4	94.28	-855.6	8,026.4	8,445.8	8,328.1	117.69	71.761	
5,314.9	5,271.5	5,245.5	5,245.5	14.1	104.7	94.28	-855.6	8,026.4	8,445.8	8,327.7	118.02	71.562	
5,400.0	5,356.6	5,330.6	5,330.6	14.2	106.4	94.28	-855.6	8,026.4	8,445.8	8,325.9	119.89	70.449	
5,413.4	5,370.0	5,344.0	5,344.0	14.3	106.7	94.28	-855.6	8,026.4	8,445.8	8,325.6	120.18	70.277	
5,500.0	5,456.6	5,430.6	5,430.6	14.4	108.4	94.28	-855.6	8,026.4	8,445.8	8,323.7	122.08	69.182	
5,511.8	5,468.4	5,442.4	5,442.4	14.4	108.6	94.28	-855.6	8,026.4	8,445.8	8,323.4	122.34	69.036	
5,600.0	5,556.6	5,530.6	5,530.6	14.6	110.4	94.28	-855.6	8,026.4	8,445.8	8,321.5	124.28	67.960	
5,610.2	5,566.8	5,540.8	5,540.8	14.6	110.6	94.28	-855.6	8,026.4	8,445.8	8,321.3	124.50	67.837	
5,700.0	5,656.6	5,630.6	5,630.6	14.8	112.4	94.28	-855.6	8,026.4	8,445.8	8,319.3	126.47	66.779	
5,708.6	5,665.2	5,639.2	5,639.2	14.8	112.6	94.28	-855.6	8,026.4	8,445.8	8,319.1	126.66	66.679	
5,800.0	5,756.6	5,730.6	5,730.6	14.9	114.4	94.28	-855.6	8,026.4	8,445.8	8,317.1	128.67	65.639	
5,807.1	5,763.7	5,737.7	5,737.7	14.9	114.6	94.28	-855.6	8,026.4	8,445.8	8,316.9	128.83	65.559	
5,900.0	5,856.6	5,830.6	5,830.6	15.1	116.4	94.28	-855.6	8,026.4	8,445.8	8,314.9	130.87	64.536	
5,905.5	5,862.1	5,836.1	5,836.1	15.1	116.6	94.28	-855.6	8,026.4	8,445.8	8,314.8	130.99	64.476	
6,000.0	5,956.6	5,930.6	5,930.6	15.3	118.5	94.28	-855.6	8,026.4	8,445.8	8,312.7	133.07	63.469	
6,003.9	5,960.5	5,934.5	5,934.5	15.3	118.5	94.28	-855.6	8,026.4	8,445.8	8,312.6	133.16	63.428	
6,100.0	6,056.6	6,030.6	6,030.6	15.5	120.5	94.28	-855.6	8,026.4	8,445.8	8,310.5	135.27	62.436	
6,102.3	6,058.9	6,032.9	6,032.9	15.5	120.5	94.28	-855.6	8,026.4	8,445.8	8,310.4	135.32	62.412	
6,200.0	6,156.6	6,130.6	6,130.6	15.7	122.5	94.28	-855.6	8,026.4	8,445.8	8,308.3	137.47	61.436	
6,200.8	6,157.4	6,131.4	6,131.4	15.7	122.5	94.28	-855.6	8,026.4	8,445.8	8,308.3	137.49	61.428	
6,272.2	6,228.8	6,202.8	6,202.8	15.8	123.9	94.28	-855.6	8,026.4	8,445.8	8,306.7	139.06	60.733	
6,299.2	6,255.8	6,229.8	6,229.8	15.8	124.5	4.29	-855.6	8,026.4	8,445.3	8,306.7	138.61	60.930	
6,300.0	6,256.6	6,230.6	6,230.6	15.8	124.5	4.29	-855.6	8,026.4	8,445.2	8,306.6	138.62	60.925	
6,350.0	6,306.4	6,280.4	6,280.4	15.9	125.5	4.31	-855.6	8,026.4	8,441.6	8,302.6	138.96	60.749	
6,397.6	6,353.6	6,327.6	6,327.6	15.9	126.4	4.36	-855.6	8,026.4	8,434.8	8,296.2	138.65	60.838	
6,400.0	6,355.9	6,329.9	6,329.9	15.9	126.5	4.36	-855.6	8,026.4	8,434.4	8,295.8	138.61	60.849	
6,450.0	6,404.8	6,378.8	6,378.8	15.9	127.5	4.43	-855.6	8,026.4	8,423.9	8,286.3	137.58	61.231	
6,496.0	6,449.0	6,423.0	6,423.0	16.0	128.4	4.52	-855.6	8,026.4	8,411.2	8,275.2	136.00	61.847	
6,500.0	6,452.8	6,426.8	6,426.8	16.0	128.4	4.53	-855.6	8,026.4	8,410.0	8,274.1	135.84	61.912	
6,550.0	6,499.7	6,473.7	6,473.7	15.9	129.4	4.66	-855.6	8,026.4	8,392.7	8,259.3	133.40	62.915	
6,594.5	6,540.3	6,514.3	6,514.3	15.9	130.2	4.80	-855.6	8,026.4	8,374.7	8,244.0	130.65	64.102	
6,600.0	6,545.3	6,519.3	6,519.3	15.9	130.3	4.81	-855.6	8,026.4	8,372.3	8,242.0	130.27	64.270	
6,650.0	6,589.3	6,563.3	6,563.3	15.9	131.2	5.01	-855.6	8,026.4	8,348.7	8,222.2	126.45	66.022	
6,692.9	6,625.7	6,599.7	6,599.7	15.9	131.9	5.22	-855.6	8,026.4	8,326.1	8,203.4	122.66	67.882	
6,700.0	6,631.6	6,605.6	6,605.6	15.9	132.0	5.25	-855.6	8,026.4	8,322.1	8,200.1	121.98	68.225	
6,750.0	6,671.9	6,645.9	6,645.9	15.9	132.8	5.55	-855.6	8,026.4	8,292.7	8,175.8	116.88	70.952	
6,791.3	6,703.6	6,677.6	6,677.6	15.9	133.5	5.84	-855.6	8,026.4	8,266.3	8,154.0	112.21	73.667	
6,800.0	6,710.1	6,684.1	6,684.1	15.9	133.6	5.91	-855.6	8,026.4	8,260.5	8,149.3	111.18	74.296	
6,850.0	6,745.9	6,719.9	6,719.9	16.0	134.3	6.34	-855.6	8,026.4	8,225.7	8,120.8	104.95	78.374	
6,889.7	6,772.6	6,746.6	6,746.6	16.1	134.9	6.77	-855.6	8,026.4	8,196.4	8,096.7	99.67	82.235	
6,900.0	6,779.2	6,753.2	6,753.2	16.1	135.0	6.89	-855.6	8,026.4	8,188.5	8,090.3	98.27	83.330	
6,950.0	6,809.8	6,783.8	6,783.8	16.3	135.6	7.57	-855.6	8,026.4	8,149.2	8,057.9	91.23	89.329	
6,988.2	6,831.3	6,805.3	6,805.3	16.4	136.0	8.21	-855.6	8,026.4	8,117.7	8,032.0	85.71	94.708	
7,000.0	6,837.6	6,811.6	6,811.6	16.5	136.2	8.43	-855.6	8,026.4	8,107.7	8,023.7	84.00	96.524	
7,050.0	6,862.5	6,836.5	6,836.5	16.9	136.7	9.56	-855.6	8,026.4	8,064.5	7,987.6	76.85	104.944	
7,086.6	6,878.7	6,852.7	6,852.7	17.2	137.0	10.62	-855.6	8,026.4	8,031.8	7,959.8	71.92	111.676	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,858.2	6,858.2	17.3	137.1	11.07	-855.6	8,026.4	8,019.6	7,949.3	70.24	114.167	
7,150.0	6,902.7	6,876.7	6,876.7	17.8	137.5	13.20	-855.6	8,026.4	7,973.3	7,908.2	65.11	122.463	
7,185.0	6,913.8	6,887.8	6,887.8	18.3	137.7	15.27	-855.6	8,026.4	7,940.2	7,876.9	63.30	125.438	
7,200.0	6,918.0	6,892.0	6,892.0	18.5	137.8	16.37	-855.6	8,026.4	7,925.9	7,862.6	63.25	125.309	
7,250.0	6,929.9	6,903.9	6,903.9	19.2	138.0	21.48	-855.6	8,026.4	7,877.5	7,809.3	68.13	115.629	
7,283.4	6,936.0	6,910.0	6,910.0	19.7	138.2	27.02	-855.6	8,026.4	7,844.7	7,766.7	78.01	100.566	
7,300.0	6,938.4	6,912.4	6,912.4	20.0	138.2	30.85	-855.6	8,026.4	7,828.4	7,742.6	85.79	91.254	
7,350.0	6,943.4	6,917.4	6,917.4	20.9	138.3	51.00	-855.6	8,026.4	7,778.8	7,653.7	125.07	62.197	
7,381.9	6,944.8	6,918.8	6,918.8	21.4	138.3	75.30	-855.6	8,026.4	7,747.1	7,592.3	154.78	50.053	
7,403.7	6,945.0	6,919.0	6,919.0	21.8	138.3	96.32	-855.6	8,026.4	7,725.3	7,566.1	159.16	48.539	
7,480.3	6,944.3	6,918.3	6,918.3	23.3	138.3	96.26	-855.6	8,026.4	7,649.0	7,488.3	160.64	47.616	
7,500.0	6,944.1	6,918.1	6,918.1	23.7	138.3	96.24	-855.6	8,026.4	7,629.3	7,468.3	161.02	47.381	
7,578.7	6,943.4	6,917.4	6,917.4	25.4	138.3	96.18	-855.6	8,026.4	7,550.9	7,388.2	162.67	46.420	
7,600.0	6,943.2	6,917.2	6,917.2	25.8	138.3	96.16	-855.6	8,026.4	7,529.7	7,366.6	163.11	46.163	
7,677.1	6,942.5	6,916.5	6,916.5	27.5	138.3	96.10	-855.6	8,026.4	7,452.8	7,288.0	164.82	45.219	
7,700.0	6,942.3	6,916.3	6,916.3	28.0	138.3	96.08	-855.6	8,026.4	7,430.0	7,264.7	165.32	44.943	
7,775.6	6,941.6	6,915.6	6,915.6	29.8	138.3	96.02	-855.6	8,026.4	7,354.7	7,187.7	167.07	44.021	
7,800.0	6,941.4	6,915.4	6,915.4	30.3	138.3	96.00	-855.6	8,026.4	7,330.4	7,162.8	167.64	43.727	
7,874.0	6,940.7	6,914.7	6,914.7	32.1	138.2	95.94	-855.6	8,026.4	7,256.7	7,087.3	169.41	42.834	
7,900.0	6,940.5	6,914.5	6,914.5	32.7	138.2	95.91	-855.6	8,026.4	7,230.8	7,060.8	170.04	42.525	
7,972.4	6,939.8	6,913.8	6,913.8	34.5	138.2	95.85	-855.6	8,026.4	7,158.7	6,986.8	171.81	41.665	
8,000.0	6,939.6	6,913.6	6,913.6	35.2	138.2	95.83	-855.6	8,026.4	7,131.2	6,958.7	172.49	41.342	
8,070.8	6,938.9	6,912.9	6,912.9	37.0	138.2	95.77	-855.6	8,026.4	7,060.6	6,886.4	174.27	40.516	
8,100.0	6,938.7	6,912.7	6,912.7	37.7	138.2	95.75	-855.6	8,026.4	7,031.6	6,856.6	175.00	40.181	
8,169.3	6,938.0	6,912.0	6,912.0	39.5	138.2	95.69	-855.6	8,026.4	6,962.6	6,785.8	176.76	39.390	
8,200.0	6,937.7	6,911.7	6,911.7	40.3	138.2	95.67	-855.6	8,026.4	6,932.0	6,754.5	177.54	39.045	
8,267.7	6,937.1	6,911.1	6,911.1	42.0	138.2	95.61	-855.6	8,026.4	6,864.6	6,685.3	179.29	38.289	
8,300.0	6,936.8	6,910.8	6,910.8	42.8	138.2	95.59	-855.6	8,026.4	6,832.4	6,652.3	180.12	37.933	
8,366.1	6,936.2	6,910.2	6,910.2	44.6	138.2	95.53	-855.6	8,026.4	6,766.6	6,584.7	181.84	37.212	
8,400.0	6,935.9	6,909.9	6,909.9	45.5	138.1	95.50	-855.6	8,026.4	6,732.9	6,550.1	182.72	36.847	
8,464.5	6,935.3	6,909.3	6,909.3	47.2	138.1	95.45	-855.6	8,026.4	6,668.6	6,484.2	184.42	36.160	
8,500.0	6,935.0	6,909.0	6,909.0	48.1	138.1	95.42	-855.6	8,026.4	6,633.3	6,448.0	185.35	35.788	
8,563.0	6,934.5	6,908.5	6,908.5	49.8	138.1	95.37	-855.6	8,026.4	6,570.6	6,383.6	187.02	35.134	
8,600.0	6,934.1	6,908.1	6,908.1	50.7	138.1	95.34	-855.6	8,026.4	6,533.8	6,345.8	188.00	34.755	
8,661.4	6,933.6	6,907.6	6,907.6	52.4	138.1	95.29	-855.6	8,026.4	6,472.7	6,283.0	189.63	34.133	
8,700.0	6,933.2	6,907.2	6,907.2	53.4	138.1	95.26	-855.6	8,026.4	6,434.3	6,243.6	190.66	33.747	
8,759.8	6,932.7	6,906.7	6,906.7	55.0	138.1	95.21	-855.6	8,026.4	6,374.7	6,182.5	192.26	33.156	
8,800.0	6,932.3	6,906.3	6,906.3	56.1	138.1	95.18	-855.6	8,026.4	6,334.7	6,141.4	193.34	32.765	
8,858.2	6,931.8	6,905.8	6,905.8	57.7	138.1	95.13	-855.6	8,026.4	6,276.8	6,081.9	194.91	32.204	
8,900.0	6,931.4	6,905.4	6,905.4	58.8	138.1	95.09	-855.6	8,026.4	6,235.3	6,039.2	196.03	31.808	
8,956.7	6,930.9	6,904.9	6,904.9	60.3	138.0	95.05	-855.6	8,026.4	6,178.9	5,981.3	197.56	31.276	
9,000.0	6,930.5	6,904.5	6,904.5	61.5	138.0	95.01	-855.6	8,026.4	6,135.8	5,937.1	198.73	30.875	
9,055.1	6,930.0	6,904.0	6,904.0	63.0	138.0	94.97	-855.6	8,026.4	6,081.0	5,880.8	200.22	30.371	
9,100.0	6,929.6	6,903.6	6,903.6	64.2	138.0	94.93	-855.6	8,026.4	6,036.3	5,834.9	201.44	29.966	
9,153.5	6,929.1	6,903.1	6,903.1	65.6	138.0	94.89	-855.6	8,026.4	5,983.1	5,780.2	202.90	29.489	
9,200.0	6,928.7	6,902.7	6,902.7	66.9	138.0	94.85	-855.6	8,026.4	5,936.9	5,732.7	204.16	29.080	
9,251.9	6,928.2	6,902.2	6,902.2	68.3	138.0	94.80	-855.6	8,026.4	5,885.2	5,679.7	205.57	28.628	
9,300.0	6,927.8	6,901.8	6,901.8	69.6	138.0	94.76	-855.6	8,026.4	5,837.5	5,630.6	206.88	28.216	
9,350.4	6,927.3	6,901.3	6,901.3	71.0	138.0	94.72	-855.6	8,026.4	5,787.4	5,579.1	208.26	27.789	
9,400.0	6,926.9	6,900.9	6,900.9	72.4	138.0	94.68	-855.6	8,026.4	5,738.1	5,528.5	209.62	27.374	
9,448.8	6,926.4	6,900.4	6,900.4	73.7	138.0	94.64	-855.6	8,026.4	5,689.6	5,478.6	210.95	26.971	
9,500.0	6,926.0	6,900.0	6,900.0	75.1	137.9	94.60	-855.6	8,026.4	5,638.7	5,426.3	212.35	26.553	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,899.5	6,899.5	76.4	137.9	94.56	-855.6	8,026.4	5,591.8	5,378.1	213.65	26.173	
9,600.0	6,925.1	6,899.1	6,899.1	77.9	137.9	94.52	-855.6	8,026.4	5,539.3	5,324.2	215.10	25.753	
9,645.6	6,924.6	6,898.6	6,898.6	79.1	137.9	94.48	-855.6	8,026.4	5,494.0	5,277.6	216.35	25.394	
9,700.0	6,924.1	6,898.1	6,898.1	80.6	137.9	94.44	-855.6	8,026.4	5,440.0	5,222.2	217.84	24.972	
9,744.1	6,923.7	6,897.7	6,897.7	81.8	137.9	94.40	-855.6	8,026.4	5,396.2	5,177.2	219.06	24.634	
9,800.0	6,923.2	6,897.2	6,897.2	83.4	137.9	94.35	-855.6	8,026.4	5,340.7	5,120.1	220.60	24.210	
9,842.5	6,922.9	6,896.9	6,896.9	84.5	137.9	94.32	-855.6	8,026.4	5,298.5	5,076.7	221.77	23.892	
9,900.0	6,922.3	6,896.3	6,896.3	86.1	137.9	94.27	-855.6	8,026.4	5,241.4	5,018.1	223.35	23.467	
9,940.9	6,922.0	6,896.0	6,896.0	87.2	137.9	94.24	-855.6	8,026.4	5,200.8	4,976.3	224.48	23.168	
10,000.0	6,921.4	6,895.4	6,895.4	88.9	137.9	94.19	-855.6	8,026.4	5,142.2	4,916.0	226.11	22.742	
10,039.3	6,921.1	6,895.1	6,895.1	90.0	137.9	94.16	-855.6	8,026.4	5,103.1	4,875.9	227.20	22.461	
10,100.0	6,920.5	6,894.5	6,894.5	91.6	137.8	94.11	-855.6	8,026.4	5,042.9	4,814.1	228.87	22.034	
10,137.8	6,920.2	6,894.2	6,894.2	92.7	137.8	94.08	-855.6	8,026.4	5,005.5	4,775.5	229.92	21.771	
10,200.0	6,919.6	6,893.6	6,893.6	94.4	137.8	94.03	-855.6	8,026.4	4,943.7	4,712.1	231.64	21.343	
10,236.2	6,919.3	6,893.3	6,893.3	95.4	137.8	94.00	-855.6	8,026.4	4,907.8	4,675.2	232.64	21.096	
10,300.0	6,918.7	6,892.7	6,892.7	97.2	137.8	93.94	-855.6	8,026.4	4,844.6	4,610.2	234.40	20.668	
10,334.6	6,918.4	6,892.4	6,892.4	98.1	137.8	93.92	-855.6	8,026.4	4,810.2	4,574.9	235.36	20.437	
10,400.0	6,917.8	6,891.8	6,891.8	99.9	137.8	93.86	-855.6	8,026.4	4,745.4	4,508.3	237.17	20.008	
10,433.0	6,917.5	6,891.5	6,891.5	100.9	137.8	93.83	-855.6	8,026.4	4,712.7	4,474.6	238.09	19.794	
10,500.0	6,916.9	6,890.9	6,890.9	102.7	137.8	93.78	-855.6	8,026.4	4,646.4	4,406.4	239.95	19.364	
10,531.5	6,916.6	6,890.6	6,890.6	103.6	137.8	93.75	-855.6	8,026.4	4,615.2	4,374.4	240.82	19.164	
10,600.0	6,916.0	6,890.0	6,890.0	105.5	137.7	93.70	-855.6	8,026.4	4,547.3	4,304.6	242.72	18.735	
10,629.9	6,915.7	6,889.7	6,889.7	106.3	137.7	93.67	-855.6	8,026.4	4,517.7	4,274.1	243.55	18.549	
10,700.0	6,915.1	6,889.1	6,889.1	108.3	137.7	93.61	-855.6	8,026.4	4,448.3	4,202.8	245.50	18.120	
10,728.3	6,914.8	6,888.8	6,888.8	109.1	137.7	93.59	-855.6	8,026.4	4,420.3	4,174.0	246.28	17.948	
10,800.0	6,914.2	6,888.2	6,888.2	111.0	137.7	93.53	-855.6	8,026.4	4,349.3	4,101.1	248.27	17.518	
10,826.7	6,913.9	6,887.9	6,887.9	111.8	137.7	93.51	-855.6	8,026.4	4,322.9	4,073.9	249.02	17.360	
10,900.0	6,913.3	6,887.3	6,887.3	113.8	137.7	93.45	-855.6	8,026.4	4,250.4	3,999.4	251.05	16.930	
10,925.2	6,913.1	6,887.1	6,887.1	114.5	137.7	93.43	-855.6	8,026.4	4,225.5	3,973.8	251.75	16.785	
11,000.0	6,912.4	6,886.4	6,886.4	116.6	137.7	93.37	-855.6	8,026.4	4,151.6	3,897.7	253.83	16.356	
11,023.6	6,912.2	6,886.2	6,886.2	117.3	137.7	93.35	-855.6	8,026.4	4,128.2	3,873.7	254.49	16.222	
11,100.0	6,911.5	6,885.5	6,885.5	119.4	137.7	93.29	-855.6	8,026.4	4,052.8	3,796.1	256.61	15.793	
11,122.0	6,911.3	6,885.3	6,885.3	120.0	137.7	93.27	-855.6	8,026.4	4,031.0	3,773.8	257.23	15.671	
11,200.0	6,910.6	6,884.6	6,884.6	122.2	137.6	93.20	-855.6	8,026.4	3,954.0	3,694.6	259.40	15.243	
11,220.4	6,910.4	6,884.4	6,884.4	122.7	137.6	93.19	-855.6	8,026.4	3,933.8	3,673.9	259.96	15.132	
11,300.0	6,909.7	6,883.7	6,883.7	125.0	137.6	93.12	-855.6	8,026.4	3,855.3	3,593.1	262.18	14.705	
11,318.9	6,909.5	6,883.5	6,883.5	125.5	137.6	93.11	-855.6	8,026.4	3,836.7	3,574.0	262.70	14.605	
11,400.0	6,908.8	6,882.8	6,882.8	127.7	137.6	93.04	-855.6	8,026.4	3,756.7	3,491.7	264.96	14.178	
11,417.3	6,908.6	6,882.6	6,882.6	128.2	137.6	93.03	-855.6	8,026.4	3,739.7	3,474.2	265.44	14.088	
11,500.0	6,907.9	6,881.9	6,881.9	130.5	137.6	92.96	-855.6	8,026.4	3,658.2	3,390.4	267.75	13.663	
11,515.7	6,907.7	6,881.7	6,881.7	131.0	137.6	92.94	-855.6	8,026.4	3,642.7	3,374.5	268.19	13.583	
11,600.0	6,907.0	6,881.0	6,881.0	133.3	137.6	92.88	-855.6	8,026.4	3,559.7	3,289.2	270.53	13.158	
11,614.1	6,906.8	6,880.8	6,880.8	133.7	137.6	92.86	-855.6	8,026.4	3,545.8	3,274.9	270.93	13.088	
11,700.0	6,906.0	6,880.0	6,880.0	136.1	137.5	92.79	-855.6	8,026.4	3,461.3	3,188.0	273.32	12.664	
11,712.6	6,905.9	6,879.9	6,879.9	136.5	137.5	92.78	-855.6	8,026.4	3,449.0	3,175.3	273.67	12.603	
11,800.0	6,905.1	6,879.1	6,879.1	138.9	137.5	92.71	-855.6	8,026.4	3,363.1	3,087.0	276.11	12.180	
11,811.0	6,905.0	6,879.0	6,879.0	139.2	137.5	92.70	-855.6	8,026.4	3,352.3	3,075.9	276.42	12.128	
11,900.0	6,904.2	6,878.2	6,878.2	141.7	137.5	92.63	-855.6	8,026.4	3,264.9	2,986.0	278.90	11.707	
11,909.4	6,904.2	6,878.2	6,878.2	141.9	137.5	92.62	-855.6	8,026.4	3,255.7	2,976.5	279.16	11.662	
12,000.0	6,903.3	6,877.3	6,877.3	144.5	137.5	92.55	-855.6	8,026.4	3,166.9	2,885.2	281.69	11.243	
12,007.8	6,903.3	6,877.3	6,877.3	144.7	137.5	92.54	-855.6	8,026.4	3,159.2	2,877.3	281.90	11.207	
12,100.0	6,902.4	6,876.4	6,876.4	147.3	137.5	92.46	-855.6	8,026.4	3,068.9	2,784.5	284.47	10.788	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 PM F #26-15 - Wellbore #1 - 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	6,902.4	6,876.4	6,876.4	147.4	137.5	92.46	-855.6	8,026.4	3,062.8	2,778.1	284.65	10.760	
12,200.0	6,901.5	6,875.5	6,875.5	150.1	137.5	92.38	-855.6	8,026.4	2,971.1	2,683.9	287.26	10.343	
12,204.7	6,901.5	6,875.5	6,875.5	150.2	137.5	92.38	-855.6	8,026.4	2,966.5	2,679.2	287.39	10.322	
12,300.0	6,900.6	6,874.6	6,874.6	152.9	137.4	92.30	-855.6	8,026.4	2,873.5	2,583.5	290.05	9.907	
12,303.1	6,900.6	6,874.6	6,874.6	152.9	137.4	92.30	-855.6	8,026.4	2,870.5	2,580.3	290.14	9.893	
12,400.0	6,899.7	6,873.7	6,873.7	155.6	137.4	92.22	-855.6	8,026.4	2,776.0	2,483.2	292.84	9.480	
12,401.5	6,899.7	6,873.7	6,873.7	155.7	137.4	92.22	-855.6	8,026.4	2,774.5	2,481.6	292.89	9.473	
12,500.0	6,898.8	6,872.8	6,872.8	158.4	137.4	92.14	-855.6	8,026.4	2,678.8	2,383.1	295.63	9.061	
12,598.4	6,897.9	6,871.9	6,871.9	161.2	137.4	92.06	-855.6	8,026.4	2,583.2	2,284.8	298.38	8.658	
12,600.0	6,897.9	6,871.9	6,871.9	161.2	137.4	92.05	-855.6	8,026.4	2,581.7	2,283.2	298.42	8.651	
12,696.8	6,897.0	6,871.0	6,871.0	163.9	137.4	91.97	-855.6	8,026.4	2,487.9	2,186.8	301.13	8.262	
12,700.0	6,897.0	6,871.0	6,871.0	164.0	137.4	91.97	-855.6	8,026.4	2,484.8	2,183.6	301.22	8.249	
12,795.2	6,896.1	6,870.1	6,870.1	166.7	137.3	91.89	-855.6	8,026.4	2,392.8	2,089.0	303.87	7.874	
12,800.0	6,896.1	6,870.1	6,870.1	166.8	137.3	91.89	-855.6	8,026.4	2,388.2	2,084.2	304.01	7.856	
12,893.7	6,895.3	6,869.3	6,869.3	169.4	137.3	91.81	-855.6	8,026.4	2,298.0	1,991.4	306.62	7.495	
12,900.0	6,895.2	6,869.2	6,869.2	169.6	137.3	91.81	-855.6	8,026.4	2,292.0	1,985.2	306.80	7.471	
12,992.1	6,894.4	6,868.4	6,868.4	172.2	137.3	91.73	-855.6	8,026.4	2,203.6	1,894.2	309.37	7.123	
13,000.0	6,894.3	6,868.3	6,868.3	172.4	137.3	91.73	-855.6	8,026.4	2,196.0	1,886.4	309.59	7.093	
13,090.5	6,893.5	6,867.5	6,867.5	175.0	137.3	91.65	-855.6	8,026.4	2,109.4	1,797.3	312.11	6.759	
13,100.0	6,893.4	6,867.4	6,867.4	175.2	137.3	91.64	-855.6	8,026.4	2,100.4	1,788.0	312.38	6.724	
13,188.9	6,892.6	6,866.6	6,866.6	177.7	137.3	91.57	-855.6	8,026.4	2,015.7	1,700.9	314.86	6.402	
13,200.0	6,892.5	6,866.5	6,866.5	178.0	137.3	91.56	-855.6	8,026.4	2,005.3	1,690.1	315.17	6.362	
13,287.4	6,891.7	6,865.7	6,865.7	180.5	137.3	91.49	-855.6	8,026.4	1,922.5	1,604.9	317.61	6.053	
13,300.0	6,891.6	6,865.6	6,865.6	180.8	137.3	91.48	-855.6	8,026.4	1,910.6	1,592.6	317.96	6.009	
13,385.8	6,890.8	6,864.8	6,864.8	183.2	137.2	91.41	-855.6	8,026.4	1,829.8	1,509.5	320.36	5.712	
13,400.0	6,890.7	6,864.7	6,864.7	183.6	137.2	91.40	-855.6	8,026.4	1,816.5	1,495.8	320.75	5.663	
13,484.2	6,889.9	6,863.9	6,863.9	186.0	137.2	91.33	-855.6	8,026.4	1,737.8	1,414.7	323.10	5.378	
13,500.0	6,889.8	6,863.8	6,863.8	186.4	137.2	91.31	-855.6	8,026.4	1,723.1	1,399.5	323.54	5.326	
13,582.6	6,889.0	6,863.0	6,863.0	188.7	137.2	91.25	-855.6	8,026.4	1,646.5	1,320.6	325.85	5.053	
13,600.0	6,888.9	6,862.9	6,862.9	189.2	137.2	91.23	-855.6	8,026.4	1,630.4	1,304.1	326.33	4.996	
13,681.1	6,888.1	6,862.1	6,862.1	191.5	137.2	91.17	-855.6	8,026.4	1,556.0	1,227.4	328.59	4.735	
13,700.0	6,888.0	6,862.0	6,862.0	192.0	137.2	91.15	-855.6	8,026.4	1,538.7	1,209.6	329.12	4.675	
13,779.5	6,887.3	6,861.3	6,861.3	194.2	137.2	91.09	-855.6	8,026.4	1,466.6	1,135.2	331.34	4.426	
13,800.0	6,887.1	6,861.1	6,861.1	194.8	137.2	91.07	-855.6	8,026.4	1,448.1	1,116.2	331.91	4.363	
13,877.9	6,886.4	6,860.4	6,860.4	197.0	137.2	91.00	-855.6	8,026.4	1,378.4	1,044.3	334.09	4.126	
13,900.0	6,886.2	6,860.2	6,860.2	197.6	137.1	90.99	-855.6	8,026.4	1,358.8	1,024.1	334.70	4.060	
13,976.3	6,885.5	6,859.5	6,859.5	199.7	137.1	90.92	-855.6	8,026.4	1,291.6	954.8	336.83	3.835	
14,000.0	6,885.3	6,859.3	6,859.3	200.4	137.1	90.90	-855.6	8,026.4	1,271.1	933.6	337.49	3.766	
14,074.8	6,884.6	6,858.6	6,858.6	202.5	137.1	90.84	-855.6	8,026.4	1,206.7	867.1	339.58	3.554	
14,100.0	6,884.4	6,858.4	6,858.4	203.2	137.1	90.82	-855.6	8,026.4	1,185.3	845.0	340.28	3.483	
14,173.2	6,883.7	6,857.7	6,857.7	205.3	137.1	90.76	-855.6	8,026.4	1,124.0	781.7	342.32	3.283	
14,200.0	6,883.5	6,857.5	6,857.5	206.0	137.1	90.74	-855.6	8,026.4	1,101.9	758.8	343.07	3.212	
14,271.6	6,882.8	6,856.8	6,856.8	208.0	137.1	90.68	-855.6	8,026.4	1,044.0	698.9	345.07	3.025	
14,300.0	6,882.6	6,856.6	6,856.6	208.8	137.1	90.66	-855.6	8,026.4	1,021.5	675.7	345.86	2.954	
14,370.0	6,881.9	6,855.9	6,855.9	210.8	137.1	90.60	-855.6	8,026.4	967.4	619.6	347.81	2.781	
14,400.0	6,881.7	6,855.7	6,855.7	211.6	137.1	90.58	-855.6	8,026.4	944.9	596.3	348.65	2.710	
14,468.5	6,881.0	6,855.0	6,855.0	213.5	137.0	90.52	-855.6	8,026.4	895.1	544.5	350.56	2.553	
14,500.0	6,880.8	6,854.8	6,854.8	214.4	137.0	90.49	-855.6	8,026.4	873.0	521.6	351.44	2.484	
14,566.9	6,880.2	6,854.2	6,854.2	216.3	137.0	90.44	-855.6	8,026.4	828.2	474.9	353.30	2.344	
14,584.2	6,880.0	6,854.0	6,854.0	216.8	137.0	90.43	-855.6	8,026.4	817.1	463.3	353.78	2.310 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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	86.71	317.6	5,531.2	5,540.4				
98.4	98.4	76.4	76.4	0.1	0.4	86.71	317.6	5,531.2	5,540.3	5,539.8	0.50	N/A	
100.0	100.0	78.0	78.0	0.1	0.4	86.71	317.6	5,531.2	5,540.3	5,539.8	0.51	N/A	
196.8	196.8	174.8	174.8	0.3	2.4	86.71	317.6	5,531.2	5,540.3	5,537.6	2.69	2,057.514	
200.0	200.0	178.0	178.0	0.3	2.5	86.71	317.6	5,531.2	5,540.3	5,537.6	2.78	1,994.821	
295.3	295.3	273.3	273.3	0.5	4.5	86.71	317.6	5,531.2	5,540.3	5,535.3	5.06	1,095.569	
300.0	300.0	278.0	278.0	0.5	4.6	86.71	317.6	5,531.2	5,540.3	5,535.2	5.17	1,072.476	
393.7	393.7	371.7	371.7	0.7	6.6	86.71	317.6	5,531.2	5,540.3	5,533.0	7.30	759.260	
400.0	400.0	378.0	378.0	0.8	6.7	86.71	317.6	5,531.2	5,540.3	5,532.9	7.44	744.696	
492.1	492.1	470.1	470.1	1.0	8.5	86.71	317.6	5,531.2	5,540.3	5,530.8	9.52	582.130	
500.0	500.0	478.0	478.0	1.0	8.7	86.71	317.6	5,531.2	5,540.3	5,530.6	9.69	571.480	
590.5	590.5	568.5	568.5	1.2	10.5	86.71	317.6	5,531.2	5,540.3	5,528.6	11.73	472.324	
600.0	600.0	578.0	578.0	1.2	10.7	86.71	317.6	5,531.2	5,540.3	5,528.4	11.94	463.929	
689.0	689.0	667.0	667.0	1.4	12.5	86.71	317.6	5,531.2	5,540.3	5,526.4	13.94	397.481	
700.0	700.0	678.0	678.0	1.4	12.8	86.71	317.6	5,531.2	5,540.3	5,526.2	14.19	390.552	
787.4	787.4	765.4	765.4	1.6	14.5	86.71	317.6	5,531.2	5,540.3	5,524.2	16.15	343.161	
800.0	800.0	778.0	778.0	1.7	14.8	86.71	317.6	5,531.2	5,540.3	5,523.9	16.43	337.262	
885.8	885.8	863.8	863.8	1.9	16.5	86.71	317.6	5,531.2	5,540.3	5,522.0	18.35	301.926	
900.0	900.0	878.0	878.0	1.9	16.8	86.71	317.6	5,531.2	5,540.3	5,521.7	18.67	296.791	
984.2	984.2	962.2	962.2	2.1	18.5	86.71	317.6	5,531.2	5,540.3	5,519.8	20.55	269.551	
1,000.0	1,000.0	978.0	978.0	2.1	18.8	86.71	317.6	5,531.2	5,540.3	5,519.4	20.91	265.004	
1,082.7	1,082.7	1,060.7	1,060.7	2.3	20.5	86.71	317.6	5,531.2	5,540.3	5,517.6	22.76	243.454	
1,100.0	1,100.0	1,078.0	1,078.0	2.3	20.8	86.71	317.6	5,531.2	5,540.3	5,517.2	23.15	239.375	
1,181.1	1,181.1	1,159.1	1,159.1	2.5	22.4	86.71	317.6	5,531.2	5,540.3	5,515.4	24.96	221.968	
1,200.0	1,200.0	1,178.0	1,178.0	2.6	22.8	86.71	317.6	5,531.2	5,540.3	5,515.0	25.38	218.269	
1,279.5	1,279.5	1,257.5	1,257.5	2.7	24.4	86.71	317.6	5,531.2	5,540.3	5,513.2	27.16	203.970	
1,300.0	1,300.0	1,278.0	1,278.0	2.8	24.8	86.71	317.6	5,531.2	5,540.3	5,512.7	27.62	200.587	
1,377.9	1,377.9	1,355.9	1,355.9	3.0	26.4	86.71	317.6	5,531.2	5,540.3	5,511.0	29.36	188.674	
1,400.0	1,400.0	1,378.0	1,378.0	3.0	26.8	86.71	317.6	5,531.2	5,540.3	5,510.5	29.86	185.556	
1,476.4	1,476.4	1,454.4	1,454.4	3.2	28.4	86.71	317.6	5,531.2	5,540.3	5,508.8	31.57	175.513	
1,500.0	1,500.0	1,478.0	1,478.0	3.2	28.9	86.71	317.6	5,531.2	5,540.3	5,508.2	32.10	172.623	
1,574.8	1,574.8	1,552.8	1,552.8	3.4	30.4	86.71	317.6	5,531.2	5,540.3	5,506.6	33.77	164.069	
1,600.0	1,600.0	1,578.0	1,578.0	3.5	30.9	86.71	317.6	5,531.2	5,540.3	5,506.0	34.33	161.375	
1,650.0	1,650.0	1,628.0	1,628.0	3.6	31.9	86.71	317.6	5,531.2	5,540.3	5,504.9	35.45	156.284	
1,673.2	1,673.2	1,651.2	1,651.2	3.6	32.3	-153.70	317.6	5,531.2	5,540.4	5,504.5	35.96	154.055	
1,700.0	1,700.0	1,678.0	1,678.0	3.7	32.9	-153.70	317.6	5,531.2	5,540.7	5,504.2	36.55	151.579	
1,771.6	1,771.6	1,749.6	1,749.6	3.8	34.3	-153.69	317.6	5,531.2	5,542.7	5,504.5	38.10	145.464	
1,800.0	1,799.9	1,777.9	1,777.9	3.9	34.9	-153.69	317.6	5,531.2	5,543.9	5,505.1	38.71	143.214	
1,870.1	1,869.9	1,847.9	1,847.9	4.0	36.3	-153.67	317.6	5,531.2	5,547.9	5,507.7	40.20	138.015	
1,900.0	1,899.7	1,877.7	1,877.7	4.1	36.9	-153.67	317.6	5,531.2	5,550.1	5,509.3	40.83	135.949	
1,968.5	1,967.8	1,945.8	1,945.8	4.2	38.3	-153.64	317.6	5,531.2	5,556.2	5,514.0	42.25	131.518	
2,000.0	1,999.1	1,977.1	1,977.1	4.3	38.9	-153.63	317.6	5,531.2	5,559.5	5,516.6	42.89	129.620	
2,066.9	2,065.5	2,043.5	2,043.5	4.4	40.2	-153.60	317.6	5,531.2	5,567.5	5,523.3	44.24	125.837	
2,100.0	2,098.2	2,076.2	2,076.2	4.5	40.9	-153.58	317.6	5,531.2	5,572.0	5,527.1	44.90	124.095	
2,165.3	2,162.6	2,140.6	2,140.6	4.7	42.2	-153.54	317.6	5,531.2	5,581.8	5,535.6	46.18	120.860	
2,200.0	2,196.6	2,174.6	2,174.6	4.7	42.9	-153.52	317.6	5,531.2	5,587.6	5,540.7	46.85	119.262	
2,249.9	2,245.5	2,223.5	2,223.5	4.9	43.9	-153.48	317.6	5,531.2	5,596.5	5,548.7	47.80	117.081	
2,263.8	2,259.1	2,237.1	2,237.1	4.9	44.1	-153.50	317.6	5,531.2	5,599.1	5,551.0	48.10	116.404	
2,300.0	2,294.5	2,272.5	2,272.5	5.0	44.8	-153.53	317.6	5,531.2	5,605.9	5,557.0	48.88	114.678	
2,362.2	2,355.4	2,333.4	2,333.4	5.2	46.1	-153.59	317.6	5,531.2	5,617.5	5,567.3	50.23	111.830	
2,400.0	2,392.3	2,370.3	2,370.3	5.4	46.8	-153.62	317.6	5,531.2	5,624.6	5,573.5	51.05	110.175	
2,460.6	2,451.6	2,429.6	2,429.6	5.6	48.0	-153.68	317.6	5,531.2	5,635.9	5,583.5	52.37	107.619	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,468.2	2,468.2	5.7	48.8	-153.72	317.6	5,531.2	5,643.3	5,590.0	53.23	106.022	
2,559.0	2,547.9	2,525.9	2,525.9	5.9	49.9	-153.77	317.6	5,531.2	5,654.3	5,599.8	54.52	103.718	
2,600.0	2,588.0	2,566.0	2,566.0	6.1	50.7	-153.81	317.6	5,531.2	5,662.0	5,606.6	55.41	102.182	
2,657.5	2,644.2	2,622.2	2,622.2	6.3	51.9	-153.86	317.6	5,531.2	5,672.8	5,616.1	56.67	100.102	
2,700.0	2,685.8	2,663.8	2,663.8	6.4	52.7	-153.90	317.6	5,531.2	5,680.7	5,623.1	57.60	98.622	
2,755.9	2,740.5	2,718.5	2,718.5	6.6	53.8	-153.95	317.6	5,531.2	5,691.2	5,632.4	58.83	96.743	
2,800.0	2,783.6	2,761.6	2,761.6	6.8	54.7	-153.99	317.6	5,531.2	5,699.5	5,639.7	59.80	95.315	
2,854.3	2,836.7	2,814.7	2,814.7	7.0	55.8	-154.04	317.6	5,531.2	5,709.7	5,648.7	60.99	93.615	
2,900.0	2,881.4	2,859.4	2,859.4	7.2	56.7	-154.09	317.6	5,531.2	5,718.3	5,656.3	62.00	92.236	
2,952.7	2,933.0	2,911.0	2,911.0	7.4	57.7	-154.13	317.6	5,531.2	5,728.2	5,665.0	63.16	90.695	
3,000.0	2,979.2	2,957.2	2,957.2	7.6	58.6	-154.18	317.6	5,531.2	5,737.0	5,672.8	64.20	89.362	
3,051.2	3,029.3	3,007.3	3,007.3	7.8	59.6	-154.22	317.6	5,531.2	5,746.7	5,681.3	65.33	87.964	
3,100.0	3,077.1	3,055.1	3,055.1	8.0	60.6	-154.27	317.6	5,531.2	5,755.8	5,689.4	66.41	86.675	
3,149.6	3,125.6	3,103.6	3,103.6	8.2	61.6	-154.31	317.6	5,531.2	5,765.2	5,697.7	67.50	85.406	
3,200.0	3,174.9	3,152.9	3,152.9	8.4	62.6	-154.35	317.6	5,531.2	5,774.6	5,706.0	68.62	84.158	
3,248.0	3,221.8	3,199.8	3,199.8	8.6	63.5	-154.40	317.6	5,531.2	5,783.7	5,714.0	69.68	83.004	
3,300.0	3,272.7	3,250.7	3,250.7	8.9	64.5	-154.44	317.6	5,531.2	5,793.5	5,722.6	70.83	81.794	
3,346.4	3,318.1	3,296.1	3,296.1	9.0	65.4	-154.48	317.6	5,531.2	5,802.2	5,730.4	71.86	80.745	
3,400.0	3,370.5	3,348.5	3,348.5	9.3	66.5	-154.53	317.6	5,531.2	5,812.3	5,739.3	73.04	79.572	
3,444.9	3,414.4	3,392.4	3,392.4	9.5	67.4	-154.57	317.6	5,531.2	5,820.8	5,746.7	74.04	78.617	
3,500.0	3,468.3	3,446.3	3,446.3	9.7	68.5	-154.62	317.6	5,531.2	5,831.2	5,755.9	75.26	77.479	
3,543.3	3,510.7	3,488.7	3,488.7	9.9	69.3	-154.66	317.6	5,531.2	5,839.3	5,763.1	76.22	76.610	
3,600.0	3,566.1	3,544.1	3,544.1	10.1	70.4	-154.71	317.6	5,531.2	5,850.0	5,772.5	77.48	75.504	
3,641.7	3,606.9	3,584.9	3,584.9	10.3	71.2	-154.74	317.6	5,531.2	5,857.9	5,779.5	78.41	74.713	
3,700.0	3,664.0	3,642.0	3,642.0	10.6	72.4	-154.79	317.6	5,531.2	5,868.9	5,789.2	79.70	73.638	
3,740.1	3,703.2	3,681.2	3,681.2	10.7	73.2	-154.83	317.6	5,531.2	5,876.5	5,795.9	80.59	72.918	
3,800.0	3,761.8	3,739.8	3,739.8	11.0	74.4	-154.88	317.6	5,531.2	5,887.8	5,805.9	81.92	71.873	
3,837.4	3,798.3	3,776.3	3,776.3	11.2	75.1	-154.91	317.6	5,531.2	5,894.8	5,812.1	82.75	71.237	
3,838.6	3,799.5	3,777.5	3,777.5	11.2	75.1	-154.91	317.6	5,531.2	5,895.1	5,812.3	82.78	71.212	
3,900.0	3,859.7	3,837.7	3,837.7	11.4	76.3	-155.06	317.6	5,531.2	5,906.1	5,821.7	84.40	69.976	
3,937.0	3,896.1	3,874.1	3,874.1	11.5	77.1	-155.14	317.6	5,531.2	5,912.1	5,826.8	85.36	69.263	
4,000.0	3,958.3	3,936.3	3,936.3	11.7	78.3	-155.26	317.6	5,531.2	5,921.5	5,834.5	86.97	68.085	
4,035.4	3,993.3	3,971.3	3,971.3	11.8	79.0	-155.32	317.6	5,531.2	5,926.2	5,838.3	87.87	67.446	
4,100.0	4,057.4	4,035.4	4,035.4	12.0	80.3	-155.41	317.6	5,531.2	5,933.7	5,844.3	89.48	66.316	
4,133.8	4,091.0	4,069.0	4,069.0	12.1	81.0	-155.46	317.6	5,531.2	5,937.2	5,846.9	90.31	65.744	
4,200.0	4,156.8	4,134.8	4,134.8	12.2	82.3	-155.53	317.6	5,531.2	5,942.8	5,850.9	91.91	64.661	
4,232.3	4,189.0	4,167.0	4,167.0	12.3	82.9	-155.56	317.6	5,531.2	5,945.1	5,852.4	92.67	64.151	
4,300.0	4,256.6	4,234.6	4,234.6	12.4	84.3	-155.61	317.6	5,531.2	5,948.8	5,854.5	94.25	63.115	
4,330.7	4,287.3	4,265.3	4,265.3	12.5	84.9	-155.62	317.6	5,531.2	5,950.0	5,855.0	94.95	62.662	
4,400.0	4,356.6	4,334.6	4,334.6	12.6	86.3	-155.64	317.6	5,531.2	5,951.6	5,855.1	96.50	61.672	
4,429.1	4,385.7	4,363.7	4,363.7	12.6	86.9	-155.64	317.6	5,531.2	5,951.8	5,854.6	97.14	61.270	
4,437.2	4,393.8	4,371.8	4,371.8	12.7	87.1	84.77	317.6	5,531.2	5,951.8	5,852.5	99.26	59.959	
4,500.0	4,456.6	4,434.6	4,434.6	12.7	88.3	84.77	317.6	5,531.2	5,951.8	5,851.2	100.62	59.149	
4,527.5	4,484.1	4,462.1	4,462.1	12.8	88.9	84.77	317.6	5,531.2	5,951.8	5,850.6	101.22	58.798	
4,600.0	4,556.6	4,534.6	4,534.6	12.9	90.3	84.77	317.6	5,531.2	5,951.8	5,849.0	102.80	57.897	
4,626.0	4,582.6	4,560.6	4,560.6	12.9	90.9	84.77	317.6	5,531.2	5,951.8	5,848.4	103.37	57.580	
4,700.0	4,656.6	4,634.6	4,634.6	13.1	92.4	84.77	317.6	5,531.2	5,951.8	5,846.8	104.98	56.696	
4,724.4	4,681.0	4,659.0	4,659.0	13.1	92.8	84.77	317.6	5,531.2	5,951.8	5,846.3	105.51	56.410	
4,800.0	4,756.6	4,734.6	4,734.6	13.2	94.4	84.77	317.6	5,531.2	5,951.8	5,844.6	107.16	55.543	
4,822.8	4,779.4	4,757.4	4,757.4	13.3	94.8	84.77	317.6	5,531.2	5,951.8	5,844.1	107.66	55.286	
4,900.0	4,856.6	4,834.6	4,834.6	13.4	96.4	84.77	317.6	5,531.2	5,951.8	5,842.4	109.34	54.435	
4,921.2	4,877.8	4,855.8	4,855.8	13.4	96.8	84.77	317.6	5,531.2	5,951.8	5,842.0	109.80	54.205	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,934.6	4,934.6	13.6	98.4	84.77	317.6	5,531.2	5,951.8	5,840.3	111.52	53.369	
5,019.7	4,976.3	4,954.3	4,954.3	13.6	98.8	84.77	317.6	5,531.2	5,951.8	5,839.8	111.95	53.164	
5,100.0	5,056.6	5,034.6	5,034.6	13.7	100.4	84.77	317.6	5,531.2	5,951.8	5,838.1	113.71	52.344	
5,118.1	5,074.7	5,052.7	5,052.7	13.8	100.8	84.77	317.6	5,531.2	5,951.8	5,837.7	114.10	52.162	
5,200.0	5,156.6	5,134.6	5,134.6	13.9	102.4	84.77	317.6	5,531.2	5,951.8	5,835.9	115.89	51.357	
5,216.5	5,173.1	5,151.1	5,151.1	13.9	102.7	84.77	317.6	5,531.2	5,951.8	5,835.5	116.25	51.197	
5,300.0	5,256.6	5,234.6	5,234.6	14.1	104.4	84.77	317.6	5,531.2	5,951.8	5,833.7	118.08	50.405	
5,314.9	5,271.5	5,249.5	5,249.5	14.1	104.7	84.77	317.6	5,531.2	5,951.8	5,833.4	118.41	50.266	
5,400.0	5,356.6	5,334.6	5,334.6	14.2	106.4	84.77	317.6	5,531.2	5,951.8	5,831.5	120.27	49.488	
5,413.4	5,370.0	5,348.0	5,348.0	14.3	106.7	84.77	317.6	5,531.2	5,951.8	5,831.2	120.56	49.368	
5,500.0	5,456.6	5,434.6	5,434.6	14.4	108.4	84.77	317.6	5,531.2	5,951.8	5,829.3	122.46	48.603	
5,511.8	5,468.4	5,446.4	5,446.4	14.4	108.7	84.77	317.6	5,531.2	5,951.8	5,829.1	122.72	48.500	
5,600.0	5,556.6	5,534.6	5,534.6	14.6	110.5	84.77	317.6	5,531.2	5,951.8	5,827.1	124.65	47.748	
5,610.2	5,566.8	5,544.8	5,544.8	14.6	110.7	84.77	317.6	5,531.2	5,951.8	5,826.9	124.87	47.663	
5,700.0	5,656.6	5,634.6	5,634.6	14.8	112.5	84.77	317.6	5,531.2	5,951.8	5,824.9	126.84	46.923	
5,708.6	5,665.2	5,643.2	5,643.2	14.8	112.6	84.77	317.6	5,531.2	5,951.8	5,824.8	127.03	46.853	
5,800.0	5,756.6	5,734.6	5,734.6	14.9	114.5	84.77	317.6	5,531.2	5,951.8	5,822.7	129.04	46.125	
5,807.1	5,763.7	5,741.7	5,741.7	14.9	114.6	84.77	317.6	5,531.2	5,951.8	5,822.6	129.19	46.070	
5,900.0	5,856.6	5,834.6	5,834.6	15.1	116.5	84.77	317.6	5,531.2	5,951.8	5,820.6	131.23	45.354	
5,905.5	5,862.1	5,840.1	5,840.1	15.1	116.6	84.77	317.6	5,531.2	5,951.8	5,820.4	131.35	45.312	
6,000.0	5,956.6	5,934.6	5,934.6	15.3	118.5	84.77	317.6	5,531.2	5,951.8	5,818.4	133.43	44.607	
6,003.9	5,960.5	5,938.5	5,938.5	15.3	118.6	84.77	317.6	5,531.2	5,951.8	5,818.3	133.51	44.578	
6,100.0	6,056.6	6,034.6	6,034.6	15.5	120.5	84.77	317.6	5,531.2	5,951.8	5,816.2	135.62	43.885	
6,102.3	6,058.9	6,036.9	6,036.9	15.5	120.6	84.77	317.6	5,531.2	5,951.8	5,816.1	135.68	43.868	
6,200.0	6,156.6	6,134.6	6,134.6	15.7	122.5	84.77	317.6	5,531.2	5,951.8	5,814.0	137.82	43.185	
6,200.8	6,157.4	6,135.4	6,135.4	15.7	122.5	84.77	317.6	5,531.2	5,951.8	5,813.9	137.84	43.179	
6,272.2	6,228.8	6,206.8	6,206.8	15.8	124.0	84.77	317.6	5,531.2	5,951.8	5,812.4	139.41	42.693	
6,299.2	6,255.8	6,233.8	6,233.8	15.8	124.5	-5.23	317.6	5,531.2	5,951.3	5,813.0	138.31	43.028	
6,300.0	6,256.6	6,234.6	6,234.6	15.8	124.5	-5.23	317.6	5,531.2	5,951.2	5,812.9	138.32	43.024	
6,350.0	6,306.4	6,284.4	6,284.4	15.9	125.5	-5.26	317.6	5,531.2	5,947.6	5,808.9	138.66	42.893	
6,397.6	6,353.6	6,331.6	6,331.6	15.9	126.5	-5.32	317.6	5,531.2	5,940.9	5,802.5	138.35	42.940	
6,400.0	6,355.9	6,333.9	6,333.9	15.9	126.5	-5.32	317.6	5,531.2	5,940.5	5,802.1	138.32	42.947	
6,450.0	6,404.8	6,382.8	6,382.8	15.9	127.5	-5.41	317.6	5,531.2	5,929.9	5,792.6	137.29	43.194	
6,496.0	6,449.0	6,427.0	6,427.0	16.0	128.4	-5.52	317.6	5,531.2	5,917.2	5,781.5	135.72	43.600	
6,500.0	6,452.8	6,430.8	6,430.8	16.0	128.5	-5.54	317.6	5,531.2	5,916.0	5,780.5	135.55	43.644	
6,550.0	6,499.7	6,477.7	6,477.7	15.9	129.4	-5.70	317.6	5,531.2	5,898.8	5,765.7	133.12	44.311	
6,594.5	6,540.3	6,518.3	6,518.3	15.9	130.2	-5.87	317.6	5,531.2	5,880.8	5,750.4	130.38	45.104	
6,600.0	6,545.3	6,523.3	6,523.3	15.9	130.3	-5.90	317.6	5,531.2	5,878.4	5,748.4	130.01	45.216	
6,650.0	6,589.3	6,567.3	6,567.3	15.9	131.2	-6.14	317.6	5,531.2	5,854.8	5,728.6	126.21	46.389	
6,692.9	6,625.7	6,603.7	6,603.7	15.9	132.0	-6.40	317.6	5,531.2	5,832.3	5,709.8	122.44	47.634	
6,700.0	6,631.6	6,609.6	6,609.6	15.9	132.1	-6.45	317.6	5,531.2	5,828.3	5,706.5	121.77	47.863	
6,750.0	6,671.9	6,649.9	6,649.9	15.9	132.9	-6.82	317.6	5,531.2	5,798.9	5,682.2	116.71	49.687	
6,791.3	6,703.6	6,681.6	6,681.6	15.9	133.5	-7.18	317.6	5,531.2	5,772.5	5,660.4	112.09	51.498	
6,800.0	6,710.1	6,688.1	6,688.1	15.9	133.6	-7.27	317.6	5,531.2	5,766.8	5,655.7	111.08	51.917	
6,850.0	6,745.9	6,723.9	6,723.9	16.0	134.4	-7.82	317.6	5,531.2	5,732.1	5,627.1	104.94	54.621	
6,889.7	6,772.6	6,750.6	6,750.6	16.1	134.9	-8.35	317.6	5,531.2	5,702.7	5,603.0	99.77	57.161	
6,900.0	6,779.2	6,757.2	6,757.2	16.1	135.0	-8.50	317.6	5,531.2	5,694.9	5,596.5	98.40	57.877	
6,950.0	6,809.8	6,787.8	6,787.8	16.3	135.7	-9.36	317.6	5,531.2	5,655.6	5,564.0	91.58	61.758	
6,988.2	6,831.3	6,809.3	6,809.3	16.4	136.1	-10.16	317.6	5,531.2	5,624.2	5,537.9	86.32	65.158	
7,000.0	6,837.6	6,815.6	6,815.6	16.5	136.2	-10.44	317.6	5,531.2	5,614.3	5,529.6	84.70	66.284	
7,050.0	6,862.5	6,840.5	6,840.5	16.9	136.7	-11.85	317.6	5,531.2	5,571.1	5,492.9	78.12	71.313	
7,086.6	6,878.7	6,856.7	6,856.7	17.2	137.0	-13.18	317.6	5,531.2	5,538.4	5,464.6	73.84	75.002	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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		
7,100.0	6,884.2	6,862.2	6,862.2	17.3	137.1	-13.74	317.6	5,531.2	5,526.3	5,453.8	72.47	76.254		
7,150.0	6,902.7	6,880.7	6,880.7	17.8	137.5	-16.38	317.6	5,531.2	5,480.1	5,411.2	68.91	79.527		
7,185.0	6,913.8	6,891.8	6,891.8	18.3	137.7	-18.92	317.6	5,531.2	5,447.0	5,378.3	68.72	79.263		
7,200.0	6,918.0	6,896.0	6,896.0	18.5	137.8	-20.25	317.6	5,531.2	5,432.7	5,363.2	69.51	78.160		
7,250.0	6,929.9	6,907.9	6,907.9	19.2	138.1	-26.38	317.6	5,531.2	5,384.4	5,306.7	77.67	69.327		
7,283.4	6,936.0	6,914.0	6,914.0	19.7	138.2	-32.78	317.6	5,531.2	5,351.7	5,261.9	89.73	59.644		
7,300.0	6,938.4	6,916.4	6,916.4	20.0	138.2	-37.05	317.6	5,531.2	5,335.4	5,237.1	98.27	54.295		
7,350.0	6,943.4	6,921.4	6,921.4	20.9	138.3	-57.43	317.6	5,531.2	5,285.9	5,151.2	134.67	39.252		
7,381.9	6,944.8	6,922.8	6,922.8	21.4	138.4	-78.33	317.6	5,531.2	5,254.2	5,097.8	156.49	33.577		
7,403.7	6,945.0	6,923.0	6,923.0	21.8	138.4	-94.98	317.6	5,531.2	5,232.5	5,072.9	159.65	32.775		
7,480.3	6,944.3	6,922.3	6,922.3	23.3	138.4	-94.91	317.6	5,531.2	5,156.4	4,995.2	161.13	32.000		
7,500.0	6,944.1	6,922.1	6,922.1	23.7	138.4	-94.89	317.6	5,531.2	5,136.8	4,975.2	161.52	31.803		
7,578.7	6,943.4	6,921.4	6,921.4	25.4	138.3	-94.81	317.6	5,531.2	5,058.5	4,895.3	163.16	31.003		
7,600.0	6,943.2	6,921.2	6,921.2	25.8	138.3	-94.79	317.6	5,531.2	5,037.3	4,873.7	163.60	30.790		
7,677.1	6,942.5	6,920.5	6,920.5	27.5	138.3	-94.72	317.6	5,531.2	4,960.6	4,795.3	165.31	30.008		
7,700.0	6,942.3	6,920.3	6,920.3	28.0	138.3	-94.69	317.6	5,531.2	4,937.9	4,772.1	165.82	29.779		
7,775.6	6,941.6	6,919.6	6,919.6	29.8	138.3	-94.62	317.6	5,531.2	4,862.8	4,695.3	167.57	29.020		
7,800.0	6,941.4	6,919.4	6,919.4	30.3	138.3	-94.60	317.6	5,531.2	4,838.6	4,670.4	168.14	28.777		
7,874.0	6,940.7	6,918.7	6,918.7	32.1	138.3	-94.53	317.6	5,531.2	4,765.0	4,595.1	169.91	28.045		
7,900.0	6,940.5	6,918.5	6,918.5	32.7	138.3	-94.50	317.6	5,531.2	4,739.2	4,568.7	170.53	27.791		
7,972.4	6,939.8	6,917.8	6,917.8	34.5	138.3	-94.43	317.6	5,531.2	4,667.3	4,495.0	172.31	27.086		
8,000.0	6,939.6	6,917.6	6,917.6	35.2	138.3	-94.41	317.6	5,531.2	4,639.9	4,466.9	172.99	26.822		
8,070.8	6,938.9	6,916.9	6,916.9	37.0	138.2	-94.34	317.6	5,531.2	4,569.5	4,394.8	174.76	26.147		
8,100.0	6,938.7	6,916.7	6,916.7	37.7	138.2	-94.31	317.6	5,531.2	4,540.6	4,365.1	175.49	25.874		
8,169.3	6,938.0	6,916.0	6,916.0	39.5	138.2	-94.25	317.6	5,531.2	4,471.8	4,294.6	177.25	25.228		
8,200.0	6,937.7	6,915.7	6,915.7	40.3	138.2	-94.22	317.6	5,531.2	4,441.3	4,263.3	178.04	24.946		
8,267.7	6,937.1	6,915.1	6,915.1	42.0	138.2	-94.15	317.6	5,531.2	4,374.1	4,194.4	179.78	24.331		
8,300.0	6,936.8	6,914.8	6,914.8	42.8	138.2	-94.12	317.6	5,531.2	4,342.1	4,161.5	180.61	24.041		
8,366.1	6,936.2	6,914.2	6,914.2	44.6	138.2	-94.06	317.6	5,531.2	4,276.5	4,094.2	182.33	23.454		
8,400.0	6,935.9	6,913.9	6,913.9	45.5	138.2	-94.03	317.6	5,531.2	4,242.9	4,059.7	183.22	23.158		
8,464.5	6,935.3	6,913.3	6,913.3	47.2	138.2	-93.96	317.6	5,531.2	4,178.9	3,994.0	184.91	22.599		
8,500.0	6,935.0	6,913.0	6,913.0	48.1	138.2	-93.93	317.6	5,531.2	4,143.7	3,957.9	185.84	22.297		
8,563.0	6,934.5	6,912.5	6,912.5	49.8	138.2	-93.87	317.6	5,531.2	4,081.3	3,893.8	187.51	21.766		
8,600.0	6,934.1	6,912.1	6,912.1	50.7	138.2	-93.83	317.6	5,531.2	4,044.6	3,856.1	188.49	21.458		
8,661.4	6,933.6	6,911.6	6,911.6	52.4	138.1	-93.78	317.6	5,531.2	3,983.8	3,793.7	190.12	20.954		
8,700.0	6,933.2	6,911.2	6,911.2	53.4	138.1	-93.74	317.6	5,531.2	3,945.5	3,754.4	191.15	20.641		
8,759.8	6,932.7	6,910.7	6,910.7	55.0	138.1	-93.68	317.6	5,531.2	3,886.3	3,693.6	192.75	20.162		
8,800.0	6,932.3	6,910.3	6,910.3	56.1	138.1	-93.64	317.6	5,531.2	3,846.5	3,652.7	193.83	19.845		
8,858.2	6,931.8	6,909.8	6,909.8	57.7	138.1	-93.59	317.6	5,531.2	3,788.9	3,593.5	195.39	19.391		
8,900.0	6,931.4	6,909.4	6,909.4	58.8	138.1	-93.55	317.6	5,531.2	3,747.6	3,551.0	196.52	19.070		
8,956.7	6,930.9	6,908.9	6,908.9	60.3	138.1	-93.49	317.6	5,531.2	3,691.5	3,493.4	198.05	18.640		
9,000.0	6,930.5	6,908.5	6,908.5	61.5	138.1	-93.45	317.6	5,531.2	3,648.6	3,449.4	199.21	18.315		
9,055.1	6,930.0	6,908.0	6,908.0	63.0	138.1	-93.40	317.6	5,531.2	3,594.2	3,393.5	200.71	17.908		
9,100.0	6,929.6	6,907.6	6,907.6	64.2	138.1	-93.36	317.6	5,531.2	3,549.8	3,347.9	201.92	17.580		
9,153.5	6,929.1	6,907.1	6,907.1	65.6	138.1	-93.30	317.6	5,531.2	3,496.9	3,293.5	203.38	17.194		
9,200.0	6,928.7	6,906.7	6,906.7	66.9	138.0	-93.26	317.6	5,531.2	3,451.0	3,246.4	204.64	16.864		
9,251.9	6,928.2	6,906.2	6,906.2	68.3	138.0	-93.21	317.6	5,531.2	3,399.7	3,193.7	206.05	16.499		
9,300.0	6,927.8	6,905.8	6,905.8	69.6	138.0	-93.16	317.6	5,531.2	3,352.3	3,144.9	207.36	16.166		
9,350.4	6,927.3	6,905.3	6,905.3	71.0	138.0	-93.12	317.6	5,531.2	3,302.6	3,093.8	208.74	15.822		
9,400.0	6,926.9	6,904.9	6,904.9	72.4	138.0	-93.07	317.6	5,531.2	3,253.6	3,043.6	210.09	15.487		
9,448.8	6,926.4	6,904.4	6,904.4	73.7	138.0	-93.02	317.6	5,531.2	3,205.5	2,994.1	211.43	15.162		
9,500.0	6,926.0	6,904.0	6,904.0	75.1	138.0	-92.97	317.6	5,531.2	3,155.1	2,942.3	212.83	14.825		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,903.5	6,903.5	76.4	138.0	-92.93	317.6	5,531.2	3,108.6	2,894.5	214.12	14.518		
9,600.0	6,925.1	6,903.1	6,903.1	77.9	138.0	-92.88	317.6	5,531.2	3,056.6	2,841.1	215.57	14.180		
9,645.6	6,924.6	6,902.6	6,902.6	79.1	138.0	-92.83	317.6	5,531.2	3,011.7	2,794.9	216.82	13.890		
9,700.0	6,924.1	6,902.1	6,902.1	80.6	138.0	-92.78	317.6	5,531.2	2,958.3	2,740.0	218.31	13.551		
9,744.1	6,923.7	6,901.7	6,901.7	81.8	137.9	-92.74	317.6	5,531.2	2,915.0	2,695.4	219.52	13.279		
9,800.0	6,923.2	6,901.2	6,901.2	83.4	137.9	-92.69	317.6	5,531.2	2,860.0	2,639.0	221.06	12.938		
9,842.5	6,922.9	6,900.9	6,900.9	84.5	137.9	-92.64	317.6	5,531.2	2,818.3	2,596.1	222.23	12.682		
9,900.0	6,922.3	6,900.3	6,900.3	86.1	137.9	-92.59	317.6	5,531.2	2,761.9	2,538.1	223.81	12.340		
9,940.9	6,922.0	6,900.0	6,900.0	87.2	137.9	-92.55	317.6	5,531.2	2,721.8	2,496.9	224.94	12.100		
10,000.0	6,921.4	6,899.4	6,899.4	88.9	137.9	-92.49	317.6	5,531.2	2,663.9	2,437.4	226.56	11.758		
10,039.3	6,921.1	6,899.1	6,899.1	90.0	137.9	-92.46	317.6	5,531.2	2,625.4	2,397.8	227.65	11.533		
10,100.0	6,920.5	6,898.5	6,898.5	91.6	137.9	-92.40	317.6	5,531.2	2,566.1	2,336.8	229.32	11.190		
10,137.8	6,920.2	6,898.2	6,898.2	92.7	137.9	-92.36	317.6	5,531.2	2,529.2	2,298.8	230.36	10.979		
10,200.0	6,919.6	6,897.6	6,897.6	94.4	137.9	-92.30	317.6	5,531.2	2,468.5	2,236.4	232.08	10.636		
10,236.2	6,919.3	6,897.3	6,897.3	95.4	137.9	-92.27	317.6	5,531.2	2,433.2	2,200.1	233.08	10.439		
10,300.0	6,918.7	6,896.7	6,896.7	97.2	137.8	-92.21	317.6	5,531.2	2,371.0	2,136.2	234.84	10.096		
10,334.6	6,918.4	6,896.4	6,896.4	98.1	137.8	-92.17	317.6	5,531.2	2,337.3	2,101.5	235.80	9.912		
10,400.0	6,917.8	6,895.8	6,895.8	99.9	137.8	-92.11	317.6	5,531.2	2,273.8	2,036.2	237.61	9.569		
10,433.0	6,917.5	6,895.5	6,895.5	100.9	137.8	-92.08	317.6	5,531.2	2,241.7	2,003.2	238.52	9.398		
10,500.0	6,916.9	6,894.9	6,894.9	102.7	137.8	-92.02	317.6	5,531.2	2,176.8	1,936.4	240.38	9.056		
10,531.5	6,916.6	6,894.6	6,894.6	103.6	137.8	-91.99	317.6	5,531.2	2,146.3	1,905.1	241.25	8.897		
10,600.0	6,916.0	6,894.0	6,894.0	105.5	137.8	-91.92	317.6	5,531.2	2,080.1	1,837.0	243.14	8.555		
10,629.9	6,915.7	6,893.7	6,893.7	106.3	137.8	-91.89	317.6	5,531.2	2,051.3	1,807.3	243.97	8.408		
10,700.0	6,915.1	6,893.1	6,893.1	108.3	137.8	-91.82	317.6	5,531.2	1,983.7	1,737.8	245.91	8.067		
10,728.3	6,914.8	6,892.8	6,892.8	109.1	137.8	-91.80	317.6	5,531.2	1,956.5	1,709.8	246.70	7.931		
10,800.0	6,914.2	6,892.2	6,892.2	111.0	137.8	-91.73	317.6	5,531.2	1,887.8	1,639.1	248.68	7.591		
10,826.7	6,913.9	6,891.9	6,891.9	111.8	137.7	-91.70	317.6	5,531.2	1,862.2	1,612.7	249.42	7.466		
10,900.0	6,913.3	6,891.3	6,891.3	113.8	137.7	-91.63	317.6	5,531.2	1,792.2	1,540.8	251.45	7.127		
10,925.2	6,913.1	6,891.1	6,891.1	114.5	137.7	-91.61	317.6	5,531.2	1,768.2	1,516.1	252.15	7.013		
11,000.0	6,912.4	6,890.4	6,890.4	116.6	137.7	-91.54	317.6	5,531.2	1,697.2	1,442.9	254.23	6.676		
11,023.6	6,912.2	6,890.2	6,890.2	117.3	137.7	-91.51	317.6	5,531.2	1,674.8	1,419.9	254.88	6.571		
11,100.0	6,911.5	6,889.5	6,889.5	119.4	137.7	-91.44	317.6	5,531.2	1,602.7	1,345.7	257.00	6.236		
11,122.0	6,911.3	6,889.3	6,889.3	120.0	137.7	-91.42	317.6	5,531.2	1,582.0	1,324.4	257.61	6.141		
11,200.0	6,910.6	6,888.6	6,888.6	122.2	137.7	-91.35	317.6	5,531.2	1,509.0	1,249.2	259.78	5.809		
11,220.4	6,910.4	6,888.4	6,888.4	122.7	137.7	-91.33	317.6	5,531.2	1,489.9	1,229.6	260.34	5.723		
11,300.0	6,909.7	6,887.7	6,887.7	125.0	137.7	-91.25	317.6	5,531.2	1,416.2	1,153.6	262.55	5.394		
11,318.9	6,909.5	6,887.5	6,887.5	125.5	137.7	-91.23	317.6	5,531.2	1,398.7	1,135.7	263.07	5.317		
11,400.0	6,908.8	6,886.8	6,886.8	127.7	137.6	-91.15	317.6	5,531.2	1,324.3	1,059.0	265.33	4.991		
11,417.3	6,908.6	6,886.6	6,886.6	128.2	137.6	-91.14	317.6	5,531.2	1,308.6	1,042.8	265.81	4.923		
11,500.0	6,907.9	6,885.9	6,885.9	130.5	137.6	-91.06	317.6	5,531.2	1,233.8	965.7	268.10	4.602		
11,515.7	6,907.7	6,885.7	6,885.7	131.0	137.6	-91.04	317.6	5,531.2	1,219.7	951.1	268.54	4.542		
11,600.0	6,907.0	6,885.0	6,885.0	133.3	137.6	-90.96	317.6	5,531.2	1,144.8	873.9	270.88	4.226		
11,614.1	6,906.8	6,884.8	6,884.8	133.7	137.6	-90.95	317.6	5,531.2	1,132.4	861.1	271.27	4.174		
11,700.0	6,906.0	6,884.0	6,884.0	136.1	137.6	-90.87	317.6	5,531.2	1,057.8	784.1	273.66	3.865		
11,712.6	6,905.9	6,883.9	6,883.9	136.5	137.6	-90.86	317.6	5,531.2	1,047.0	773.0	274.01	3.821		
11,800.0	6,905.1	6,883.1	6,883.1	138.9	137.6	-90.77	317.6	5,531.2	973.3	696.9	276.43	3.521		
11,811.0	6,905.0	6,883.0	6,883.0	139.2	137.6	-90.76	317.6	5,531.2	964.2	687.4	276.74	3.484		
11,900.0	6,904.2	6,882.2	6,882.2	141.7	137.6	-90.68	317.6	5,531.2	892.0	612.8	279.21	3.195		
11,909.4	6,904.2	6,882.2	6,882.2	141.9	137.6	-90.67	317.6	5,531.2	884.5	605.1	279.47	3.165		
12,000.0	6,903.3	6,881.3	6,881.3	144.5	137.5	-90.58	317.6	5,531.2	814.9	532.9	281.99	2.890		
12,007.8	6,903.3	6,881.3	6,881.3	144.7	137.5	-90.57	317.6	5,531.2	809.0	526.8	282.21	2.867		
12,100.0	6,902.4	6,880.4	6,880.4	147.3	137.5	-90.49	317.6	5,531.2	743.2	458.5	284.77	2.610		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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
12,106.3	6,902.4	6,880.4	6,880.4	147.4	137.5	-90.48	317.6	5,531.2	738.9	454.0	284.94	2.593	
12,200.0	6,901.5	6,879.5	6,879.5	150.1	137.5	-90.39	317.6	5,531.2	678.8	391.2	287.54	2.361	
12,204.7	6,901.5	6,879.5	6,879.5	150.2	137.5	-90.39	317.6	5,531.2	676.0	388.3	287.67	2.350	
12,300.0	6,900.6	6,878.6	6,878.6	152.9	137.5	-90.29	317.6	5,531.2	623.8	333.4	290.32	2.149	
12,303.1	6,900.6	6,878.6	6,878.6	152.9	137.5	-90.29	317.6	5,531.2	622.2	331.8	290.41	2.143	
12,400.0	6,899.7	6,877.7	6,877.7	155.6	137.5	-90.20	317.6	5,531.2	580.9	287.8	293.10	1.982	
12,401.5	6,899.7	6,877.7	6,877.7	155.7	137.5	-90.20	317.6	5,531.2	580.3	287.2	293.14	1.980	
12,500.0	6,898.8	6,876.8	6,876.8	158.4	137.4	-90.10	317.6	5,531.2	553.0	257.1	295.88	1.869	
12,598.4	6,897.9	6,875.9	6,875.9	161.2	137.4	-90.01	317.6	5,531.2	542.4	243.8	298.61	1.816	
12,600.0	6,897.9	6,875.9	6,875.9	161.2	137.4	-90.01	317.6	5,531.2	542.3	243.7	298.65	1.816	
12,608.3	6,897.8	6,875.8	6,875.8	161.5	137.4	-90.00	317.6	5,531.2	542.3	243.4	298.88	1.814 CC, ES, SF	
12,696.8	6,897.0	6,875.0	6,875.0	163.9	137.4	-89.92	317.6	5,531.2	549.5	248.1	301.34	1.823	
12,700.0	6,897.0	6,875.0	6,875.0	164.0	137.4	-89.91	317.6	5,531.2	550.0	248.6	301.43	1.825	
12,795.2	6,896.1	6,874.1	6,874.1	166.7	137.4	-89.82	317.6	5,531.2	573.6	269.5	304.08	1.886	
12,800.0	6,896.1	6,874.1	6,874.1	166.8	137.4	-89.82	317.6	5,531.2	575.2	271.0	304.21	1.891	
12,893.7	6,895.3	6,873.3	6,873.3	169.4	137.4	-89.73	317.6	5,531.2	612.8	306.0	306.81	1.997	
12,900.0	6,895.2	6,873.2	6,873.2	169.6	137.4	-89.72	317.6	5,531.2	615.8	308.8	306.98	2.006	
12,992.1	6,894.4	6,872.4	6,872.4	172.2	137.4	-89.63	317.6	5,531.2	664.4	354.8	309.54	2.146	
13,000.0	6,894.3	6,872.3	6,872.3	172.4	137.4	-89.63	317.6	5,531.2	669.0	359.2	309.76	2.160	
13,090.5	6,893.5	6,871.5	6,871.5	175.0	137.3	-89.54	317.6	5,531.2	725.7	413.4	312.27	2.324	
13,100.0	6,893.4	6,871.4	6,871.4	175.2	137.3	-89.53	317.6	5,531.2	732.0	419.5	312.53	2.342	
13,188.9	6,892.6	6,870.6	6,870.6	177.7	137.3	-89.45	317.6	5,531.2	794.5	479.5	315.00	2.522	
13,200.0	6,892.5	6,870.5	6,870.5	178.0	137.3	-89.44	317.6	5,531.2	802.6	487.3	315.31	2.545	
13,287.4	6,891.7	6,869.7	6,869.7	180.5	137.3	-89.35	317.6	5,531.2	869.0	551.3	317.73	2.735	
13,300.0	6,891.6	6,869.6	6,869.6	180.8	137.3	-89.34	317.6	5,531.2	878.9	560.9	318.08	2.763	
13,385.8	6,890.8	6,868.8	6,868.8	183.2	137.3	-89.26	317.6	5,531.2	947.9	627.5	320.46	2.958	
13,400.0	6,890.7	6,868.7	6,868.7	183.6	137.3	-89.24	317.6	5,531.2	959.6	638.8	320.86	2.991	
13,484.2	6,889.9	6,867.9	6,867.9	186.0	137.3	-89.16	317.6	5,531.2	1,030.2	707.0	323.19	3.188	
13,500.0	6,889.8	6,867.8	6,867.8	186.4	137.3	-89.15	317.6	5,531.2	1,043.6	720.0	323.63	3.225	
13,582.6	6,889.0	6,867.0	6,867.0	188.7	137.2	-89.07	317.6	5,531.2	1,115.1	789.2	325.92	3.421	
13,600.0	6,888.9	6,866.9	6,866.9	189.2	137.2	-89.05	317.6	5,531.2	1,130.3	803.9	326.40	3.463	
13,681.1	6,888.1	6,866.1	6,866.1	191.5	137.2	-88.98	317.6	5,531.2	1,202.0	873.4	328.65	3.657	
13,700.0	6,888.0	6,866.0	6,866.0	192.0	137.2	-88.96	317.6	5,531.2	1,219.0	889.8	329.17	3.703	
13,779.5	6,887.3	6,865.3	6,865.3	194.2	137.2	-88.88	317.6	5,531.2	1,290.6	959.3	331.38	3.895	
13,800.0	6,887.1	6,865.1	6,865.1	194.8	137.2	-88.86	317.6	5,531.2	1,309.3	977.3	331.95	3.944	
13,877.9	6,886.4	6,864.4	6,864.4	197.0	137.2	-88.79	317.6	5,531.2	1,380.6	1,046.5	334.10	4.132	
13,900.0	6,886.2	6,864.2	6,864.2	197.6	137.2	-88.77	317.6	5,531.2	1,400.9	1,066.2	334.72	4.185	
13,976.3	6,885.5	6,863.5	6,863.5	199.7	137.2	-88.70	317.6	5,531.2	1,471.6	1,134.8	336.83	4.369	
14,000.0	6,885.3	6,863.3	6,863.3	200.4	137.2	-88.67	317.6	5,531.2	1,493.6	1,156.1	337.49	4.426	
14,074.8	6,884.6	6,862.6	6,862.6	202.5	137.2	-88.60	317.6	5,531.2	1,563.5	1,223.9	339.56	4.605	
14,100.0	6,884.4	6,862.4	6,862.4	203.2	137.2	-88.58	317.6	5,531.2	1,587.2	1,246.9	340.25	4.665	
14,173.2	6,883.7	6,861.7	6,861.7	205.3	137.1	-88.51	317.6	5,531.2	1,656.2	1,313.9	342.28	4.839	
14,200.0	6,883.5	6,861.5	6,861.5	206.0	137.1	-88.48	317.6	5,531.2	1,681.5	1,338.5	343.02	4.902	
14,271.6	6,882.8	6,860.8	6,860.8	208.0	137.1	-88.41	317.6	5,531.2	1,749.5	1,404.5	345.01	5.071	
14,300.0	6,882.6	6,860.6	6,860.6	208.8	137.1	-88.39	317.6	5,531.2	1,776.5	1,430.7	345.79	5.137	
14,370.0	6,881.9	6,859.9	6,859.9	210.8	137.1	-88.32	317.6	5,531.2	1,843.3	1,495.6	347.73	5.301	
14,400.0	6,881.7	6,859.7	6,859.7	211.6	137.1	-88.29	317.6	5,531.2	1,871.9	1,523.4	348.56	5.371	
14,468.5	6,881.0	6,859.0	6,859.0	213.5	137.1	-88.23	317.6	5,531.2	1,937.6	1,587.1	350.45	5.529	
14,500.0	6,880.8	6,858.8	6,858.8	214.4	137.1	-88.20	317.6	5,531.2	1,967.9	1,616.5	351.32	5.601	
14,566.9	6,880.2	6,858.2	6,858.2	216.3	137.1	-88.13	317.6	5,531.2	2,032.2	1,679.1	353.17	5.754	
14,584.2	6,880.0	6,858.0	6,858.0	216.8	137.1	-88.12	317.6	5,531.2	2,048.9	1,695.2	353.65	5.794	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	69.78	1,501.3	4,076.5	4,344.3				
98.4	98.4	65.4	65.4	0.1	0.5	69.78	1,501.3	4,076.5	4,344.1	4,343.6	0.54	8,079.007	
100.0	100.0	67.0	67.0	0.1	0.5	69.78	1,501.3	4,076.5	4,344.1	4,343.6	0.55	7,892.968	
196.8	196.8	163.8	163.8	0.3	2.2	69.78	1,501.3	4,076.5	4,344.1	4,341.6	2.54	1,710.135	
200.0	200.0	167.0	167.0	0.3	2.3	69.78	1,501.3	4,076.5	4,344.1	4,341.5	2.62	1,655.876	
295.3	295.3	262.3	262.3	0.5	4.4	69.78	1,501.3	4,076.5	4,344.1	4,339.2	4.93	880.848	
300.0	300.0	267.0	267.0	0.5	4.5	69.78	1,501.3	4,076.5	4,344.1	4,339.1	5.04	861.805	
393.7	393.7	360.7	360.7	0.7	6.4	69.78	1,501.3	4,076.5	4,344.1	4,337.0	7.18	605.235	
400.0	400.0	367.0	367.0	0.8	6.6	69.78	1,501.3	4,076.5	4,344.1	4,336.8	7.32	593.429	
492.1	492.1	459.1	459.1	1.0	8.4	69.78	1,501.3	4,076.5	4,344.1	4,334.7	9.40	462.121	
500.0	500.0	467.0	467.0	1.0	8.6	69.78	1,501.3	4,076.5	4,344.1	4,334.6	9.58	453.560	
590.5	590.5	557.5	557.5	1.2	10.4	69.78	1,501.3	4,076.5	4,344.1	4,332.5	11.61	374.030	
600.0	600.0	567.0	567.0	1.2	10.6	69.78	1,501.3	4,076.5	4,344.1	4,332.3	11.83	367.315	
689.0	689.0	656.0	656.0	1.4	12.4	69.78	1,501.3	4,076.5	4,344.1	4,330.3	13.82	314.247	
700.0	700.0	667.0	667.0	1.4	12.6	69.78	1,501.3	4,076.5	4,344.1	4,330.1	14.07	308.723	
787.4	787.4	754.4	754.4	1.6	14.4	69.78	1,501.3	4,076.5	4,344.1	4,328.1	16.03	270.984	
800.0	800.0	767.0	767.0	1.7	14.7	69.78	1,501.3	4,076.5	4,344.1	4,327.8	16.31	266.293	
885.8	885.8	852.8	852.8	1.9	16.4	69.78	1,501.3	4,076.5	4,344.1	4,325.9	18.24	238.212	
900.0	900.0	867.0	867.0	1.9	16.7	69.78	1,501.3	4,076.5	4,344.1	4,325.6	18.55	234.136	
984.2	984.2	951.2	951.2	2.1	18.4	69.78	1,501.3	4,076.5	4,344.1	4,323.7	20.44	212.523	
1,000.0	1,000.0	967.0	967.0	2.1	18.7	69.78	1,501.3	4,076.5	4,344.1	4,323.3	20.79	208.919	
1,082.7	1,082.7	1,049.7	1,049.7	2.3	20.3	69.78	1,501.3	4,076.5	4,344.1	4,321.5	22.64	191.842	
1,100.0	1,100.0	1,067.0	1,067.0	2.3	20.7	69.78	1,501.3	4,076.5	4,344.1	4,321.1	23.03	188.612	
1,181.1	1,181.1	1,148.1	1,148.1	2.5	22.3	69.78	1,501.3	4,076.5	4,344.1	4,319.3	24.85	174.833	
1,200.0	1,200.0	1,167.0	1,167.0	2.6	22.7	69.78	1,501.3	4,076.5	4,344.1	4,318.9	25.27	171.907	
1,279.5	1,279.5	1,246.5	1,246.5	2.7	24.3	69.78	1,501.3	4,076.5	4,344.1	4,317.1	27.05	160.597	
1,300.0	1,300.0	1,267.0	1,267.0	2.8	24.7	69.78	1,501.3	4,076.5	4,344.1	4,316.6	27.51	157.922	
1,377.9	1,377.9	1,344.9	1,344.9	3.0	26.3	69.78	1,501.3	4,076.5	4,344.1	4,314.9	29.25	148.506	
1,400.0	1,400.0	1,367.0	1,367.0	3.0	26.7	69.78	1,501.3	4,076.5	4,344.1	4,314.4	29.75	146.043	
1,476.4	1,476.4	1,443.4	1,443.4	3.2	28.3	69.78	1,501.3	4,076.5	4,344.1	4,312.7	31.45	138.109	
1,500.0	1,500.0	1,467.0	1,467.0	3.2	28.7	69.78	1,501.3	4,076.5	4,344.1	4,312.2	31.98	135.827	
1,574.8	1,574.8	1,541.8	1,541.8	3.4	30.3	69.78	1,501.3	4,076.5	4,344.1	4,310.5	33.66	129.074	
1,600.0	1,600.0	1,567.0	1,567.0	3.5	30.8	69.78	1,501.3	4,076.5	4,344.1	4,309.9	34.22	126.948	
1,650.0	1,650.0	1,617.0	1,617.0	3.6	31.8	69.78	1,501.3	4,076.5	4,344.1	4,308.8	35.34	122.930	
1,673.2	1,673.2	1,640.2	1,640.2	3.6	32.2	-170.63	1,501.3	4,076.5	4,344.2	4,308.4	35.85	121.172	
1,700.0	1,700.0	1,667.0	1,667.0	3.7	32.8	-170.63	1,501.3	4,076.5	4,344.6	4,308.1	36.44	119.224	
1,771.6	1,771.6	1,738.6	1,738.6	3.8	34.2	-170.63	1,501.3	4,076.5	4,346.7	4,308.7	37.99	114.428	
1,800.0	1,799.9	1,766.9	1,766.9	3.9	34.8	-170.63	1,501.3	4,076.5	4,348.0	4,309.4	38.59	112.672	
1,870.1	1,869.9	1,836.9	1,836.9	4.0	36.2	-170.62	1,501.3	4,076.5	4,352.5	4,312.4	40.07	108.631	
1,900.0	1,899.7	1,866.7	1,866.7	4.1	36.8	-170.62	1,501.3	4,076.5	4,354.9	4,314.2	40.69	107.032	
1,968.5	1,967.8	1,934.8	1,934.8	4.2	38.2	-170.61	1,501.3	4,076.5	4,361.6	4,319.5	42.09	103.623	
2,000.0	1,999.1	1,966.1	1,966.1	4.3	38.8	-170.61	1,501.3	4,076.5	4,365.2	4,322.5	42.72	102.172	
2,066.9	2,065.5	2,032.5	2,032.5	4.4	40.1	-170.60	1,501.3	4,076.5	4,374.0	4,330.0	44.05	99.297	
2,100.0	2,098.2	2,065.2	2,065.2	4.5	40.8	-170.60	1,501.3	4,076.5	4,378.9	4,334.2	44.69	97.983	
2,165.3	2,162.6	2,129.6	2,129.6	4.7	42.1	-170.58	1,501.3	4,076.5	4,389.8	4,343.8	45.94	95.563	
2,200.0	2,196.6	2,163.6	2,163.6	4.7	42.8	-170.58	1,501.3	4,076.5	4,396.1	4,349.5	46.58	94.378	
2,249.9	2,245.5	2,212.5	2,212.5	4.9	43.7	-170.56	1,501.3	4,076.5	4,405.9	4,358.4	47.49	92.776	
2,263.8	2,259.1	2,226.1	2,226.1	4.9	44.0	-170.57	1,501.3	4,076.5	4,408.7	4,361.0	47.79	92.257	
2,300.0	2,294.5	2,261.5	2,261.5	5.0	44.7	-170.59	1,501.3	4,076.5	4,416.2	4,367.6	48.56	90.939	
2,362.2	2,355.4	2,322.4	2,322.4	5.2	46.0	-170.61	1,501.3	4,076.5	4,428.9	4,379.0	49.90	88.762	
2,400.0	2,392.3	2,359.3	2,359.3	5.4	46.7	-170.63	1,501.3	4,076.5	4,436.7	4,386.0	50.71	87.499	
2,460.6	2,451.6	2,418.6	2,418.6	5.6	47.9	-170.66	1,501.3	4,076.5	4,449.1	4,397.1	52.01	85.549	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,457.2	2,457.2	5.7	48.7	-170.67	1,501.3	4,076.5	4,457.2	4,404.4	52.85	84.330	
2,559.0	2,547.9	2,514.9	2,514.9	5.9	49.8	-170.70	1,501.3	4,076.5	4,469.3	4,415.2	54.13	82.573	
2,600.0	2,588.0	2,555.0	2,555.0	6.1	50.6	-170.72	1,501.3	4,076.5	4,477.7	4,422.7	55.01	81.401	
2,657.5	2,644.2	2,611.2	2,611.2	6.3	51.8	-170.74	1,501.3	4,076.5	4,489.5	4,433.3	56.25	79.816	
2,700.0	2,685.8	2,652.8	2,652.8	6.4	52.6	-170.76	1,501.3	4,076.5	4,498.3	4,441.1	57.17	78.687	
2,755.9	2,740.5	2,707.5	2,707.5	6.6	53.7	-170.78	1,501.3	4,076.5	4,509.7	4,451.4	58.38	77.254	
2,800.0	2,783.6	2,750.6	2,750.6	6.8	54.6	-170.80	1,501.3	4,076.5	4,518.8	4,459.5	59.33	76.166	
2,854.3	2,836.7	2,803.7	2,803.7	7.0	55.6	-170.82	1,501.3	4,076.5	4,530.0	4,469.4	60.50	74.869	
2,900.0	2,881.4	2,848.4	2,848.4	7.2	56.5	-170.84	1,501.3	4,076.5	4,539.3	4,477.8	61.49	73.818	
2,952.7	2,933.0	2,900.0	2,900.0	7.4	57.6	-170.87	1,501.3	4,076.5	4,550.2	4,487.5	62.64	72.643	
3,000.0	2,979.2	2,946.2	2,946.2	7.6	58.5	-170.88	1,501.3	4,076.5	4,559.9	4,496.2	63.66	71.627	
3,051.2	3,029.3	2,996.3	2,996.3	7.8	59.5	-170.91	1,501.3	4,076.5	4,570.4	4,505.6	64.77	70.560	
3,100.0	3,077.1	3,044.1	3,044.1	8.0	60.5	-170.93	1,501.3	4,076.5	4,580.4	4,514.6	65.83	69.577	
3,149.6	3,125.6	3,092.6	3,092.6	8.2	61.4	-170.95	1,501.3	4,076.5	4,590.6	4,523.7	66.91	68.608	
3,200.0	3,174.9	3,141.9	3,141.9	8.4	62.4	-170.97	1,501.3	4,076.5	4,600.9	4,532.9	68.01	67.656	
3,248.0	3,221.8	3,188.8	3,188.8	8.6	63.4	-170.99	1,501.3	4,076.5	4,610.8	4,541.8	69.05	66.775	
3,300.0	3,272.7	3,239.7	3,239.7	8.9	64.4	-171.01	1,501.3	4,076.5	4,621.5	4,551.3	70.18	65.852	
3,346.4	3,318.1	3,285.1	3,285.1	9.0	65.3	-171.03	1,501.3	4,076.5	4,631.0	4,559.8	71.19	65.050	
3,400.0	3,370.5	3,337.5	3,337.5	9.3	66.4	-171.05	1,501.3	4,076.5	4,642.0	4,569.7	72.36	64.154	
3,444.9	3,414.4	3,381.4	3,381.4	9.5	67.3	-171.07	1,501.3	4,076.5	4,651.2	4,577.9	73.33	63.425	
3,500.0	3,468.3	3,435.3	3,435.3	9.7	68.3	-171.09	1,501.3	4,076.5	4,662.6	4,588.0	74.54	62.555	
3,543.3	3,510.7	3,477.7	3,477.7	9.9	69.2	-171.10	1,501.3	4,076.5	4,671.5	4,596.0	75.48	61.891	
3,600.0	3,566.1	3,533.1	3,533.1	10.1	70.3	-171.13	1,501.3	4,076.5	4,683.1	4,606.4	76.72	61.045	
3,641.7	3,606.9	3,573.9	3,573.9	10.3	71.1	-171.14	1,501.3	4,076.5	4,691.7	4,614.1	77.63	60.440	
3,700.0	3,664.0	3,631.0	3,631.0	10.6	72.3	-171.17	1,501.3	4,076.5	4,703.7	4,624.8	78.90	59.618	
3,740.1	3,703.2	3,670.2	3,670.2	10.7	73.1	-171.18	1,501.3	4,076.5	4,711.9	4,632.1	79.77	59.067	
3,800.0	3,761.8	3,728.8	3,728.8	11.0	74.2	-171.20	1,501.3	4,076.5	4,724.2	4,643.1	81.08	58.267	
3,837.4	3,798.3	3,765.3	3,765.3	11.2	75.0	-171.22	1,501.3	4,076.5	4,731.9	4,650.0	81.89	57.781	
3,886.6	3,799.5	3,766.5	3,766.5	11.2	75.0	-171.22	1,501.3	4,076.5	4,732.1	4,650.2	81.93	57.760	
3,900.0	3,859.7	3,826.7	3,826.7	11.4	76.2	-171.28	1,501.3	4,076.5	4,744.1	4,660.5	83.59	56.756	
3,937.0	3,896.1	3,863.1	3,863.1	11.5	76.9	-171.31	1,501.3	4,076.5	4,750.7	4,666.1	84.57	56.174	
4,000.0	3,958.3	3,925.3	3,925.3	11.7	78.2	-171.36	1,501.3	4,076.5	4,760.8	4,674.6	86.22	55.215	
4,035.4	3,993.3	3,960.3	3,960.3	11.8	78.9	-171.39	1,501.3	4,076.5	4,766.0	4,678.8	87.14	54.694	
4,100.0	4,057.4	4,024.4	4,024.4	12.0	80.2	-171.43	1,501.3	4,076.5	4,774.2	4,685.4	88.78	53.773	
4,133.8	4,091.0	4,058.0	4,058.0	12.1	80.9	-171.44	1,501.3	4,076.5	4,777.9	4,688.3	89.63	53.307	
4,200.0	4,156.8	4,123.8	4,123.8	12.2	82.2	-171.47	1,501.3	4,076.5	4,784.1	4,692.8	91.26	52.424	
4,232.3	4,189.0	4,156.0	4,156.0	12.3	82.8	-171.48	1,501.3	4,076.5	4,786.5	4,694.5	92.03	52.009	
4,300.0	4,256.6	4,223.6	4,223.6	12.4	84.2	-171.50	1,501.3	4,076.5	4,790.5	4,696.9	93.63	51.164	
4,330.7	4,287.3	4,254.3	4,254.3	12.5	84.8	-171.51	1,501.3	4,076.5	4,791.8	4,697.5	94.34	50.794	
4,400.0	4,356.6	4,323.6	4,323.6	12.6	86.2	-171.52	1,501.3	4,076.5	4,793.5	4,697.6	95.90	49.986	
4,429.1	4,385.7	4,352.7	4,352.7	12.6	86.8	-171.52	1,501.3	4,076.5	4,793.8	4,697.2	96.54	49.657	
4,437.2	4,393.8	4,360.8	4,360.8	12.7	87.0	68.90	1,501.3	4,076.5	4,793.8	4,694.2	99.55	48.154	
4,500.0	4,456.6	4,423.6	4,423.6	12.7	88.2	68.90	1,501.3	4,076.5	4,793.8	4,692.9	100.91	47.507	
4,527.5	4,484.1	4,451.1	4,451.1	12.8	88.8	68.90	1,501.3	4,076.5	4,793.8	4,692.3	101.51	47.227	
4,600.0	4,556.6	4,523.6	4,523.6	12.9	90.2	68.90	1,501.3	4,076.5	4,793.8	4,690.7	103.08	46.506	
4,626.0	4,582.6	4,549.6	4,549.6	12.9	90.8	68.90	1,501.3	4,076.5	4,793.8	4,690.1	103.64	46.253	
4,700.0	4,656.6	4,623.6	4,623.6	13.1	92.2	68.90	1,501.3	4,076.5	4,793.8	4,688.5	105.25	45.547	
4,724.4	4,681.0	4,648.0	4,648.0	13.1	92.7	68.90	1,501.3	4,076.5	4,793.8	4,688.0	105.78	45.318	
4,800.0	4,756.6	4,723.6	4,723.6	13.2	94.3	68.90	1,501.3	4,076.5	4,793.8	4,686.4	107.42	44.625	
4,822.8	4,779.4	4,746.4	4,746.4	13.3	94.7	68.90	1,501.3	4,076.5	4,793.8	4,685.9	107.92	44.419	
4,900.0	4,856.6	4,823.6	4,823.6	13.4	96.3	68.90	1,501.3	4,076.5	4,793.8	4,684.2	109.60	43.739	
4,921.2	4,877.8	4,844.8	4,844.8	13.4	96.7	68.90	1,501.3	4,076.5	4,793.8	4,683.7	110.06	43.555	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,923.6	4,923.6	13.6	98.3	68.90	1,501.3	4,076.5	4,793.8	4,682.0	111.78	42.887	
5,019.7	4,976.3	4,943.3	4,943.3	13.6	98.7	68.90	1,501.3	4,076.5	4,793.8	4,681.6	112.21	42.723	
5,100.0	5,056.6	5,023.6	5,023.6	13.7	100.3	68.90	1,501.3	4,076.5	4,793.8	4,679.8	113.96	42.067	
5,118.1	5,074.7	5,041.7	5,041.7	13.8	100.6	68.90	1,501.3	4,076.5	4,793.8	4,679.4	114.35	41.921	
5,200.0	5,156.6	5,123.6	5,123.6	13.9	102.3	68.90	1,501.3	4,076.5	4,793.8	4,677.6	116.14	41.277	
5,216.5	5,173.1	5,140.1	5,140.1	13.9	102.6	68.90	1,501.3	4,076.5	4,793.8	4,677.3	116.50	41.149	
5,300.0	5,256.6	5,223.6	5,223.6	14.1	104.3	68.90	1,501.3	4,076.5	4,793.8	4,675.5	118.32	40.515	
5,314.9	5,271.5	5,238.5	5,238.5	14.1	104.6	68.90	1,501.3	4,076.5	4,793.8	4,675.1	118.65	40.404	
5,400.0	5,356.6	5,323.6	5,323.6	14.2	106.3	68.90	1,501.3	4,076.5	4,793.8	4,673.3	120.50	39.781	
5,413.4	5,370.0	5,337.0	5,337.0	14.3	106.6	68.90	1,501.3	4,076.5	4,793.8	4,673.0	120.80	39.685	
5,500.0	5,456.6	5,423.6	5,423.6	14.4	108.3	68.90	1,501.3	4,076.5	4,793.8	4,671.1	122.69	39.073	
5,511.8	5,468.4	5,435.4	5,435.4	14.4	108.6	68.90	1,501.3	4,076.5	4,793.8	4,670.8	122.95	38.991	
5,600.0	5,556.6	5,523.6	5,523.6	14.6	110.3	68.90	1,501.3	4,076.5	4,793.8	4,668.9	124.88	38.388	
5,610.2	5,566.8	5,533.8	5,533.8	14.6	110.5	68.90	1,501.3	4,076.5	4,793.8	4,668.7	125.10	38.320	
5,700.0	5,656.6	5,623.6	5,623.6	14.8	112.4	68.90	1,501.3	4,076.5	4,793.8	4,666.7	127.06	37.727	
5,708.6	5,665.2	5,632.2	5,632.2	14.8	112.5	68.90	1,501.3	4,076.5	4,793.8	4,666.5	127.25	37.671	
5,800.0	5,756.6	5,723.6	5,723.6	14.9	114.4	68.90	1,501.3	4,076.5	4,793.8	4,664.5	129.25	37.088	
5,807.1	5,763.7	5,730.7	5,730.7	14.9	114.5	68.90	1,501.3	4,076.5	4,793.8	4,664.4	129.41	37.044	
5,900.0	5,856.6	5,823.6	5,823.6	15.1	116.4	68.90	1,501.3	4,076.5	4,793.8	4,662.3	131.44	36.470	
5,905.5	5,862.1	5,829.1	5,829.1	15.1	116.5	68.90	1,501.3	4,076.5	4,793.8	4,662.2	131.56	36.437	
6,000.0	5,956.6	5,923.6	5,923.6	15.3	118.4	68.90	1,501.3	4,076.5	4,793.8	4,660.1	133.64	35.872	
6,003.9	5,960.5	5,927.5	5,927.5	15.3	118.5	68.90	1,501.3	4,076.5	4,793.8	4,660.1	133.72	35.849	
6,100.0	6,056.6	6,023.6	6,023.6	15.5	120.4	68.90	1,501.3	4,076.5	4,793.8	4,657.9	135.83	35.293	
6,102.3	6,058.9	6,025.9	6,025.9	15.5	120.4	68.90	1,501.3	4,076.5	4,793.8	4,657.9	135.88	35.280	
6,200.0	6,156.6	6,123.6	6,123.6	15.7	122.4	68.90	1,501.3	4,076.5	4,793.8	4,655.8	138.02	34.732	
6,200.8	6,157.4	6,124.4	6,124.4	15.7	122.4	68.90	1,501.3	4,076.5	4,793.8	4,655.7	138.04	34.728	
6,272.2	6,228.8	6,195.8	6,195.8	15.8	123.9	68.90	1,501.3	4,076.5	4,793.8	4,654.2	139.61	34.337	
6,299.2	6,255.8	6,222.8	6,222.8	15.8	124.4	-21.12	1,501.3	4,076.5	4,793.3	4,655.4	137.86	34.769	
6,300.0	6,256.6	6,223.6	6,223.6	15.8	124.4	-21.12	1,501.3	4,076.5	4,793.3	4,655.4	137.87	34.766	
6,350.0	6,306.4	6,273.4	6,273.4	15.9	125.4	-21.24	1,501.3	4,076.5	4,789.8	4,651.5	138.30	34.633	
6,397.6	6,353.6	6,320.6	6,320.6	15.9	126.4	-21.45	1,501.3	4,076.5	4,783.6	4,645.4	138.16	34.622	
6,400.0	6,355.9	6,322.9	6,322.9	15.9	126.4	-21.46	1,501.3	4,076.5	4,783.2	4,645.0	138.14	34.625	
6,450.0	6,404.8	6,371.8	6,371.8	15.9	127.4	-21.81	1,501.3	4,076.5	4,773.3	4,635.9	137.40	34.741	
6,496.0	6,449.0	6,416.0	6,416.0	16.0	128.3	-22.23	1,501.3	4,076.5	4,761.4	4,625.2	136.20	34.958	
6,500.0	6,452.8	6,419.8	6,419.8	16.0	128.4	-22.27	1,501.3	4,076.5	4,760.3	4,624.2	136.08	34.982	
6,550.0	6,499.7	6,466.7	6,466.7	15.9	129.3	-22.88	1,501.3	4,076.5	4,744.2	4,610.0	134.22	35.345	
6,594.5	6,540.3	6,507.3	6,507.3	15.9	130.1	-23.53	1,501.3	4,076.5	4,727.3	4,595.2	132.16	35.769	
6,600.0	6,545.3	6,512.3	6,512.3	15.9	130.2	-23.63	1,501.3	4,076.5	4,725.1	4,593.2	131.88	35.828	
6,650.0	6,589.3	6,556.3	6,556.3	15.9	131.1	-24.54	1,501.3	4,076.5	4,703.1	4,574.0	129.13	36.420	
6,692.9	6,625.7	6,592.7	6,592.7	15.9	131.8	-25.47	1,501.3	4,076.5	4,682.0	4,555.5	126.53	37.003	
6,700.0	6,631.6	6,598.6	6,598.6	15.9	132.0	-25.64	1,501.3	4,076.5	4,678.3	4,552.2	126.08	37.105	
6,750.0	6,671.9	6,638.9	6,638.9	15.9	132.8	-26.96	1,501.3	4,076.5	4,650.9	4,528.0	122.88	37.849	
6,791.3	6,703.6	6,670.6	6,670.6	15.9	133.4	-28.24	1,501.3	4,076.5	4,626.3	4,506.0	120.26	38.469	
6,800.0	6,710.1	6,677.1	6,677.1	15.9	133.5	-28.53	1,501.3	4,076.5	4,620.9	4,501.2	119.72	38.597	
6,850.0	6,745.9	6,712.9	6,712.9	16.0	134.3	-30.40	1,501.3	4,076.5	4,588.6	4,471.7	116.87	39.261	
6,889.7	6,772.6	6,739.6	6,739.6	16.1	134.8	-32.14	1,501.3	4,076.5	4,561.3	4,446.3	115.05	39.646	
6,900.0	6,779.2	6,746.2	6,746.2	16.1	134.9	-32.62	1,501.3	4,076.5	4,554.1	4,439.4	114.67	39.716	
6,950.0	6,809.8	6,776.8	6,776.8	16.3	135.5	-35.27	1,501.3	4,076.5	4,517.5	4,404.0	113.49	39.805	
6,988.2	6,831.3	6,798.3	6,798.3	16.4	136.0	-37.62	1,501.3	4,076.5	4,488.4	4,374.8	113.57	39.522	
7,000.0	6,837.6	6,804.6	6,804.6	16.5	136.1	-38.41	1,501.3	4,076.5	4,479.1	4,365.4	113.79	39.364	
7,050.0	6,862.5	6,829.5	6,829.5	16.9	136.6	-42.16	1,501.3	4,076.5	4,439.1	4,323.2	115.95	38.285	
7,086.6	6,878.7	6,845.7	6,845.7	17.2	136.9	-45.35	1,501.3	4,076.5	4,408.9	4,290.1	118.88	37.086	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,851.2	6,851.2	17.3	137.0	-46.62	1,501.3	4,076.5	4,397.7	4,277.5	120.24	36.574	
7,150.0	6,902.7	6,869.7	6,869.7	17.8	137.4	-51.91	1,501.3	4,076.5	4,355.0	4,228.4	126.63	34.391	
7,185.0	6,913.8	6,880.8	6,880.8	18.3	137.6	-56.15	1,501.3	4,076.5	4,324.5	4,192.4	132.15	32.724	
7,200.0	6,918.0	6,885.0	6,885.0	18.5	137.7	-58.10	1,501.3	4,076.5	4,311.4	4,176.7	134.68	32.012	
7,250.0	6,929.9	6,896.9	6,896.9	19.2	138.0	-65.23	1,501.3	4,076.5	4,266.9	4,123.5	143.43	29.748	
7,283.4	6,936.0	6,903.0	6,903.0	19.7	138.1	-70.47	1,501.3	4,076.5	4,236.9	4,087.9	149.02	28.432	
7,300.0	6,938.4	6,905.4	6,905.4	20.0	138.1	-73.19	1,501.3	4,076.5	4,221.9	4,070.4	151.52	27.865	
7,350.0	6,943.4	6,910.4	6,910.4	20.9	138.2	-81.74	1,501.3	4,076.5	4,176.6	4,019.2	157.41	26.533	
7,381.9	6,944.8	6,911.8	6,911.8	21.4	138.3	-87.32	1,501.3	4,076.5	4,147.6	3,988.1	159.50	26.005	
7,403.7	6,945.0	6,912.0	6,912.0	21.8	138.3	-91.13	1,501.3	4,076.5	4,127.8	3,967.7	160.06	25.788	
7,480.3	6,944.3	6,911.3	6,911.3	23.3	138.2	-91.11	1,501.3	4,076.5	4,058.3	3,896.8	161.54	25.123	
7,500.0	6,944.1	6,911.1	6,911.1	23.7	138.2	-91.10	1,501.3	4,076.5	4,040.5	3,878.6	161.92	24.954	
7,578.7	6,943.4	6,910.4	6,910.4	25.4	138.2	-91.08	1,501.3	4,076.5	3,969.5	3,805.9	163.55	24.270	
7,600.0	6,943.2	6,910.2	6,910.2	25.8	138.2	-91.07	1,501.3	4,076.5	3,950.3	3,786.3	163.99	24.088	
7,677.1	6,942.5	6,909.5	6,909.5	27.5	138.2	-91.05	1,501.3	4,076.5	3,881.1	3,715.4	165.69	23.423	
7,700.0	6,942.3	6,909.3	6,909.3	28.0	138.2	-91.04	1,501.3	4,076.5	3,860.6	3,694.4	166.20	23.229	
7,775.6	6,941.6	6,908.6	6,908.6	29.8	138.2	-91.02	1,501.3	4,076.5	3,793.2	3,625.2	167.94	22.587	
7,800.0	6,941.4	6,908.4	6,908.4	30.3	138.2	-91.01	1,501.3	4,076.5	3,771.4	3,602.9	168.50	22.382	
7,874.0	6,940.7	6,907.7	6,907.7	32.1	138.2	-90.99	1,501.3	4,076.5	3,705.8	3,535.5	170.26	21.765	
7,900.0	6,940.5	6,907.5	6,907.5	32.7	138.2	-90.98	1,501.3	4,076.5	3,682.8	3,511.9	170.88	21.552	
7,972.4	6,939.8	6,906.8	6,906.8	34.5	138.2	-90.96	1,501.3	4,076.5	3,619.0	3,446.3	172.65	20.961	
8,000.0	6,939.6	6,906.6	6,906.6	35.2	138.2	-90.95	1,501.3	4,076.5	3,594.8	3,421.5	173.33	20.740	
8,070.8	6,938.9	6,905.9	6,905.9	37.0	138.1	-90.93	1,501.3	4,076.5	3,532.8	3,357.7	175.09	20.177	
8,100.0	6,938.7	6,905.7	6,905.7	37.7	138.1	-90.92	1,501.3	4,076.5	3,507.4	3,331.6	175.82	19.949	
8,169.3	6,938.0	6,905.0	6,905.0	39.5	138.1	-90.90	1,501.3	4,076.5	3,447.3	3,269.7	177.57	19.413	
8,200.0	6,937.7	6,904.7	6,904.7	40.3	138.1	-90.89	1,501.3	4,076.5	3,420.7	3,242.4	178.35	19.180	
8,267.7	6,937.1	6,904.1	6,904.1	42.0	138.1	-90.87	1,501.3	4,076.5	3,362.4	3,182.3	180.08	18.671	
8,300.0	6,936.8	6,903.8	6,903.8	42.8	138.1	-90.86	1,501.3	4,076.5	3,334.8	3,153.8	180.91	18.433	
8,366.1	6,936.2	6,903.2	6,903.2	44.6	138.1	-90.84	1,501.3	4,076.5	3,278.4	3,095.7	182.63	17.951	
8,400.0	6,935.9	6,902.9	6,902.9	45.5	138.1	-90.83	1,501.3	4,076.5	3,249.6	3,066.1	183.50	17.709	
8,464.5	6,935.3	6,902.3	6,902.3	47.2	138.1	-90.81	1,501.3	4,076.5	3,195.1	3,009.9	185.19	17.253	
8,500.0	6,935.0	6,902.0	6,902.0	48.1	138.1	-90.80	1,501.3	4,076.5	3,165.3	2,979.2	186.12	17.007	
8,563.0	6,934.5	6,901.5	6,901.5	49.8	138.0	-90.78	1,501.3	4,076.5	3,112.7	2,925.0	187.78	16.577	
8,600.0	6,934.1	6,901.1	6,901.1	50.7	138.0	-90.77	1,501.3	4,076.5	3,082.0	2,893.2	188.75	16.328	
8,661.4	6,933.6	6,900.6	6,900.6	52.4	138.0	-90.75	1,501.3	4,076.5	3,031.3	2,840.9	190.38	15.923	
8,700.0	6,933.2	6,900.2	6,900.2	53.4	138.0	-90.74	1,501.3	4,076.5	2,999.7	2,808.3	191.40	15.672	
8,759.8	6,932.7	6,899.7	6,899.7	55.0	138.0	-90.72	1,501.3	4,076.5	2,950.9	2,757.9	192.99	15.290	
8,800.0	6,932.3	6,899.3	6,899.3	56.1	138.0	-90.71	1,501.3	4,076.5	2,918.4	2,724.4	194.06	15.039	
8,858.2	6,931.8	6,898.8	6,898.8	57.7	138.0	-90.69	1,501.3	4,076.5	2,871.7	2,676.1	195.62	14.680	
8,900.0	6,931.4	6,898.4	6,898.4	58.8	138.0	-90.68	1,501.3	4,076.5	2,838.4	2,641.7	196.74	14.427	
8,956.7	6,930.9	6,897.9	6,897.9	60.3	138.0	-90.66	1,501.3	4,076.5	2,793.7	2,595.4	198.26	14.091	
9,000.0	6,930.5	6,897.5	6,897.5	61.5	138.0	-90.65	1,501.3	4,076.5	2,759.7	2,560.3	199.42	13.838	
9,055.1	6,930.0	6,897.0	6,897.0	63.0	138.0	-90.63	1,501.3	4,076.5	2,716.9	2,516.0	200.91	13.523	
9,100.0	6,929.6	6,896.6	6,896.6	64.2	138.0	-90.62	1,501.3	4,076.5	2,682.4	2,480.3	202.12	13.271	
9,153.5	6,929.1	6,896.1	6,896.1	65.6	137.9	-90.60	1,501.3	4,076.5	2,641.7	2,438.1	203.57	12.977	
9,200.0	6,928.7	6,895.7	6,895.7	66.9	137.9	-90.59	1,501.3	4,076.5	2,606.7	2,401.8	204.82	12.726	
9,251.9	6,928.2	6,895.2	6,895.2	68.3	137.9	-90.57	1,501.3	4,076.5	2,568.0	2,361.7	206.23	12.452	
9,300.0	6,927.8	6,894.8	6,894.8	69.6	137.9	-90.56	1,501.3	4,076.5	2,532.6	2,325.1	207.53	12.203	
9,350.4	6,927.3	6,894.3	6,894.3	71.0	137.9	-90.54	1,501.3	4,076.5	2,496.0	2,287.1	208.90	11.948	
9,400.0	6,926.9	6,893.9	6,893.9	72.4	137.9	-90.53	1,501.3	4,076.5	2,460.4	2,250.1	210.25	11.702	
9,448.8	6,926.4	6,893.4	6,893.4	73.7	137.9	-90.51	1,501.3	4,076.5	2,425.8	2,214.3	211.58	11.465	
9,500.0	6,926.0	6,893.0	6,893.0	75.1	137.9	-90.50	1,501.3	4,076.5	2,390.1	2,177.2	212.97	11.223	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,892.5	6,892.5	76.4	137.9	-90.48	1,501.3	4,076.5	2,357.7	2,143.5	214.26	11.004	
9,600.0	6,925.1	6,892.1	6,892.1	77.9	137.9	-90.47	1,501.3	4,076.5	2,322.1	2,106.4	215.70	10.765	
9,645.6	6,924.6	6,891.6	6,891.6	79.1	137.9	-90.45	1,501.3	4,076.5	2,291.8	2,074.9	216.94	10.564	
9,700.0	6,924.1	6,891.1	6,891.1	80.6	137.8	-90.44	1,501.3	4,076.5	2,256.4	2,038.0	218.43	10.330	
9,744.1	6,923.7	6,890.7	6,890.7	81.8	137.8	-90.42	1,501.3	4,076.5	2,228.3	2,008.6	219.63	10.145	
9,800.0	6,923.2	6,890.2	6,890.2	83.4	137.8	-90.41	1,501.3	4,076.5	2,193.3	1,972.2	221.16	9.917	
9,842.5	6,922.9	6,889.9	6,889.9	84.5	137.8	-90.39	1,501.3	4,076.5	2,167.4	1,945.0	222.33	9.749	
9,900.0	6,922.3	6,889.3	6,889.3	86.1	137.8	-90.38	1,501.3	4,076.5	2,133.1	1,909.2	223.90	9.527	
9,940.9	6,922.0	6,889.0	6,889.0	87.2	137.8	-90.36	1,501.3	4,076.5	2,109.3	1,884.3	225.03	9.374	
10,000.0	6,921.4	6,888.4	6,888.4	88.9	137.8	-90.35	1,501.3	4,076.5	2,075.9	1,849.3	226.65	9.159	
10,039.3	6,921.1	6,888.1	6,888.1	90.0	137.8	-90.33	1,501.3	4,076.5	2,054.3	1,826.6	227.73	9.021	
10,100.0	6,920.5	6,887.5	6,887.5	91.6	137.8	-90.32	1,501.3	4,076.5	2,022.1	1,792.7	229.39	8.815	
10,137.8	6,920.2	6,887.2	6,887.2	92.7	137.8	-90.31	1,501.3	4,076.5	2,002.6	1,772.2	230.43	8.691	
10,200.0	6,919.6	6,886.6	6,886.6	94.4	137.8	-90.29	1,501.3	4,076.5	1,971.8	1,739.7	232.14	8.494	
10,236.2	6,919.3	6,886.3	6,886.3	95.4	137.7	-90.28	1,501.3	4,076.5	1,954.6	1,721.4	233.14	8.384	
10,300.0	6,918.7	6,885.7	6,885.7	97.2	137.7	-90.26	1,501.3	4,076.5	1,925.5	1,690.6	234.89	8.197	
10,334.6	6,918.4	6,885.4	6,885.4	98.1	137.7	-90.25	1,501.3	4,076.5	1,910.4	1,674.5	235.84	8.100	
10,400.0	6,917.8	6,884.8	6,884.8	99.9	137.7	-90.23	1,501.3	4,076.5	1,883.3	1,645.6	237.64	7.925	
10,433.0	6,917.5	6,884.5	6,884.5	100.9	137.7	-90.22	1,501.3	4,076.5	1,870.3	1,631.7	238.55	7.840	
10,500.0	6,916.9	6,883.9	6,883.9	102.7	137.7	-90.20	1,501.3	4,076.5	1,845.5	1,605.1	240.40	7.677	
10,531.5	6,916.6	6,883.6	6,883.6	103.6	137.7	-90.19	1,501.3	4,076.5	1,834.6	1,593.4	241.27	7.604	
10,600.0	6,916.0	6,883.0	6,883.0	105.5	137.7	-90.17	1,501.3	4,076.5	1,812.6	1,569.4	243.15	7.454	
10,629.9	6,915.7	6,882.7	6,882.7	106.3	137.7	-90.16	1,501.3	4,076.5	1,803.6	1,559.7	243.98	7.393	
10,700.0	6,915.1	6,882.1	6,882.1	108.3	137.7	-90.14	1,501.3	4,076.5	1,784.6	1,538.7	245.91	7.257	
10,728.3	6,914.8	6,881.8	6,881.8	109.1	137.7	-90.13	1,501.3	4,076.5	1,777.6	1,530.9	246.70	7.206	
10,800.0	6,914.2	6,881.2	6,881.2	111.0	137.6	-90.11	1,501.3	4,076.5	1,761.8	1,513.1	248.67	7.085	
10,826.7	6,913.9	6,880.9	6,880.9	111.8	137.6	-90.10	1,501.3	4,076.5	1,756.6	1,507.2	249.41	7.043	
10,900.0	6,913.3	6,880.3	6,880.3	113.8	137.6	-90.08	1,501.3	4,076.5	1,744.5	1,493.1	251.44	6.938	
10,925.2	6,913.1	6,880.1	6,880.1	114.5	137.6	-90.07	1,501.3	4,076.5	1,741.0	1,488.9	252.13	6.905	
11,000.0	6,912.4	6,879.4	6,879.4	116.6	137.6	-90.05	1,501.3	4,076.5	1,732.8	1,478.6	254.20	6.817	
11,023.6	6,912.2	6,879.2	6,879.2	117.3	137.6	-90.04	1,501.3	4,076.5	1,730.9	1,476.0	254.85	6.792	
11,100.0	6,911.5	6,878.5	6,878.5	119.4	137.6	-90.02	1,501.3	4,076.5	1,726.8	1,469.9	256.96	6.720	
11,122.0	6,911.3	6,878.3	6,878.3	120.0	137.6	-90.01	1,501.3	4,076.5	1,726.3	1,468.7	257.57	6.702	
11,153.4	6,911.0	6,878.0	6,878.0	120.9	137.6	-90.00	1,501.3	4,076.5	1,726.0	1,467.6	258.44	6.679 CC	
11,200.0	6,910.6	6,877.6	6,877.6	122.2	137.6	-89.99	1,501.3	4,076.5	1,726.6	1,466.9	259.73	6.648 ES	
11,220.4	6,910.4	6,877.4	6,877.4	122.7	137.6	-89.98	1,501.3	4,076.5	1,727.3	1,467.0	260.29	6.636	
11,300.0	6,909.7	6,876.7	6,876.7	125.0	137.6	-89.96	1,501.3	4,076.5	1,732.2	1,469.7	262.49	6.599	
11,318.9	6,909.5	6,876.5	6,876.5	125.5	137.5	-89.95	1,501.3	4,076.5	1,733.9	1,470.9	263.02	6.592	
11,400.0	6,908.8	6,875.8	6,875.8	127.7	137.5	-89.93	1,501.3	4,076.5	1,743.5	1,478.3	265.26	6.573	
11,417.3	6,908.6	6,875.6	6,875.6	128.2	137.5	-89.92	1,501.3	4,076.5	1,746.0	1,480.3	265.74	6.570	
11,500.0	6,907.9	6,874.9	6,874.9	130.5	137.5	-89.90	1,501.3	4,076.5	1,760.4	1,492.4	268.03	6.568 SF	
11,515.7	6,907.7	6,874.7	6,874.7	131.0	137.5	-89.89	1,501.3	4,076.5	1,763.6	1,495.1	268.47	6.569	
11,600.0	6,907.0	6,874.0	6,874.0	133.3	137.5	-89.87	1,501.3	4,076.5	1,782.8	1,512.0	270.80	6.584	
11,614.1	6,906.8	6,873.8	6,873.8	133.7	137.5	-89.86	1,501.3	4,076.5	1,786.4	1,515.2	271.19	6.587	
11,700.0	6,906.0	6,873.0	6,873.0	136.1	137.5	-89.84	1,501.3	4,076.5	1,810.5	1,536.9	273.57	6.618	
11,712.6	6,905.9	6,872.9	6,872.9	136.5	137.5	-89.83	1,501.3	4,076.5	1,814.3	1,540.4	273.92	6.623	
11,800.0	6,905.1	6,872.1	6,872.1	138.9	137.5	-89.81	1,501.3	4,076.5	1,843.1	1,566.8	276.34	6.670	
11,811.0	6,905.0	6,872.0	6,872.0	139.2	137.5	-89.80	1,501.3	4,076.5	1,847.0	1,570.4	276.65	6.676	
11,900.0	6,904.2	6,871.2	6,871.2	141.7	137.4	-89.78	1,501.3	4,076.5	1,880.5	1,601.4	279.11	6.737	
11,909.4	6,904.2	6,871.2	6,871.2	141.9	137.4	-89.77	1,501.3	4,076.5	1,884.3	1,604.9	279.38	6.745	
12,000.0	6,903.3	6,870.3	6,870.3	144.5	137.4	-89.75	1,501.3	4,076.5	1,922.4	1,640.5	281.89	6.820	
12,007.8	6,903.3	6,870.3	6,870.3	144.7	137.4	-89.74	1,501.3	4,076.5	1,925.9	1,643.8	282.10	6.827	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,100.0	6,902.4	6,869.4	6,869.4	147.3	137.4	-89.72	1,501.3	4,076.5	1,968.5	1,683.8	284.66	6.915	
12,106.3	6,902.4	6,869.4	6,869.4	147.4	137.4	-89.71	1,501.3	4,076.5	1,971.5	1,686.7	284.83	6.922	
12,200.0	6,901.5	6,868.5	6,868.5	150.1	137.4	-89.69	1,501.3	4,076.5	2,018.5	1,731.0	287.43	7.022	
12,204.7	6,901.5	6,868.5	6,868.5	150.2	137.4	-89.68	1,501.3	4,076.5	2,020.9	1,733.4	287.56	7.028	
12,300.0	6,900.6	6,867.6	6,867.6	152.9	137.4	-89.66	1,501.3	4,076.5	2,072.1	1,781.9	290.21	7.140	
12,303.1	6,900.6	6,867.6	6,867.6	152.9	137.4	-89.66	1,501.3	4,076.5	2,073.8	1,783.5	290.29	7.144	
12,400.0	6,899.7	6,866.7	6,866.7	155.6	137.4	-89.63	1,501.3	4,076.5	2,129.0	1,836.1	292.98	7.267	
12,401.5	6,899.7	6,866.7	6,866.7	155.7	137.4	-89.63	1,501.3	4,076.5	2,130.0	1,836.9	293.03	7.269	
12,500.0	6,898.8	6,865.8	6,865.8	158.4	137.3	-89.60	1,501.3	4,076.5	2,189.1	1,893.3	295.76	7.402	
12,598.4	6,897.9	6,864.9	6,864.9	161.2	137.3	-89.57	1,501.3	4,076.5	2,251.0	1,952.5	298.49	7.541	
12,600.0	6,897.9	6,864.9	6,864.9	161.2	137.3	-89.57	1,501.3	4,076.5	2,252.0	1,953.4	298.53	7.543	
12,696.8	6,897.0	6,864.0	6,864.0	163.9	137.3	-89.54	1,501.3	4,076.5	2,315.4	2,014.1	301.22	7.687	
12,700.0	6,897.0	6,864.0	6,864.0	164.0	137.3	-89.54	1,501.3	4,076.5	2,317.5	2,016.2	301.31	7.691	
12,795.2	6,896.1	6,863.1	6,863.1	166.7	137.3	-89.51	1,501.3	4,076.5	2,382.1	2,078.1	303.95	7.837	
12,800.0	6,896.1	6,863.1	6,863.1	166.8	137.3	-89.51	1,501.3	4,076.5	2,385.4	2,081.3	304.09	7.844	
12,893.7	6,895.3	6,862.3	6,862.3	169.4	137.3	-89.48	1,501.3	4,076.5	2,451.0	2,144.3	306.69	7.992	
12,900.0	6,895.2	6,862.2	6,862.2	169.6	137.3	-89.48	1,501.3	4,076.5	2,455.5	2,148.6	306.86	8.002	
12,992.1	6,894.4	6,861.4	6,861.4	172.2	137.2	-89.45	1,501.3	4,076.5	2,521.8	2,212.4	309.42	8.150	
13,000.0	6,894.3	6,861.3	6,861.3	172.4	137.2	-89.45	1,501.3	4,076.5	2,527.6	2,217.9	309.64	8.163	
13,090.5	6,893.5	6,860.5	6,860.5	175.0	137.2	-89.42	1,501.3	4,076.5	2,594.4	2,282.3	312.15	8.311	
13,100.0	6,893.4	6,860.4	6,860.4	175.2	137.2	-89.42	1,501.3	4,076.5	2,601.5	2,289.1	312.42	8.327	
13,188.9	6,892.6	6,859.6	6,859.6	177.7	137.2	-89.39	1,501.3	4,076.5	2,668.7	2,353.8	314.89	8.475	
13,200.0	6,892.5	6,859.5	6,859.5	178.0	137.2	-89.39	1,501.3	4,076.5	2,677.1	2,362.0	315.20	8.494	
13,287.4	6,891.7	6,858.7	6,858.7	180.5	137.2	-89.36	1,501.3	4,076.5	2,744.5	2,426.9	317.62	8.641	
13,300.0	6,891.6	6,858.6	6,858.6	180.8	137.2	-89.36	1,501.3	4,076.5	2,754.3	2,436.4	317.97	8.662	
13,385.8	6,890.8	6,857.8	6,857.8	183.2	137.2	-89.33	1,501.3	4,076.5	2,821.7	2,501.4	320.36	8.808	
13,400.0	6,890.7	6,857.7	6,857.7	183.6	137.2	-89.33	1,501.3	4,076.5	2,833.0	2,512.2	320.75	8.832	
13,484.2	6,889.9	6,856.9	6,856.9	186.0	137.2	-89.30	1,501.3	4,076.5	2,900.2	2,577.1	323.09	8.976	
13,500.0	6,889.8	6,856.8	6,856.8	186.4	137.2	-89.30	1,501.3	4,076.5	2,912.9	2,589.4	323.53	9.003	
13,582.6	6,889.0	6,856.0	6,856.0	188.7	137.1	-89.27	1,501.3	4,076.5	2,979.9	2,654.0	325.83	9.146	
13,600.0	6,888.9	6,855.9	6,855.9	189.2	137.1	-89.27	1,501.3	4,076.5	2,994.0	2,667.7	326.31	9.175	
13,681.1	6,888.1	6,855.1	6,855.1	191.5	137.1	-89.24	1,501.3	4,076.5	3,060.6	2,732.1	328.56	9.315	
13,700.0	6,888.0	6,855.0	6,855.0	192.0	137.1	-89.24	1,501.3	4,076.5	3,076.3	2,747.2	329.09	9.348	
13,779.5	6,887.3	6,854.3	6,854.3	194.2	137.1	-89.21	1,501.3	4,076.5	3,142.4	2,811.1	331.30	9.485	
13,800.0	6,887.1	6,854.1	6,854.1	194.8	137.1	-89.21	1,501.3	4,076.5	3,159.5	2,827.7	331.87	9.521	
13,877.9	6,886.4	6,853.4	6,853.4	197.0	137.1	-89.18	1,501.3	4,076.5	3,225.1	2,891.1	334.03	9.655	
13,900.0	6,886.2	6,853.2	6,853.2	197.6	137.1	-89.18	1,501.3	4,076.5	3,243.8	2,909.1	334.65	9.693	
13,976.3	6,885.5	6,852.5	6,852.5	199.7	137.1	-89.15	1,501.3	4,076.5	3,308.7	2,971.9	336.77	9.825	
14,000.0	6,885.3	6,852.3	6,852.3	200.4	137.1	-89.15	1,501.3	4,076.5	3,328.9	2,991.4	337.43	9.865	
14,074.8	6,884.6	6,851.6	6,851.6	202.5	137.0	-89.12	1,501.3	4,076.5	3,393.0	3,053.5	339.50	9.994	
14,100.0	6,884.4	6,851.4	6,851.4	203.2	137.0	-89.12	1,501.3	4,076.5	3,414.8	3,074.5	340.21	10.037	
14,173.2	6,883.7	6,850.7	6,850.7	205.3	137.0	-89.10	1,501.3	4,076.5	3,478.1	3,135.9	342.24	10.163	
14,200.0	6,883.5	6,850.5	6,850.5	206.0	137.0	-89.09	1,501.3	4,076.5	3,501.4	3,158.4	342.99	10.209	
14,271.6	6,882.8	6,849.8	6,849.8	208.0	137.0	-89.07	1,501.3	4,076.5	3,563.9	3,218.9	344.98	10.331	
14,300.0	6,882.6	6,849.6	6,849.6	208.8	137.0	-89.06	1,501.3	4,076.5	3,588.7	3,243.0	345.77	10.379	
14,370.0	6,881.9	6,848.9	6,848.9	210.8	137.0	-89.04	1,501.3	4,076.5	3,650.3	3,302.6	347.71	10.498	
14,400.0	6,881.7	6,848.7	6,848.7	211.6	137.0	-89.03	1,501.3	4,076.5	3,676.7	3,328.2	348.55	10.549	
14,468.5	6,881.0	6,848.0	6,848.0	213.5	137.0	-89.01	1,501.3	4,076.5	3,737.3	3,386.9	350.45	10.664	
14,500.0	6,880.8	6,847.8	6,847.8	214.4	137.0	-89.00	1,501.3	4,076.5	3,765.3	3,414.0	351.33	10.717	
14,566.9	6,880.2	6,847.2	6,847.2	216.3	137.0	-88.98	1,501.3	4,076.5	3,824.9	3,471.7	353.19	10.830	
14,584.2	6,880.0	6,847.0	6,847.0	216.8	137.0	-88.97	1,501.3	4,076.5	3,840.3	3,486.6	353.67	10.859	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	60.20	1,646.8	2,875.5	3,313.8				
98.4	98.4	80.4	80.4	0.1	0.4	60.20	1,646.8	2,875.5	3,313.7	3,313.2	0.48	6,890.080	
100.0	100.0	82.0	82.0	0.1	0.4	60.20	1,646.8	2,875.5	3,313.7	3,313.2	0.49	6,756.224	
196.8	196.8	178.8	178.8	0.3	2.4	60.20	1,646.8	2,875.5	3,313.7	3,311.0	2.75	1,204.413	
200.0	200.0	182.0	182.0	0.3	2.5	60.20	1,646.8	2,875.5	3,313.7	3,310.9	2.84	1,168.253	
295.3	295.3	277.3	277.3	0.5	4.6	60.20	1,646.8	2,875.5	3,313.7	3,308.6	5.10	649.354	
300.0	300.0	282.0	282.0	0.5	4.7	60.20	1,646.8	2,875.5	3,313.7	3,308.5	5.21	635.794	
393.7	393.7	375.7	375.7	0.7	6.6	60.20	1,646.8	2,875.5	3,313.7	3,306.4	7.34	451.413	
400.0	400.0	382.0	382.0	0.8	6.7	60.20	1,646.8	2,875.5	3,313.7	3,306.2	7.48	442.807	
492.1	492.1	474.1	474.1	1.0	8.6	60.20	1,646.8	2,875.5	3,313.7	3,304.2	9.56	346.619	
500.0	500.0	482.0	482.0	1.0	8.8	60.20	1,646.8	2,875.5	3,313.7	3,304.0	9.74	340.307	
590.5	590.5	572.5	572.5	1.2	10.6	60.20	1,646.8	2,875.5	3,313.7	3,302.0	11.77	281.488	
600.0	600.0	582.0	582.0	1.2	10.8	60.20	1,646.8	2,875.5	3,313.7	3,301.7	11.98	276.503	
689.0	689.0	671.0	671.0	1.4	12.6	60.20	1,646.8	2,875.5	3,313.7	3,299.7	13.98	237.025	
700.0	700.0	682.0	682.0	1.4	12.8	60.20	1,646.8	2,875.5	3,313.7	3,299.5	14.23	232.906	
787.4	787.4	769.4	769.4	1.6	14.6	60.20	1,646.8	2,875.5	3,313.7	3,297.5	16.19	204.720	
800.0	800.0	782.0	782.0	1.7	14.8	60.20	1,646.8	2,875.5	3,313.7	3,297.3	16.47	201.210	
885.8	885.8	867.8	867.8	1.9	16.5	60.20	1,646.8	2,875.5	3,313.7	3,295.3	18.39	180.178	
900.0	900.0	882.0	882.0	1.9	16.8	60.20	1,646.8	2,875.5	3,313.7	3,295.0	18.71	177.120	
984.2	984.2	966.2	966.2	2.1	18.5	60.20	1,646.8	2,875.5	3,313.7	3,293.1	20.60	160.897	
1,000.0	1,000.0	982.0	982.0	2.1	18.8	60.20	1,646.8	2,875.5	3,313.7	3,292.8	20.95	158.189	
1,082.7	1,082.7	1,064.7	1,064.7	2.3	20.5	60.20	1,646.8	2,875.5	3,313.7	3,290.9	22.80	145.349	
1,100.0	1,100.0	1,082.0	1,082.0	2.3	20.9	60.20	1,646.8	2,875.5	3,313.7	3,290.5	23.19	142.918	
1,181.1	1,181.1	1,163.1	1,163.1	2.5	22.5	60.20	1,646.8	2,875.5	3,313.7	3,288.7	25.00	132.543	
1,200.0	1,200.0	1,182.0	1,182.0	2.6	22.9	60.20	1,646.8	2,875.5	3,313.7	3,288.3	25.42	130.338	
1,279.5	1,279.5	1,261.5	1,261.5	2.7	24.5	60.20	1,646.8	2,875.5	3,313.7	3,286.5	27.20	121.812	
1,300.0	1,300.0	1,282.0	1,282.0	2.8	24.9	60.20	1,646.8	2,875.5	3,313.7	3,286.1	27.66	119.795	
1,377.9	1,377.9	1,359.9	1,359.9	3.0	26.4	60.20	1,646.8	2,875.5	3,313.7	3,284.3	29.41	112.690	
1,400.0	1,400.0	1,382.0	1,382.0	3.0	26.9	60.20	1,646.8	2,875.5	3,313.7	3,283.8	29.90	110.831	
1,476.4	1,476.4	1,458.4	1,458.4	3.2	28.4	60.20	1,646.8	2,875.5	3,313.7	3,282.1	31.61	104.840	
1,500.0	1,500.0	1,482.0	1,482.0	3.2	28.9	60.20	1,646.8	2,875.5	3,313.7	3,281.6	32.14	103.116	
1,574.8	1,574.8	1,556.8	1,556.8	3.4	30.4	60.20	1,646.8	2,875.5	3,313.7	3,279.9	33.81	98.013	
1,600.0	1,600.0	1,582.0	1,582.0	3.5	30.9	60.20	1,646.8	2,875.5	3,313.7	3,279.3	34.37	96.405	
1,650.0	1,650.0	1,632.0	1,632.0	3.6	31.9	60.20	1,646.8	2,875.5	3,313.7	3,278.2	35.49	93.367	
1,673.2	1,673.2	1,655.2	1,655.2	3.6	32.4	179.78	1,646.8	2,875.5	3,313.8	3,277.8	36.00	92.039	
1,700.0	1,700.0	1,682.0	1,682.0	3.7	32.9	179.78	1,646.8	2,875.5	3,314.2	3,277.6	36.59	90.568	
1,771.6	1,771.6	1,753.6	1,753.6	3.8	34.4	179.78	1,646.8	2,875.5	3,316.3	3,278.2	38.14	86.955	
1,800.0	1,799.9	1,781.9	1,781.9	3.9	34.9	179.78	1,646.8	2,875.5	3,317.6	3,278.9	38.74	85.636	
1,870.1	1,869.9	1,851.9	1,851.9	4.0	36.3	179.78	1,646.8	2,875.5	3,322.2	3,282.0	40.22	82.607	
1,900.0	1,899.7	1,881.7	1,881.7	4.1	36.9	179.78	1,646.8	2,875.5	3,324.6	3,283.8	40.84	81.413	
1,968.5	1,967.8	1,949.8	1,949.8	4.2	38.3	179.78	1,646.8	2,875.5	3,331.4	3,289.2	42.24	78.875	
2,000.0	1,999.1	1,981.1	1,981.1	4.3	38.9	179.78	1,646.8	2,875.5	3,335.1	3,292.2	42.87	77.798	
2,066.9	2,065.5	2,047.5	2,047.5	4.4	40.3	179.78	1,646.8	2,875.5	3,344.0	3,299.8	44.19	75.675	
2,100.0	2,098.2	2,080.2	2,080.2	4.5	40.9	179.78	1,646.8	2,875.5	3,349.0	3,304.2	44.83	74.708	
2,165.3	2,162.6	2,144.6	2,144.6	4.7	42.2	179.78	1,646.8	2,875.5	3,360.0	3,313.9	46.07	72.937	
2,200.0	2,196.6	2,178.6	2,178.6	4.7	42.9	179.78	1,646.8	2,875.5	3,366.4	3,319.7	46.71	72.076	
2,249.9	2,245.5	2,227.5	2,227.5	4.9	43.9	179.78	1,646.8	2,875.5	3,376.3	3,328.7	47.61	70.916	
2,263.8	2,259.1	2,241.1	2,241.1	4.9	44.2	179.78	1,646.8	2,875.5	3,379.2	3,331.3	47.91	70.536	
2,300.0	2,294.5	2,276.5	2,276.5	5.0	44.9	179.78	1,646.8	2,875.5	3,386.7	3,338.0	48.68	69.570	
2,362.2	2,355.4	2,337.4	2,337.4	5.2	46.1	179.78	1,646.8	2,875.5	3,399.6	3,349.6	50.01	67.975	
2,400.0	2,392.3	2,374.3	2,374.3	5.4	46.9	179.79	1,646.8	2,875.5	3,407.5	3,356.7	50.82	67.050	
2,460.6	2,451.6	2,433.6	2,433.6	5.6	48.0	179.79	1,646.8	2,875.5	3,420.1	3,368.0	52.12	65.620	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,472.2	2,472.2	5.7	48.8	179.79	1,646.8	2,875.5	3,428.3	3,375.3	52.97	64.727	
2,559.0	2,547.9	2,529.9	2,529.9	5.9	50.0	179.79	1,646.8	2,875.5	3,440.6	3,386.3	54.23	63.439	
2,600.0	2,588.0	2,570.0	2,570.0	6.1	50.8	179.79	1,646.8	2,875.5	3,449.1	3,394.0	55.11	62.580	
2,657.5	2,644.2	2,626.2	2,626.2	6.3	51.9	179.79	1,646.8	2,875.5	3,461.0	3,404.7	56.35	61.418	
2,700.0	2,685.8	2,667.8	2,667.8	6.4	52.8	179.79	1,646.8	2,875.5	3,469.9	3,412.6	57.27	60.590	
2,755.9	2,740.5	2,722.5	2,722.5	6.6	53.9	179.79	1,646.8	2,875.5	3,481.5	3,423.0	58.47	59.539	
2,800.0	2,783.6	2,765.6	2,765.6	6.8	54.7	179.79	1,646.8	2,875.5	3,490.7	3,431.2	59.42	58.741	
2,854.3	2,836.7	2,818.7	2,818.7	7.0	55.8	179.79	1,646.8	2,875.5	3,501.9	3,441.3	60.60	57.790	
2,900.0	2,881.4	2,863.4	2,863.4	7.2	56.7	179.79	1,646.8	2,875.5	3,511.4	3,449.9	61.58	57.019	
2,952.7	2,933.0	2,915.0	2,915.0	7.4	57.7	179.79	1,646.8	2,875.5	3,522.4	3,459.7	62.72	56.157	
3,000.0	2,979.2	2,961.2	2,961.2	7.6	58.7	179.79	1,646.8	2,875.5	3,532.2	3,468.5	63.75	55.411	
3,051.2	3,029.3	3,011.3	3,011.3	7.8	59.7	179.79	1,646.8	2,875.5	3,542.9	3,478.0	64.85	54.628	
3,100.0	3,077.1	3,059.1	3,059.1	8.0	60.6	179.79	1,646.8	2,875.5	3,553.0	3,487.1	65.91	53.907	
3,149.6	3,125.6	3,107.6	3,107.6	8.2	61.6	179.79	1,646.8	2,875.5	3,563.3	3,496.3	66.99	53.196	
3,200.0	3,174.9	3,156.9	3,156.9	8.4	62.6	179.80	1,646.8	2,875.5	3,573.8	3,505.7	68.08	52.496	
3,248.0	3,221.8	3,203.8	3,203.8	8.6	63.5	179.80	1,646.8	2,875.5	3,583.8	3,514.7	69.12	51.850	
3,300.0	3,272.7	3,254.7	3,254.7	8.9	64.6	179.80	1,646.8	2,875.5	3,594.6	3,524.3	70.25	51.172	
3,346.4	3,318.1	3,300.1	3,300.1	9.0	65.5	179.80	1,646.8	2,875.5	3,604.2	3,533.0	71.25	50.583	
3,400.0	3,370.5	3,352.5	3,352.5	9.3	66.5	179.80	1,646.8	2,875.5	3,615.4	3,543.0	72.42	49.925	
3,444.9	3,414.4	3,396.4	3,396.4	9.5	67.4	179.80	1,646.8	2,875.5	3,624.7	3,551.3	73.39	49.389	
3,500.0	3,468.3	3,450.3	3,450.3	9.7	68.5	179.80	1,646.8	2,875.5	3,636.2	3,561.6	74.59	48.750	
3,543.3	3,510.7	3,492.7	3,492.7	9.9	69.3	179.80	1,646.8	2,875.5	3,645.2	3,569.6	75.53	48.262	
3,600.0	3,566.1	3,548.1	3,548.1	10.1	70.5	179.80	1,646.8	2,875.5	3,656.9	3,580.2	76.76	47.640	
3,641.7	3,606.9	3,588.9	3,588.9	10.3	71.3	179.80	1,646.8	2,875.5	3,665.6	3,587.9	77.67	47.196	
3,700.0	3,664.0	3,646.0	3,646.0	10.6	72.4	179.80	1,646.8	2,875.5	3,677.7	3,598.8	78.94	46.591	
3,740.1	3,703.2	3,685.2	3,685.2	10.7	73.2	179.80	1,646.8	2,875.5	3,686.1	3,606.3	79.81	46.186	
3,800.0	3,761.8	3,743.8	3,743.8	11.0	74.4	179.80	1,646.8	2,875.5	3,698.5	3,617.4	81.11	45.598	
3,837.4	3,798.3	3,780.3	3,780.3	11.2	75.1	179.80	1,646.8	2,875.5	3,706.3	3,624.4	81.92	45.240	
3,838.6	3,799.5	3,781.5	3,781.5	11.2	75.2	179.80	1,646.8	2,875.5	3,706.5	3,624.6	81.96	45.225	
3,900.0	3,859.7	3,841.7	3,841.7	11.4	76.4	179.80	1,646.8	2,875.5	3,718.6	3,635.0	83.63	44.468	
3,937.0	3,896.1	3,878.1	3,878.1	11.5	77.1	179.80	1,646.8	2,875.5	3,725.3	3,640.7	84.61	44.027	
4,000.0	3,958.3	3,940.3	3,940.3	11.7	78.3	179.81	1,646.8	2,875.5	3,735.6	3,649.3	86.27	43.299	
4,035.4	3,993.3	3,975.3	3,975.3	11.8	79.1	179.81	1,646.8	2,875.5	3,740.7	3,653.5	87.19	42.902	
4,100.0	4,057.4	4,039.4	4,039.4	12.0	80.3	179.81	1,646.8	2,875.5	3,749.0	3,660.2	88.84	42.198	
4,133.8	4,091.0	4,073.0	4,073.0	12.1	81.0	179.81	1,646.8	2,875.5	3,752.8	3,663.1	89.69	41.840	
4,200.0	4,156.8	4,138.8	4,138.8	12.2	82.3	179.81	1,646.8	2,875.5	3,759.0	3,667.7	91.32	41.162	
4,232.3	4,189.0	4,171.0	4,171.0	12.3	83.0	179.81	1,646.8	2,875.5	3,761.5	3,669.4	92.10	40.840	
4,300.0	4,256.6	4,238.6	4,238.6	12.4	84.3	179.81	1,646.8	2,875.5	3,765.6	3,671.9	93.70	40.186	
4,330.7	4,287.3	4,269.3	4,269.3	12.5	85.0	179.81	1,646.8	2,875.5	3,766.9	3,672.5	94.41	39.898	
4,400.0	4,356.6	4,338.6	4,338.6	12.6	86.4	179.81	1,646.8	2,875.5	3,768.6	3,672.6	95.98	39.267	
4,429.1	4,385.7	4,367.7	4,367.7	12.6	86.9	179.81	1,646.8	2,875.5	3,768.8	3,672.2	96.61	39.009	
4,437.2	4,393.8	4,375.8	4,375.8	12.7	87.1	60.23	1,646.8	2,875.5	3,768.9	3,669.1	99.76	37.780	
4,500.0	4,456.6	4,438.6	4,438.6	12.7	88.4	60.23	1,646.8	2,875.5	3,768.9	3,667.7	101.12	37.273	
4,527.5	4,484.1	4,466.1	4,466.1	12.8	88.9	60.23	1,646.8	2,875.5	3,768.9	3,667.1	101.71	37.054	
4,600.0	4,556.6	4,538.6	4,538.6	12.9	90.4	60.23	1,646.8	2,875.5	3,768.9	3,665.6	103.28	36.490	
4,626.0	4,582.6	4,564.6	4,564.6	12.9	90.9	60.23	1,646.8	2,875.5	3,768.9	3,665.0	103.85	36.292	
4,700.0	4,656.6	4,638.6	4,638.6	13.1	92.4	60.23	1,646.8	2,875.5	3,768.9	3,663.4	105.46	35.739	
4,724.4	4,681.0	4,663.0	4,663.0	13.1	92.9	60.23	1,646.8	2,875.5	3,768.9	3,662.9	105.99	35.560	
4,800.0	4,756.6	4,738.6	4,738.6	13.2	94.4	60.23	1,646.8	2,875.5	3,768.9	3,661.2	107.63	35.017	
4,822.8	4,779.4	4,761.4	4,761.4	13.3	94.9	60.23	1,646.8	2,875.5	3,768.9	3,660.7	108.13	34.856	
4,900.0	4,856.6	4,838.6	4,838.6	13.4	96.4	60.23	1,646.8	2,875.5	3,768.9	3,659.1	109.80	34.324	
4,921.2	4,877.8	4,859.8	4,859.8	13.4	96.8	60.23	1,646.8	2,875.5	3,768.9	3,658.6	110.27	34.180	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,938.6	4,938.6	13.6	98.4	60.23	1,646.8	2,875.5	3,768.9	3,656.9	111.98	33.657	
5,019.7	4,976.3	4,958.3	4,958.3	13.6	98.8	60.23	1,646.8	2,875.5	3,768.9	3,656.4	112.41	33.528	
5,100.0	5,056.6	5,038.6	5,038.6	13.7	100.4	60.23	1,646.8	2,875.5	3,768.9	3,654.7	114.16	33.014	
5,118.1	5,074.7	5,056.7	5,056.7	13.8	100.8	60.23	1,646.8	2,875.5	3,768.9	3,654.3	114.55	32.901	
5,200.0	5,156.6	5,138.6	5,138.6	13.9	102.4	60.23	1,646.8	2,875.5	3,768.9	3,652.5	116.34	32.396	
5,216.5	5,173.1	5,155.1	5,155.1	13.9	102.8	60.23	1,646.8	2,875.5	3,768.9	3,652.2	116.70	32.296	
5,300.0	5,256.6	5,238.6	5,238.6	14.1	104.5	60.23	1,646.8	2,875.5	3,768.9	3,650.3	118.52	31.800	
5,314.9	5,271.5	5,253.5	5,253.5	14.1	104.8	60.23	1,646.8	2,875.5	3,768.9	3,650.0	118.85	31.712	
5,400.0	5,356.6	5,338.6	5,338.6	14.2	106.5	60.23	1,646.8	2,875.5	3,768.9	3,648.2	120.70	31.224	
5,413.4	5,370.0	5,352.0	5,352.0	14.3	106.7	60.23	1,646.8	2,875.5	3,768.9	3,647.9	120.99	31.149	
5,500.0	5,456.6	5,438.6	5,438.6	14.4	108.5	60.23	1,646.8	2,875.5	3,768.9	3,646.0	122.89	30.669	
5,511.8	5,468.4	5,450.4	5,450.4	14.4	108.7	60.23	1,646.8	2,875.5	3,768.9	3,645.7	123.14	30.605	
5,600.0	5,556.6	5,538.6	5,538.6	14.6	110.5	60.23	1,646.8	2,875.5	3,768.9	3,643.8	125.07	30.134	
5,610.2	5,566.8	5,548.8	5,548.8	14.6	110.7	60.23	1,646.8	2,875.5	3,768.9	3,643.6	125.30	30.080	
5,700.0	5,656.6	5,638.6	5,638.6	14.8	112.5	60.23	1,646.8	2,875.5	3,768.9	3,641.6	127.26	29.616	
5,708.6	5,665.2	5,647.2	5,647.2	14.8	112.7	60.23	1,646.8	2,875.5	3,768.9	3,641.4	127.45	29.572	
5,800.0	5,756.6	5,738.6	5,738.6	14.9	114.5	60.23	1,646.8	2,875.5	3,768.9	3,639.4	129.45	29.115	
5,807.1	5,763.7	5,745.7	5,745.7	14.9	114.7	60.23	1,646.8	2,875.5	3,768.9	3,639.3	129.60	29.080	
5,900.0	5,856.6	5,838.6	5,838.6	15.1	116.5	60.23	1,646.8	2,875.5	3,768.9	3,637.2	131.64	28.631	
5,905.5	5,862.1	5,844.1	5,844.1	15.1	116.6	60.23	1,646.8	2,875.5	3,768.9	3,637.1	131.76	28.605	
6,000.0	5,956.6	5,938.6	5,938.6	15.3	118.5	60.23	1,646.8	2,875.5	3,768.9	3,635.0	133.83	28.162	
6,003.9	5,960.5	5,942.5	5,942.5	15.3	118.6	60.23	1,646.8	2,875.5	3,768.9	3,634.9	133.91	28.144	
6,100.0	6,056.6	6,038.6	6,038.6	15.5	120.5	60.23	1,646.8	2,875.5	3,768.9	3,632.8	136.02	27.708	
6,102.3	6,058.9	6,040.9	6,040.9	15.5	120.6	60.23	1,646.8	2,875.5	3,768.9	3,632.8	136.07	27.698	
6,200.0	6,156.6	6,138.6	6,138.6	15.7	122.6	60.23	1,646.8	2,875.5	3,768.9	3,630.6	138.21	27.269	
6,200.8	6,157.4	6,139.4	6,139.4	15.7	122.6	60.23	1,646.8	2,875.5	3,768.9	3,630.6	138.23	27.265	
6,272.2	6,228.8	6,210.8	6,210.8	15.8	124.0	60.23	1,646.8	2,875.5	3,768.9	3,629.1	139.80	26.959	
6,299.2	6,255.8	6,237.8	6,237.8	15.8	124.6	-29.80	1,646.8	2,875.5	3,768.4	3,630.4	137.98	27.311	
6,300.0	6,256.6	6,238.6	6,238.6	15.8	124.6	-29.80	1,646.8	2,875.5	3,768.4	3,630.4	137.99	27.308	
6,350.0	6,306.4	6,288.4	6,288.4	15.9	125.6	-29.95	1,646.8	2,875.5	3,765.2	3,626.7	138.51	27.183	
6,397.6	6,353.6	6,335.6	6,335.6	15.9	126.5	-30.24	1,646.8	2,875.5	3,759.4	3,620.8	138.54	27.136	
6,400.0	6,355.9	6,337.9	6,337.9	15.9	126.6	-30.26	1,646.8	2,875.5	3,759.0	3,620.5	138.53	27.136	
6,450.0	6,404.8	6,386.8	6,386.8	15.9	127.5	-30.72	1,646.8	2,875.5	3,749.8	3,611.8	138.05	27.163	
6,496.0	6,449.0	6,431.0	6,431.0	16.0	128.4	-31.29	1,646.8	2,875.5	3,738.8	3,601.6	137.20	27.250	
6,500.0	6,452.8	6,434.8	6,434.8	16.0	128.5	-31.34	1,646.8	2,875.5	3,737.7	3,600.6	137.12	27.260	
6,550.0	6,499.7	6,481.7	6,481.7	15.9	129.5	-32.14	1,646.8	2,875.5	3,722.8	3,587.0	135.78	27.419	
6,594.5	6,540.3	6,522.3	6,522.3	15.9	130.3	-33.00	1,646.8	2,875.5	3,707.2	3,572.8	134.31	27.602	
6,600.0	6,545.3	6,527.3	6,527.3	15.9	130.4	-33.12	1,646.8	2,875.5	3,705.1	3,571.0	134.11	27.627	
6,650.0	6,589.3	6,571.3	6,571.3	15.9	131.3	-34.31	1,646.8	2,875.5	3,684.7	3,552.5	132.22	27.868	
6,692.9	6,625.7	6,607.7	6,607.7	15.9	132.0	-35.51	1,646.8	2,875.5	3,665.1	3,534.6	130.53	28.079	
6,700.0	6,631.6	6,613.6	6,613.6	15.9	132.1	-35.72	1,646.8	2,875.5	3,661.7	3,531.5	130.25	28.113	
6,750.0	6,671.9	6,653.9	6,653.9	15.9	132.9	-37.38	1,646.8	2,875.5	3,636.4	3,508.0	128.37	28.327	
6,791.3	6,703.6	6,685.6	6,685.6	15.9	133.6	-38.96	1,646.8	2,875.5	3,613.7	3,486.7	127.04	28.446	
6,800.0	6,710.1	6,692.1	6,692.1	15.9	133.7	-39.32	1,646.8	2,875.5	3,608.7	3,482.0	126.79	28.462	
6,850.0	6,745.9	6,727.9	6,727.9	16.0	134.4	-41.56	1,646.8	2,875.5	3,579.0	3,453.2	125.76	28.459	
6,889.7	6,772.6	6,754.6	6,754.6	16.1	134.9	-43.59	1,646.8	2,875.5	3,553.9	3,428.4	125.49	28.321	
6,900.0	6,779.2	6,761.2	6,761.2	16.1	135.1	-44.15	1,646.8	2,875.5	3,547.3	3,421.7	125.51	28.262	
6,950.0	6,809.8	6,791.8	6,791.8	16.3	135.7	-47.11	1,646.8	2,875.5	3,513.8	3,387.5	126.28	27.825	
6,988.2	6,831.3	6,813.3	6,813.3	16.4	136.1	-49.64	1,646.8	2,875.5	3,487.1	3,359.4	127.67	27.314	
7,000.0	6,837.6	6,819.6	6,819.6	16.5	136.3	-50.47	1,646.8	2,875.5	3,478.7	3,350.4	128.23	27.128	
7,050.0	6,862.5	6,844.5	6,844.5	16.9	136.8	-54.27	1,646.8	2,875.5	3,442.2	3,310.8	131.40	26.197	
7,086.6	6,878.7	6,860.7	6,860.7	17.2	137.1	-57.33	1,646.8	2,875.5	3,414.7	3,280.2	134.43	25.401	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,866.2	6,866.2	17.3	137.2	-58.51	1,646.8	2,875.5	3,404.5	3,268.8	135.66	25.097	
7,150.0	6,902.7	6,884.7	6,884.7	17.8	137.6	-63.17	1,646.8	2,875.5	3,365.8	3,225.1	140.70	23.922	
7,185.0	6,913.8	6,895.8	6,895.8	18.3	137.8	-66.67	1,646.8	2,875.5	3,338.2	3,193.8	144.46	23.108	
7,200.0	6,918.0	6,900.0	6,900.0	18.5	137.9	-68.22	1,646.8	2,875.5	3,326.3	3,180.3	146.06	22.774	
7,250.0	6,929.9	6,911.9	6,911.9	19.2	138.1	-73.58	1,646.8	2,875.5	3,286.3	3,135.1	151.17	21.740	
7,283.4	6,936.0	6,918.0	6,918.0	19.7	138.2	-77.29	1,646.8	2,875.5	3,259.3	3,105.1	154.17	21.141	
7,300.0	6,938.4	6,920.4	6,920.4	20.0	138.3	-79.14	1,646.8	2,875.5	3,245.9	3,090.5	155.47	20.878	
7,350.0	6,943.4	6,925.4	6,925.4	20.9	138.4	-84.77	1,646.8	2,875.5	3,205.4	3,046.9	158.55	20.217	
7,381.9	6,944.8	6,926.8	6,926.8	21.4	138.4	-88.31	1,646.8	2,875.5	3,179.6	3,019.9	159.76	19.903	
7,403.7	6,945.0	6,927.0	6,927.0	21.8	138.4	-90.71	1,646.8	2,875.5	3,162.0	3,001.8	160.23	19.734	
7,480.3	6,944.3	6,926.3	6,926.3	23.3	138.4	-90.69	1,646.8	2,875.5	3,100.6	2,938.9	161.71	19.174	
7,500.0	6,944.1	6,926.1	6,926.1	23.7	138.4	-90.68	1,646.8	2,875.5	3,084.9	2,922.8	162.09	19.033	
7,578.7	6,943.4	6,925.4	6,925.4	25.4	138.4	-90.66	1,646.8	2,875.5	3,022.7	2,859.0	163.72	18.463	
7,600.0	6,943.2	6,925.2	6,925.2	25.8	138.4	-90.65	1,646.8	2,875.5	3,006.0	2,841.9	164.16	18.312	
7,677.1	6,942.5	6,924.5	6,924.5	27.5	138.4	-90.63	1,646.8	2,875.5	2,946.1	2,780.2	165.86	17.763	
7,700.0	6,942.3	6,924.3	6,924.3	28.0	138.4	-90.63	1,646.8	2,875.5	2,928.5	2,762.1	166.36	17.603	
7,775.6	6,941.6	6,923.6	6,923.6	29.8	138.3	-90.60	1,646.8	2,875.5	2,870.7	2,702.6	168.10	17.077	
7,800.0	6,941.4	6,923.4	6,923.4	30.3	138.3	-90.60	1,646.8	2,875.5	2,852.3	2,683.6	168.67	16.911	
7,874.0	6,940.7	6,922.7	6,922.7	32.1	138.3	-90.58	1,646.8	2,875.5	2,796.8	2,626.4	170.43	16.411	
7,900.0	6,940.5	6,922.5	6,922.5	32.7	138.3	-90.57	1,646.8	2,875.5	2,777.6	2,606.5	171.05	16.239	
7,972.4	6,939.8	6,921.8	6,921.8	34.5	138.3	-90.55	1,646.8	2,875.5	2,724.5	2,551.7	172.82	15.765	
8,000.0	6,939.6	6,921.6	6,921.6	35.2	138.3	-90.54	1,646.8	2,875.5	2,704.5	2,531.0	173.49	15.589	
8,070.8	6,938.9	6,920.9	6,920.9	37.0	138.3	-90.52	1,646.8	2,875.5	2,653.8	2,478.6	175.25	15.143	
8,100.0	6,938.7	6,920.7	6,920.7	37.7	138.3	-90.51	1,646.8	2,875.5	2,633.2	2,457.3	175.98	14.963	
8,169.3	6,938.0	6,920.0	6,920.0	39.5	138.3	-90.50	1,646.8	2,875.5	2,585.0	2,407.3	177.73	14.544	
8,200.0	6,937.7	6,919.7	6,919.7	40.3	138.3	-90.49	1,646.8	2,875.5	2,563.9	2,385.4	178.51	14.363	
8,267.7	6,937.1	6,919.1	6,919.1	42.0	138.3	-90.47	1,646.8	2,875.5	2,518.1	2,337.9	180.25	13.970	
8,300.0	6,936.8	6,918.8	6,918.8	42.8	138.2	-90.46	1,646.8	2,875.5	2,496.6	2,315.5	181.08	13.788	
8,366.1	6,936.2	6,918.2	6,918.2	44.6	138.2	-90.44	1,646.8	2,875.5	2,453.4	2,270.6	182.79	13.422	
8,400.0	6,935.9	6,917.9	6,917.9	45.5	138.2	-90.43	1,646.8	2,875.5	2,431.6	2,247.9	183.67	13.239	
8,464.5	6,935.3	6,917.3	6,917.3	47.2	138.2	-90.41	1,646.8	2,875.5	2,390.9	2,205.5	185.35	12.899	
8,500.0	6,935.0	6,917.0	6,917.0	48.1	138.2	-90.40	1,646.8	2,875.5	2,369.0	2,182.7	186.28	12.717	
8,563.0	6,934.5	6,916.5	6,916.5	49.8	138.2	-90.39	1,646.8	2,875.5	2,330.9	2,143.0	187.94	12.403	
8,600.0	6,934.1	6,916.1	6,916.1	50.7	138.2	-90.38	1,646.8	2,875.5	2,309.0	2,120.1	188.91	12.223	
8,661.4	6,933.6	6,915.6	6,915.6	52.4	138.2	-90.36	1,646.8	2,875.5	2,273.6	2,083.1	190.54	11.933	
8,700.0	6,933.2	6,915.2	6,915.2	53.4	138.2	-90.35	1,646.8	2,875.5	2,251.9	2,060.4	191.56	11.756	
8,759.8	6,932.7	6,914.7	6,914.7	55.0	138.2	-90.33	1,646.8	2,875.5	2,219.2	2,026.1	193.15	11.489	
8,800.0	6,932.3	6,914.3	6,914.3	56.1	138.2	-90.32	1,646.8	2,875.5	2,197.9	2,003.7	194.22	11.316	
8,858.2	6,931.8	6,913.8	6,913.8	57.7	138.1	-90.30	1,646.8	2,875.5	2,167.9	1,972.1	195.78	11.073	
8,900.0	6,931.4	6,913.4	6,913.4	58.8	138.1	-90.29	1,646.8	2,875.5	2,147.2	1,950.3	196.90	10.905	
8,956.7	6,930.9	6,912.9	6,912.9	60.3	138.1	-90.28	1,646.8	2,875.5	2,120.0	1,921.5	198.42	10.684	
9,000.0	6,930.5	6,912.5	6,912.5	61.5	138.1	-90.26	1,646.8	2,875.5	2,100.0	1,900.4	199.58	10.522	
9,055.1	6,930.0	6,912.0	6,912.0	63.0	138.1	-90.25	1,646.8	2,875.5	2,075.5	1,874.5	201.07	10.323	
9,100.0	6,929.6	6,911.6	6,911.6	64.2	138.1	-90.24	1,646.8	2,875.5	2,056.5	1,854.3	202.28	10.167	
9,153.5	6,929.1	6,911.1	6,911.1	65.6	138.1	-90.22	1,646.8	2,875.5	2,034.9	1,831.2	203.72	9.989	
9,200.0	6,928.7	6,910.7	6,910.7	66.9	138.1	-90.21	1,646.8	2,875.5	2,017.1	1,812.2	204.98	9.841	
9,251.9	6,928.2	6,910.2	6,910.2	68.3	138.1	-90.19	1,646.8	2,875.5	1,998.3	1,792.0	206.39	9.682	
9,300.0	6,927.8	6,909.8	6,909.8	69.6	138.1	-90.18	1,646.8	2,875.5	1,982.0	1,774.3	207.69	9.543	
9,350.4	6,927.3	6,909.3	6,909.3	71.0	138.1	-90.17	1,646.8	2,875.5	1,966.0	1,756.9	209.06	9.404	
9,400.0	6,926.9	6,908.9	6,908.9	72.4	138.0	-90.15	1,646.8	2,875.5	1,951.4	1,741.0	210.41	9.274	
9,448.8	6,926.4	6,908.4	6,908.4	73.7	138.0	-90.14	1,646.8	2,875.5	1,938.1	1,726.4	211.73	9.154	
9,500.0	6,926.0	6,908.0	6,908.0	75.1	138.0	-90.13	1,646.8	2,875.5	1,925.5	1,712.3	213.13	9.034	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
9,547.2	6,925.5	6,907.5	6,907.5	76.4	138.0	-90.11	1,646.8	2,875.5	1,914.9	1,700.5	214.41	8.931	
9,600.0	6,925.1	6,907.1	6,907.1	77.9	138.0	-90.10	1,646.8	2,875.5	1,904.4	1,688.6	215.85	8.823	
9,645.6	6,924.6	6,906.6	6,906.6	79.1	138.0	-90.09	1,646.8	2,875.5	1,896.5	1,679.4	217.10	8.736	
9,700.0	6,924.1	6,906.1	6,906.1	80.6	138.0	-90.07	1,646.8	2,875.5	1,888.5	1,669.9	218.58	8.640	
9,744.1	6,923.7	6,905.7	6,905.7	81.8	138.0	-90.06	1,646.8	2,875.5	1,883.1	1,663.3	219.79	8.568	
9,800.0	6,923.2	6,905.2	6,905.2	83.4	138.0	-90.04	1,646.8	2,875.5	1,877.7	1,656.4	221.32	8.484	
9,842.5	6,922.9	6,904.9	6,904.9	84.5	138.0	-90.03	1,646.8	2,875.5	1,874.8	1,652.3	222.48	8.427	
9,900.0	6,922.3	6,904.3	6,904.3	86.1	138.0	-90.01	1,646.8	2,875.5	1,872.3	1,648.2	224.06	8.356	
9,940.9	6,922.0	6,904.0	6,904.0	87.2	137.9	-90.00	1,646.8	2,875.5	1,871.6	1,646.4	225.18	8.312	
9,952.5	6,921.9	6,903.9	6,903.9	87.6	137.9	-90.00	1,646.8	2,875.5	1,871.5	1,646.1	225.50	8.300 CC	
10,000.0	6,921.4	6,903.4	6,903.4	88.9	137.9	-89.99	1,646.8	2,875.5	1,872.2	1,645.4	226.80	8.255 ES	
10,039.3	6,921.1	6,903.1	6,903.1	90.0	137.9	-89.98	1,646.8	2,875.5	1,873.6	1,645.7	227.88	8.222	
10,100.0	6,920.5	6,902.5	6,902.5	91.6	137.9	-89.96	1,646.8	2,875.5	1,877.4	1,647.8	229.54	8.179	
10,137.8	6,920.2	6,902.2	6,902.2	92.7	137.9	-89.95	1,646.8	2,875.5	1,880.7	1,650.1	230.58	8.156	
10,200.0	6,919.6	6,901.6	6,901.6	94.4	137.9	-89.93	1,646.8	2,875.5	1,887.8	1,655.6	232.29	8.127	
10,236.2	6,919.3	6,901.3	6,901.3	95.4	137.9	-89.92	1,646.8	2,875.5	1,892.9	1,659.6	233.29	8.114	
10,300.0	6,918.7	6,900.7	6,900.7	97.2	137.9	-89.90	1,646.8	2,875.5	1,903.5	1,668.5	235.04	8.099	
10,334.6	6,918.4	6,900.4	6,900.4	98.1	137.9	-89.89	1,646.8	2,875.5	1,910.2	1,674.2	235.99	8.094	
10,400.0	6,917.8	6,899.8	6,899.8	99.9	137.9	-89.88	1,646.8	2,875.5	1,924.3	1,686.5	237.79	8.092 SF	
10,433.0	6,917.5	6,899.5	6,899.5	100.9	137.9	-89.87	1,646.8	2,875.5	1,932.3	1,693.6	238.70	8.095	
10,500.0	6,916.9	6,898.9	6,898.9	102.7	137.8	-89.85	1,646.8	2,875.5	1,950.0	1,709.4	240.55	8.106	
10,531.5	6,916.6	6,898.6	6,898.6	103.6	137.8	-89.84	1,646.8	2,875.5	1,959.1	1,717.6	241.42	8.115	
10,600.0	6,916.0	6,898.0	6,898.0	105.5	137.8	-89.82	1,646.8	2,875.5	1,980.4	1,737.1	243.30	8.140	
10,629.9	6,915.7	6,897.7	6,897.7	106.3	137.8	-89.81	1,646.8	2,875.5	1,990.4	1,746.2	244.13	8.153	
10,700.0	6,915.1	6,897.1	6,897.1	108.3	137.8	-89.79	1,646.8	2,875.5	2,015.3	1,769.2	246.06	8.190	
10,728.3	6,914.8	6,896.8	6,896.8	109.1	137.8	-89.79	1,646.8	2,875.5	2,026.0	1,779.1	246.84	8.208	
10,800.0	6,914.2	6,896.2	6,896.2	111.0	137.8	-89.77	1,646.8	2,875.5	2,054.5	1,805.7	248.82	8.257	
10,826.7	6,913.9	6,895.9	6,895.9	111.8	137.8	-89.76	1,646.8	2,875.5	2,065.7	1,816.1	249.56	8.277	
10,900.0	6,913.3	6,895.3	6,895.3	113.8	137.8	-89.74	1,646.8	2,875.5	2,097.7	1,846.1	251.58	8.338	
10,925.2	6,913.1	6,895.1	6,895.1	114.5	137.8	-89.73	1,646.8	2,875.5	2,109.2	1,856.9	252.28	8.361	
11,000.0	6,912.4	6,894.4	6,894.4	116.6	137.8	-89.71	1,646.8	2,875.5	2,144.8	1,890.4	254.35	8.432	
11,023.6	6,912.2	6,894.2	6,894.2	117.3	137.8	-89.70	1,646.8	2,875.5	2,156.4	1,901.4	255.00	8.456	
11,100.0	6,911.5	6,893.5	6,893.5	119.4	137.7	-89.68	1,646.8	2,875.5	2,195.3	1,938.2	257.11	8.539	
11,122.0	6,911.3	6,893.3	6,893.3	120.0	137.7	-89.68	1,646.8	2,875.5	2,206.9	1,949.2	257.72	8.563	
11,200.0	6,910.6	6,892.6	6,892.6	122.2	137.7	-89.65	1,646.8	2,875.5	2,249.2	1,989.3	259.87	8.655	
11,220.4	6,910.4	6,892.4	6,892.4	122.7	137.7	-89.65	1,646.8	2,875.5	2,260.6	2,000.2	260.44	8.680	
11,300.0	6,909.7	6,891.7	6,891.7	125.0	137.7	-89.63	1,646.8	2,875.5	2,306.2	2,043.5	262.64	8.781	
11,318.9	6,909.5	6,891.5	6,891.5	125.5	137.7	-89.62	1,646.8	2,875.5	2,317.3	2,054.1	263.16	8.805	
11,400.0	6,908.8	6,890.8	6,890.8	127.7	137.7	-89.60	1,646.8	2,875.5	2,366.0	2,100.6	265.41	8.915	
11,417.3	6,908.6	6,890.6	6,890.6	128.2	137.7	-89.59	1,646.8	2,875.5	2,376.6	2,110.7	265.89	8.938	
11,500.0	6,907.9	6,889.9	6,889.9	130.5	137.7	-89.57	1,646.8	2,875.5	2,428.5	2,160.3	268.17	9.056	
11,515.7	6,907.7	6,889.7	6,889.7	131.0	137.7	-89.57	1,646.8	2,875.5	2,438.5	2,169.9	268.61	9.078	
11,600.0	6,907.0	6,889.0	6,889.0	133.3	137.6	-89.54	1,646.8	2,875.5	2,493.4	2,222.4	270.94	9.203	
11,614.1	6,906.8	6,888.8	6,888.8	133.7	137.6	-89.54	1,646.8	2,875.5	2,502.7	2,231.4	271.34	9.224	
11,700.0	6,906.0	6,888.0	6,888.0	136.1	137.6	-89.52	1,646.8	2,875.5	2,560.5	2,286.8	273.71	9.355	
11,712.6	6,905.9	6,887.9	6,887.9	136.5	137.6	-89.51	1,646.8	2,875.5	2,569.1	2,295.1	274.06	9.374	
11,800.0	6,905.1	6,887.1	6,887.1	138.9	137.6	-89.49	1,646.8	2,875.5	2,629.8	2,353.3	276.48	9.512	
11,811.0	6,905.0	6,887.0	6,887.0	139.2	137.6	-89.49	1,646.8	2,875.5	2,637.5	2,360.8	276.79	9.529	
11,900.0	6,904.2	6,886.2	6,886.2	141.7	137.6	-89.46	1,646.8	2,875.5	2,701.0	2,421.7	279.25	9.672	
11,909.4	6,904.2	6,886.2	6,886.2	141.9	137.6	-89.46	1,646.8	2,875.5	2,707.8	2,428.3	279.52	9.687	
12,000.0	6,903.3	6,885.3	6,885.3	144.5	137.6	-89.43	1,646.8	2,875.5	2,774.0	2,491.9	282.03	9.836	
12,007.8	6,903.3	6,885.3	6,885.3	144.7	137.6	-89.43	1,646.8	2,875.5	2,779.8	2,497.5	282.24	9.849	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,884.4	6,884.4	147.3	137.6	-89.41	1,646.8	2,875.5	2,848.6	2,563.8	284.80	10.002	
12,106.3	6,902.4	6,884.4	6,884.4	147.4	137.6	-89.40	1,646.8	2,875.5	2,853.3	2,568.3	284.97	10.013	
12,200.0	6,901.5	6,883.5	6,883.5	150.1	137.5	-89.38	1,646.8	2,875.5	2,924.7	2,637.1	287.57	10.170	
12,204.7	6,901.5	6,883.5	6,883.5	150.2	137.5	-89.38	1,646.8	2,875.5	2,928.3	2,640.6	287.70	10.178	
12,300.0	6,900.6	6,882.6	6,882.6	152.9	137.5	-89.35	1,646.8	2,875.5	3,002.2	2,711.9	290.35	10.340	
12,303.1	6,900.6	6,882.6	6,882.6	152.9	137.5	-89.35	1,646.8	2,875.5	3,004.6	2,714.2	290.43	10.345	
12,400.0	6,899.7	6,881.7	6,881.7	155.6	137.5	-89.32	1,646.8	2,875.5	3,081.0	2,787.9	293.12	10.511	
12,401.5	6,899.7	6,881.7	6,881.7	155.7	137.5	-89.32	1,646.8	2,875.5	3,082.3	2,789.1	293.16	10.514	
12,500.0	6,898.8	6,880.8	6,880.8	158.4	137.5	-89.30	1,646.8	2,875.5	3,161.0	2,865.1	295.89	10.683	
12,598.4	6,897.9	6,879.9	6,879.9	161.2	137.5	-89.27	1,646.8	2,875.5	3,240.9	2,942.2	298.62	10.853	
12,600.0	6,897.9	6,879.9	6,879.9	161.2	137.5	-89.27	1,646.8	2,875.5	3,242.2	2,943.5	298.67	10.855	
12,696.8	6,897.0	6,879.0	6,879.0	163.9	137.4	-89.24	1,646.8	2,875.5	3,321.7	3,020.3	301.36	11.022	
12,700.0	6,897.0	6,879.0	6,879.0	164.0	137.4	-89.24	1,646.8	2,875.5	3,324.3	3,022.9	301.44	11.028	
12,795.2	6,896.1	6,878.1	6,878.1	166.7	137.4	-89.21	1,646.8	2,875.5	3,403.5	3,099.4	304.09	11.192	
12,800.0	6,896.1	6,878.1	6,878.1	166.8	137.4	-89.21	1,646.8	2,875.5	3,407.4	3,103.2	304.22	11.201	
12,893.7	6,895.3	6,877.3	6,877.3	169.4	137.4	-89.19	1,646.8	2,875.5	3,486.1	3,179.3	306.82	11.362	
12,900.0	6,895.2	6,877.2	6,877.2	169.6	137.4	-89.18	1,646.8	2,875.5	3,491.4	3,184.4	307.00	11.373	
12,992.1	6,894.4	6,876.4	6,876.4	172.2	137.4	-89.16	1,646.8	2,875.5	3,569.5	3,260.0	309.55	11.531	
13,000.0	6,894.3	6,876.3	6,876.3	172.4	137.4	-89.16	1,646.8	2,875.5	3,576.2	3,266.5	309.77	11.545	
13,090.5	6,893.5	6,875.5	6,875.5	175.0	137.4	-89.13	1,646.8	2,875.5	3,653.7	3,341.4	312.29	11.700	
13,100.0	6,893.4	6,875.4	6,875.4	175.2	137.4	-89.13	1,646.8	2,875.5	3,661.8	3,349.3	312.55	11.716	
13,188.9	6,892.6	6,874.6	6,874.6	177.7	137.4	-89.11	1,646.8	2,875.5	3,738.6	3,423.5	315.02	11.868	
13,200.0	6,892.5	6,874.5	6,874.5	178.0	137.4	-89.10	1,646.8	2,875.5	3,748.1	3,432.8	315.33	11.886	
13,287.4	6,891.7	6,873.7	6,873.7	180.5	137.3	-89.08	1,646.8	2,875.5	3,824.1	3,506.3	317.75	12.035	
13,300.0	6,891.6	6,873.6	6,873.6	180.8	137.3	-89.07	1,646.8	2,875.5	3,835.1	3,517.0	318.10	12.056	
13,385.8	6,890.8	6,872.8	6,872.8	183.2	137.3	-89.05	1,646.8	2,875.5	3,910.2	3,589.7	320.49	12.201	
13,400.0	6,890.7	6,872.7	6,872.7	183.6	137.3	-89.05	1,646.8	2,875.5	3,922.7	3,601.8	320.88	12.225	
13,484.2	6,889.9	6,871.9	6,871.9	186.0	137.3	-89.02	1,646.8	2,875.5	3,996.9	3,673.7	323.22	12.366	
13,500.0	6,889.8	6,871.8	6,871.8	186.4	137.3	-89.02	1,646.8	2,875.5	4,010.8	3,687.2	323.66	12.392	
13,582.6	6,889.0	6,871.0	6,871.0	188.7	137.3	-89.00	1,646.8	2,875.5	4,084.1	3,758.2	325.96	12.530	
13,600.0	6,888.9	6,870.9	6,870.9	189.2	137.3	-88.99	1,646.8	2,875.5	4,099.5	3,773.1	326.44	12.558	
13,681.1	6,888.1	6,870.1	6,870.1	191.5	137.3	-88.97	1,646.8	2,875.5	4,171.8	3,843.1	328.69	12.692	
13,700.0	6,888.0	6,870.0	6,870.0	192.0	137.3	-88.96	1,646.8	2,875.5	4,188.8	3,859.5	329.22	12.723	
13,779.5	6,887.3	6,869.3	6,869.3	194.2	137.3	-88.94	1,646.8	2,875.5	4,260.0	3,928.6	331.42	12.854	
13,800.0	6,887.1	6,869.1	6,869.1	194.8	137.2	-88.94	1,646.8	2,875.5	4,278.4	3,946.5	331.99	12.887	
13,877.9	6,886.4	6,868.4	6,868.4	197.0	137.2	-88.92	1,646.8	2,875.5	4,348.7	4,014.5	334.16	13.014	
13,900.0	6,886.2	6,868.2	6,868.2	197.6	137.2	-88.91	1,646.8	2,875.5	4,368.6	4,033.8	334.77	13.049	
13,976.3	6,885.5	6,867.5	6,867.5	199.7	137.2	-88.89	1,646.8	2,875.5	4,437.7	4,100.8	336.89	13.172	
14,000.0	6,885.3	6,867.3	6,867.3	200.4	137.2	-88.88	1,646.8	2,875.5	4,459.1	4,121.6	337.55	13.210	
14,074.8	6,884.6	6,866.6	6,866.6	202.5	137.2	-88.86	1,646.8	2,875.5	4,527.1	4,187.5	339.63	13.330	
14,100.0	6,884.4	6,866.4	6,866.4	203.2	137.2	-88.85	1,646.8	2,875.5	4,550.1	4,209.8	340.33	13.370	
14,173.2	6,883.7	6,865.7	6,865.7	205.3	137.2	-88.83	1,646.8	2,875.5	4,616.9	4,274.6	342.37	13.485	
14,200.0	6,883.5	6,865.5	6,865.5	206.0	137.2	-88.83	1,646.8	2,875.5	4,641.4	4,298.3	343.11	13.528	
14,271.6	6,882.8	6,864.8	6,864.8	208.0	137.2	-88.81	1,646.8	2,875.5	4,707.1	4,362.0	345.10	13.640	
14,300.0	6,882.6	6,864.6	6,864.6	208.8	137.2	-88.80	1,646.8	2,875.5	4,733.1	4,387.2	345.89	13.684	
14,370.0	6,881.9	6,863.9	6,863.9	210.8	137.1	-88.78	1,646.8	2,875.5	4,797.5	4,449.7	347.84	13.793	
14,400.0	6,881.7	6,863.7	6,863.7	211.6	137.1	-88.77	1,646.8	2,875.5	4,825.1	4,476.5	348.67	13.839	
14,468.5	6,881.0	6,863.0	6,863.0	213.5	137.1	-88.75	1,646.8	2,875.5	4,888.3	4,537.7	350.57	13.944	
14,500.0	6,880.8	6,862.8	6,862.8	214.4	137.1	-88.74	1,646.8	2,875.5	4,917.4	4,566.0	351.45	13.992	
14,566.9	6,880.2	6,862.2	6,862.2	216.3	137.1	-88.73	1,646.8	2,875.5	4,979.4	4,626.1	353.31	14.094	
14,584.2	6,880.0	6,862.0	6,862.0	216.8	137.1	-88.72	1,646.8	2,875.5	4,995.4	4,641.6	353.79	14.120	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	81.64	1,393.1	9,481.0	9,582.8				
98.4	98.4	70.4	70.4	0.1	0.4	81.64	1,393.1	9,481.0	9,582.8	9,582.3	0.53	N/A	
100.0	100.0	72.0	72.0	0.1	0.5	81.64	1,393.1	9,481.0	9,582.8	9,582.2	0.54	N/A	
196.8	196.8	168.8	168.8	0.3	2.3	81.64	1,393.1	9,481.0	9,582.8	9,580.2	2.61	3,674.322	
200.0	200.0	172.0	172.0	0.3	2.4	81.64	1,393.1	9,481.0	9,582.8	9,580.1	2.69	3,559.863	
295.3	295.3	267.3	267.3	0.5	4.5	81.64	1,393.1	9,481.0	9,582.8	9,577.8	4.99	1,920.996	
300.0	300.0	272.0	272.0	0.5	4.6	81.64	1,393.1	9,481.0	9,582.8	9,577.7	5.10	1,879.939	
393.7	393.7	365.7	365.7	0.7	6.5	81.64	1,393.1	9,481.0	9,582.8	9,575.6	7.23	1,325.104	
400.0	400.0	372.0	372.0	0.8	6.6	81.64	1,393.1	9,481.0	9,582.8	9,575.4	7.37	1,299.453	
492.1	492.1	464.1	464.1	1.0	8.5	81.64	1,393.1	9,481.0	9,582.8	9,573.3	9.45	1,013.680	
500.0	500.0	472.0	472.0	1.0	8.6	81.64	1,393.1	9,481.0	9,582.8	9,573.2	9.63	995.008	
590.5	590.5	562.5	562.5	1.2	10.5	81.64	1,393.1	9,481.0	9,582.8	9,571.1	11.67	821.370	
600.0	600.0	572.0	572.0	1.2	10.7	81.64	1,393.1	9,481.0	9,582.8	9,570.9	11.88	806.691	
689.0	689.0	661.0	661.0	1.4	12.5	81.64	1,393.1	9,481.0	9,582.8	9,568.9	13.88	690.602	
700.0	700.0	672.0	672.0	1.4	12.7	81.64	1,393.1	9,481.0	9,582.8	9,568.7	14.12	678.508	
787.4	787.4	759.4	759.4	1.6	14.5	81.64	1,393.1	9,481.0	9,582.8	9,566.7	16.08	595.843	
800.0	800.0	772.0	772.0	1.7	14.7	81.64	1,393.1	9,481.0	9,582.8	9,566.4	16.37	585.561	
885.8	885.8	857.8	857.8	1.9	16.4	81.64	1,393.1	9,481.0	9,582.8	9,564.5	18.29	523.994	
900.0	900.0	872.0	872.0	1.9	16.7	81.64	1,393.1	9,481.0	9,582.8	9,564.2	18.61	515.052	
984.2	984.2	956.2	956.2	2.1	18.4	81.64	1,393.1	9,481.0	9,582.8	9,562.3	20.49	467.632	
1,000.0	1,000.0	972.0	972.0	2.1	18.7	81.64	1,393.1	9,481.0	9,582.8	9,561.9	20.84	459.721	
1,082.7	1,082.7	1,054.7	1,054.7	2.3	20.4	81.64	1,393.1	9,481.0	9,582.8	9,560.1	22.70	422.231	
1,100.0	1,100.0	1,072.0	1,072.0	2.3	20.7	81.64	1,393.1	9,481.0	9,582.8	9,559.7	23.08	415.137	
1,181.1	1,181.1	1,153.1	1,153.1	2.5	22.4	81.64	1,393.1	9,481.0	9,582.8	9,557.9	24.90	384.873	
1,200.0	1,200.0	1,172.0	1,172.0	2.6	22.8	81.64	1,393.1	9,481.0	9,582.8	9,557.5	25.32	378.444	
1,279.5	1,279.5	1,251.5	1,251.5	2.7	24.4	81.64	1,393.1	9,481.0	9,582.8	9,555.7	27.10	353.594	
1,300.0	1,300.0	1,272.0	1,272.0	2.8	24.8	81.64	1,393.1	9,481.0	9,582.8	9,555.2	27.56	347.716	
1,377.9	1,377.9	1,349.9	1,349.9	3.0	26.3	81.64	1,393.1	9,481.0	9,582.8	9,553.5	29.30	327.021	
1,400.0	1,400.0	1,372.0	1,372.0	3.0	26.8	81.64	1,393.1	9,481.0	9,582.8	9,553.0	29.80	321.606	
1,476.4	1,476.4	1,448.4	1,448.4	3.2	28.3	81.64	1,393.1	9,481.0	9,582.8	9,551.3	31.51	304.164	
1,500.0	1,500.0	1,472.0	1,472.0	3.2	28.8	81.64	1,393.1	9,481.0	9,582.8	9,550.7	32.03	299.146	
1,574.8	1,574.8	1,546.8	1,546.8	3.4	30.3	81.64	1,393.1	9,481.0	9,582.8	9,549.1	33.71	284.296	
1,600.0	1,600.0	1,572.0	1,572.0	3.5	30.8	81.64	1,393.1	9,481.0	9,582.8	9,548.5	34.27	279.620	
1,650.0	1,650.0	1,622.0	1,622.0	3.6	31.8	81.64	1,393.1	9,481.0	9,582.8	9,547.4	35.39	270.783	
1,673.2	1,673.2	1,645.2	1,645.2	3.6	32.3	-158.77	1,393.1	9,481.0	9,582.9	9,547.0	35.90	266.913	
1,700.0	1,700.0	1,672.0	1,672.0	3.7	32.8	-158.77	1,393.1	9,481.0	9,583.2	9,546.7	36.49	262.612	
1,771.6	1,771.6	1,743.6	1,743.6	3.8	34.3	-158.76	1,393.1	9,481.0	9,585.2	9,547.1	38.04	251.975	
1,800.0	1,799.9	1,771.9	1,771.9	3.9	34.8	-158.76	1,393.1	9,481.0	9,586.4	9,547.8	38.65	248.058	
1,870.1	1,869.9	1,841.9	1,841.9	4.0	36.2	-158.74	1,393.1	9,481.0	9,590.7	9,550.5	40.13	238.994	
1,900.0	1,899.7	1,871.7	1,871.7	4.1	36.8	-158.72	1,393.1	9,481.0	9,592.9	9,552.2	40.75	235.386	
1,968.5	1,967.8	1,939.8	1,939.8	4.2	38.2	-158.69	1,393.1	9,481.0	9,599.3	9,557.1	42.17	227.640	
2,000.0	1,999.1	1,971.1	1,971.1	4.3	38.8	-158.68	1,393.1	9,481.0	9,602.7	9,559.9	42.81	224.317	
2,066.9	2,065.5	2,037.5	2,037.5	4.4	40.2	-158.63	1,393.1	9,481.0	9,611.0	9,566.9	44.15	217.684	
2,100.0	2,098.2	2,070.2	2,070.2	4.5	40.8	-158.61	1,393.1	9,481.0	9,615.7	9,570.9	44.80	214.624	
2,165.3	2,162.6	2,134.6	2,134.6	4.7	42.1	-158.56	1,393.1	9,481.0	9,625.9	9,579.8	46.07	208.934	
2,200.0	2,196.6	2,168.6	2,168.6	4.7	42.8	-158.53	1,393.1	9,481.0	9,631.9	9,585.1	46.73	206.118	
2,249.9	2,245.5	2,217.5	2,217.5	4.9	43.8	-158.48	1,393.1	9,481.0	9,641.1	9,593.5	47.66	202.271	
2,263.8	2,259.1	2,231.1	2,231.1	4.9	44.1	-158.49	1,393.1	9,481.0	9,643.8	9,595.9	47.96	201.064	
2,300.0	2,294.5	2,266.5	2,266.5	5.0	44.8	-158.50	1,393.1	9,481.0	9,650.9	9,602.1	48.74	197.992	
2,362.2	2,355.4	2,327.4	2,327.4	5.2	46.0	-158.53	1,393.1	9,481.0	9,662.9	9,612.8	50.09	192.920	
2,400.0	2,392.3	2,364.3	2,364.3	5.4	46.8	-158.55	1,393.1	9,481.0	9,670.3	9,619.4	50.90	189.975	
2,460.6	2,451.6	2,423.6	2,423.6	5.6	47.9	-158.58	1,393.1	9,481.0	9,682.0	9,629.8	52.21	185.426	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,462.2	2,462.2	5.7	48.7	-158.59	1,393.1	9,481.0	9,689.7	9,636.6	53.07	182.584		
2,559.0	2,547.9	2,519.9	2,519.9	5.9	49.9	-158.62	1,393.1	9,481.0	9,701.1	9,646.8	54.35	178.485		
2,600.0	2,588.0	2,560.0	2,560.0	6.1	50.7	-158.64	1,393.1	9,481.0	9,709.1	9,653.8	55.24	175.752		
2,657.5	2,644.2	2,616.2	2,616.2	6.3	51.8	-158.66	1,393.1	9,481.0	9,720.2	9,663.7	56.50	172.054		
2,700.0	2,685.8	2,657.8	2,657.8	6.4	52.7	-158.68	1,393.1	9,481.0	9,728.5	9,671.1	57.42	169.421		
2,755.9	2,740.5	2,712.5	2,712.5	6.6	53.8	-158.71	1,393.1	9,481.0	9,739.4	9,680.7	58.64	166.079		
2,800.0	2,783.6	2,755.6	2,755.6	6.8	54.6	-158.73	1,393.1	9,481.0	9,747.9	9,688.3	59.61	163.539		
2,854.3	2,836.7	2,808.7	2,808.7	7.0	55.7	-158.75	1,393.1	9,481.0	9,758.5	9,697.7	60.80	160.514		
2,900.0	2,881.4	2,853.4	2,853.4	7.2	56.6	-158.77	1,393.1	9,481.0	9,767.3	9,705.6	61.79	158.062		
2,952.7	2,933.0	2,905.0	2,905.0	7.4	57.6	-158.79	1,393.1	9,481.0	9,777.6	9,714.6	62.95	155.321		
3,000.0	2,979.2	2,951.2	2,951.2	7.6	58.6	-158.82	1,393.1	9,481.0	9,786.8	9,722.8	63.99	152.951		
3,051.2	3,029.3	3,001.3	3,001.3	7.8	59.6	-158.84	1,393.1	9,481.0	9,796.7	9,731.6	65.11	150.464		
3,100.0	3,077.1	3,049.1	3,049.1	8.0	60.5	-158.86	1,393.1	9,481.0	9,806.2	9,740.0	66.18	148.171		
3,149.6	3,125.6	3,097.6	3,097.6	8.2	61.5	-158.88	1,393.1	9,481.0	9,815.9	9,748.6	67.27	145.912		
3,200.0	3,174.9	3,146.9	3,146.9	8.4	62.5	-158.90	1,393.1	9,481.0	9,825.7	9,757.3	68.38	143.692		
3,248.0	3,221.8	3,193.8	3,193.8	8.6	63.4	-158.92	1,393.1	9,481.0	9,835.0	9,765.6	69.44	141.639		
3,300.0	3,272.7	3,244.7	3,244.7	8.9	64.5	-158.95	1,393.1	9,481.0	9,845.1	9,774.5	70.58	139.487		
3,346.4	3,318.1	3,290.1	3,290.1	9.0	65.4	-158.97	1,393.1	9,481.0	9,854.2	9,782.5	71.60	137.620		
3,400.0	3,370.5	3,342.5	3,342.5	9.3	66.4	-158.99	1,393.1	9,481.0	9,864.6	9,791.8	72.78	135.532		
3,444.9	3,414.4	3,386.4	3,386.4	9.5	67.3	-159.01	1,393.1	9,481.0	9,873.3	9,799.5	73.77	133.833		
3,500.0	3,468.3	3,440.3	3,440.3	9.7	68.4	-159.03	1,393.1	9,481.0	9,884.0	9,809.0	74.99	131.807		
3,543.3	3,510.7	3,482.7	3,482.7	9.9	69.2	-159.05	1,393.1	9,481.0	9,892.5	9,816.5	75.94	130.259		
3,600.0	3,566.1	3,538.1	3,538.1	10.1	70.4	-159.08	1,393.1	9,481.0	9,903.5	9,826.3	77.20	128.291		
3,641.7	3,606.9	3,578.9	3,578.9	10.3	71.2	-159.09	1,393.1	9,481.0	9,911.6	9,833.5	78.12	126.882		
3,700.0	3,664.0	3,636.0	3,636.0	10.6	72.3	-159.12	1,393.1	9,481.0	9,923.0	9,843.6	79.40	124.969		
3,740.1	3,703.2	3,675.2	3,675.2	10.7	73.1	-159.14	1,393.1	9,481.0	9,930.8	9,850.5	80.29	123.685		
3,800.0	3,761.8	3,733.8	3,733.8	11.0	74.3	-159.16	1,393.1	9,481.0	9,942.5	9,860.8	81.61	121.824		
3,837.4	3,798.3	3,770.3	3,770.3	11.2	75.0	-159.18	1,393.1	9,481.0	9,949.7	9,867.3	82.44	120.692		
3,838.6	3,799.5	3,771.5	3,771.5	11.2	75.1	-159.18	1,393.1	9,481.0	9,950.0	9,867.5	82.47	120.647		
3,900.0	3,859.7	3,831.7	3,831.7	11.4	76.3	-159.29	1,393.1	9,481.0	9,961.3	9,877.2	84.11	118.438		
3,937.0	3,896.1	3,868.1	3,868.1	11.5	77.0	-159.34	1,393.1	9,481.0	9,967.6	9,882.5	85.07	117.167		
4,000.0	3,958.3	3,930.3	3,930.3	11.7	78.2	-159.43	1,393.1	9,481.0	9,977.2	9,890.5	86.70	115.079		
4,035.4	3,993.3	3,965.3	3,965.3	11.8	79.0	-159.48	1,393.1	9,481.0	9,982.0	9,894.4	87.60	113.950		
4,100.0	4,057.4	4,029.4	4,029.4	12.0	80.2	-159.55	1,393.1	9,481.0	9,989.8	9,900.6	89.22	111.964		
4,133.8	4,091.0	4,063.0	4,063.0	12.1	80.9	-159.58	1,393.1	9,481.0	9,993.3	9,903.3	90.06	110.965		
4,200.0	4,156.8	4,128.8	4,128.8	12.2	82.2	-159.63	1,393.1	9,481.0	9,999.2	9,907.5	91.67	109.080		
6,397.6	6,353.6	6,325.6	6,325.6	15.9	126.4	-9.45	1,393.1	9,481.0	9,997.6	9,859.4	138.21	72.335		
6,400.0	6,355.9	6,327.9	6,327.9	15.9	126.5	-9.46	1,393.1	9,481.0	9,997.2	9,859.0	138.18	72.348		
6,450.0	6,404.8	6,376.8	6,376.8	15.9	127.4	-9.61	1,393.1	9,481.0	9,986.7	9,849.5	137.19	72.795		
6,496.0	6,449.0	6,421.0	6,421.0	16.0	128.3	-9.80	1,393.1	9,481.0	9,974.2	9,838.5	135.68	73.515		
6,500.0	6,452.8	6,424.8	6,424.8	16.0	128.4	-9.82	1,393.1	9,481.0	9,973.0	9,837.4	135.52	73.591		
6,550.0	6,499.7	6,471.7	6,471.7	15.9	129.4	-10.09	1,393.1	9,481.0	9,955.9	9,822.7	133.18	74.758		
6,594.5	6,540.3	6,512.3	6,512.3	15.9	130.2	-10.38	1,393.1	9,481.0	9,938.1	9,807.5	130.54	76.131		
6,600.0	6,545.3	6,517.3	6,517.3	15.9	130.3	-10.42	1,393.1	9,481.0	9,935.7	9,805.5	130.18	76.325		
6,650.0	6,589.3	6,561.3	6,561.3	15.9	131.2	-10.84	1,393.1	9,481.0	9,912.3	9,785.8	126.54	78.332		
6,692.9	6,625.7	6,597.7	6,597.7	15.9	131.9	-11.27	1,393.1	9,481.0	9,890.0	9,767.0	122.95	80.439		
6,700.0	6,631.6	6,603.6	6,603.6	15.9	132.0	-11.34	1,393.1	9,481.0	9,886.1	9,763.7	122.32	80.824		
6,750.0	6,671.9	6,643.9	6,643.9	15.9	132.8	-11.96	1,393.1	9,481.0	9,856.9	9,739.4	117.55	83.852		
6,791.3	6,703.6	6,675.6	6,675.6	15.9	133.5	-12.56	1,393.1	9,481.0	9,830.8	9,717.5	113.27	86.793		
6,800.0	6,710.1	6,682.1	6,682.1	15.9	133.6	-12.70	1,393.1	9,481.0	9,825.1	9,712.7	112.33	87.463		
6,850.0	6,745.9	6,717.9	6,717.9	16.0	134.3	-13.61	1,393.1	9,481.0	9,790.7	9,683.9	106.78	91.692		
6,889.7	6,772.6	6,744.6	6,744.6	16.1	134.8	-14.48	1,393.1	9,481.0	9,761.6	9,659.4	102.24	95.482		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
6,900.0	6,779.2	6,751.2	6,751.2	16.1	135.0	-14.73	1,393.1	9,481.0	9,753.9	9,652.9	101.06	96.516	
6,950.0	6,809.8	6,781.8	6,781.8	16.3	135.6	-16.11	1,393.1	9,481.0	9,715.0	9,619.5	95.44	101.793	
6,988.2	6,831.3	6,803.3	6,803.3	16.4	136.0	-17.40	1,393.1	9,481.0	9,683.8	9,592.4	91.46	105.885	
7,000.0	6,837.6	6,809.6	6,809.6	16.5	136.2	-17.85	1,393.1	9,481.0	9,674.0	9,583.7	90.32	107.112	
7,050.0	6,862.5	6,834.5	6,834.5	16.9	136.7	-20.08	1,393.1	9,481.0	9,631.2	9,544.9	86.32	111.582	
7,086.6	6,878.7	6,850.7	6,850.7	17.2	137.0	-22.14	1,393.1	9,481.0	9,598.9	9,514.2	84.63	113.419	
7,100.0	6,884.2	6,856.2	6,856.2	17.3	137.1	-23.01	1,393.1	9,481.0	9,586.8	9,502.5	84.38	113.610	
7,150.0	6,902.7	6,874.7	6,874.7	17.8	137.5	-26.95	1,393.1	9,481.0	9,541.1	9,455.2	85.87	111.106	
7,185.0	6,913.8	6,885.8	6,885.8	18.3	137.7	-30.60	1,393.1	9,481.0	9,508.3	9,418.5	89.86	105.813	
7,200.0	6,918.0	6,890.0	6,890.0	18.5	137.8	-32.46	1,393.1	9,481.0	9,494.2	9,401.7	92.47	102.669	
7,250.0	6,929.9	6,901.9	6,901.9	19.2	138.0	-40.42	1,393.1	9,481.0	9,446.3	9,340.5	105.82	89.265	
7,283.4	6,936.0	6,908.0	6,908.0	19.7	138.1	-47.80	1,393.1	9,481.0	9,413.9	9,295.1	118.85	79.210	
7,300.0	6,938.4	6,910.4	6,910.4	20.0	138.2	-52.25	1,393.1	9,481.0	9,397.8	9,271.5	126.29	74.417	
7,350.0	6,943.4	6,915.4	6,915.4	20.9	138.3	-69.44	1,393.1	9,481.0	9,348.8	9,199.7	149.13	62.688	
7,381.9	6,944.8	6,916.8	6,916.8	21.4	138.3	-83.07	1,393.1	9,481.0	9,317.5	9,158.9	158.54	58.769	
7,403.7	6,945.0	6,917.0	6,917.0	21.8	138.3	-92.94	1,393.1	9,481.0	9,295.9	9,136.0	159.95	58.116	
7,480.3	6,944.3	6,916.3	6,916.3	23.3	138.3	-92.92	1,393.1	9,481.0	9,220.5	9,059.1	161.43	57.118	
7,500.0	6,944.1	6,916.1	6,916.1	23.7	138.3	-92.91	1,393.1	9,481.0	9,201.2	9,039.3	161.81	56.864	
7,578.7	6,943.4	6,915.4	6,915.4	25.4	138.3	-92.88	1,393.1	9,481.0	9,123.7	8,960.2	163.44	55.821	
7,600.0	6,943.2	6,915.2	6,915.2	25.8	138.3	-92.88	1,393.1	9,481.0	9,102.7	8,938.8	163.89	55.543	
7,677.1	6,942.5	6,914.5	6,914.5	27.5	138.3	-92.85	1,393.1	9,481.0	9,026.8	8,861.2	165.58	54.515	
7,700.0	6,942.3	6,914.3	6,914.3	28.0	138.3	-92.84	1,393.1	9,481.0	9,004.3	8,838.3	166.09	54.214	
7,775.6	6,941.6	6,913.6	6,913.6	29.8	138.2	-92.82	1,393.1	9,481.0	8,930.0	8,762.2	167.83	53.209	
7,800.0	6,941.4	6,913.4	6,913.4	30.3	138.2	-92.81	1,393.1	9,481.0	8,906.0	8,737.6	168.39	52.888	
7,874.0	6,940.7	6,912.7	6,912.7	32.1	138.2	-92.79	1,393.1	9,481.0	8,833.2	8,663.1	170.16	51.912	
7,900.0	6,940.5	6,912.5	6,912.5	32.7	138.2	-92.78	1,393.1	9,481.0	8,807.7	8,636.9	170.78	51.574	
7,972.4	6,939.8	6,911.8	6,911.8	34.5	138.2	-92.76	1,393.1	9,481.0	8,736.5	8,564.0	172.55	50.633	
8,000.0	6,939.6	6,911.6	6,911.6	35.2	138.2	-92.75	1,393.1	9,481.0	8,709.4	8,536.2	173.22	50.280	
8,070.8	6,938.9	6,910.9	6,910.9	37.0	138.2	-92.72	1,393.1	9,481.0	8,639.8	8,464.8	174.98	49.375	
8,100.0	6,938.7	6,910.7	6,910.7	37.7	138.2	-92.71	1,393.1	9,481.0	8,611.2	8,435.5	175.71	49.007	
8,169.3	6,938.0	6,910.0	6,910.0	39.5	138.2	-92.69	1,393.1	9,481.0	8,543.1	8,365.7	177.47	48.140	
8,200.0	6,937.7	6,909.7	6,909.7	40.3	138.2	-92.68	1,393.1	9,481.0	8,513.0	8,334.7	178.24	47.760	
8,267.7	6,937.1	6,909.1	6,909.1	42.0	138.2	-92.66	1,393.1	9,481.0	8,446.5	8,266.5	179.98	46.930	
8,300.0	6,936.8	6,908.8	6,908.8	42.8	138.1	-92.65	1,393.1	9,481.0	8,414.8	8,234.0	180.81	46.540	
8,366.1	6,936.2	6,908.2	6,908.2	44.6	138.1	-92.63	1,393.1	9,481.0	8,349.9	8,167.4	182.52	45.748	
8,400.0	6,935.9	6,907.9	6,907.9	45.5	138.1	-92.62	1,393.1	9,481.0	8,316.7	8,133.3	183.40	45.347	
8,464.5	6,935.3	6,907.3	6,907.3	47.2	138.1	-92.60	1,393.1	9,481.0	8,253.4	8,068.3	185.09	44.592	
8,500.0	6,935.0	6,907.0	6,907.0	48.1	138.1	-92.59	1,393.1	9,481.0	8,218.7	8,032.6	186.01	44.183	
8,563.0	6,934.5	6,906.5	6,906.5	49.8	138.1	-92.57	1,393.1	9,481.0	8,156.9	7,969.2	187.67	43.464	
8,600.0	6,934.1	6,906.1	6,906.1	50.7	138.1	-92.55	1,393.1	9,481.0	8,120.6	7,932.0	188.65	43.047	
8,661.4	6,933.6	6,905.6	6,905.6	52.4	138.1	-92.53	1,393.1	9,481.0	8,060.5	7,870.2	190.28	42.362	
8,700.0	6,933.2	6,905.2	6,905.2	53.4	138.1	-92.52	1,393.1	9,481.0	8,022.7	7,831.4	191.30	41.938	
8,759.8	6,932.7	6,904.7	6,904.7	55.0	138.1	-92.50	1,393.1	9,481.0	7,964.1	7,771.2	192.89	41.288	
8,800.0	6,932.3	6,904.3	6,904.3	56.1	138.1	-92.49	1,393.1	9,481.0	7,924.8	7,730.8	193.96	40.857	
8,858.2	6,931.8	6,903.8	6,903.8	57.7	138.0	-92.47	1,393.1	9,481.0	7,867.7	7,672.2	195.52	40.240	
8,900.0	6,931.4	6,903.4	6,903.4	58.8	138.0	-92.46	1,393.1	9,481.0	7,826.9	7,630.3	196.64	39.803	
8,956.7	6,930.9	6,902.9	6,902.9	60.3	138.0	-92.44	1,393.1	9,481.0	7,771.5	7,573.3	198.16	39.218	
9,000.0	6,930.5	6,902.5	6,902.5	61.5	138.0	-92.42	1,393.1	9,481.0	7,729.1	7,529.8	199.33	38.776	
9,055.1	6,930.0	6,902.0	6,902.0	63.0	138.0	-92.41	1,393.1	9,481.0	7,675.2	7,474.4	200.81	38.221	
9,100.0	6,929.6	6,901.6	6,901.6	64.2	138.0	-92.39	1,393.1	9,481.0	7,631.3	7,429.3	202.02	37.775	
9,153.5	6,929.1	6,901.1	6,901.1	65.6	138.0	-92.38	1,393.1	9,481.0	7,579.0	7,375.6	203.47	37.249	
9,200.0	6,928.7	6,900.7	6,900.7	66.9	138.0	-92.36	1,393.1	9,481.0	7,533.6	7,328.9	204.73	36.799	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,251.9	6,928.2	6,900.2	6,900.2	68.3	138.0	-92.34	1,393.1	9,481.0	7,482.9	7,276.8	206.13	36.301	
9,300.0	6,927.8	6,899.8	6,899.8	69.6	138.0	-92.33	1,393.1	9,481.0	7,436.0	7,228.6	207.44	35.847	
9,350.4	6,927.3	6,899.3	6,899.3	71.0	138.0	-92.31	1,393.1	9,481.0	7,386.8	7,178.0	208.81	35.377	
9,400.0	6,926.9	6,898.9	6,898.9	72.4	137.9	-92.30	1,393.1	9,481.0	7,338.4	7,128.3	210.16	34.919	
9,448.8	6,926.4	6,898.4	6,898.4	73.7	137.9	-92.28	1,393.1	9,481.0	7,290.8	7,079.4	211.48	34.475	
9,500.0	6,926.0	6,898.0	6,898.0	75.1	137.9	-92.26	1,393.1	9,481.0	7,240.9	7,028.1	212.88	34.014	
9,547.2	6,925.5	6,897.5	6,897.5	76.4	137.9	-92.25	1,393.1	9,481.0	7,194.9	6,980.7	214.17	33.595	
9,600.0	6,925.1	6,897.1	6,897.1	77.9	137.9	-92.23	1,393.1	9,481.0	7,143.5	6,927.9	215.61	33.132	
9,645.6	6,924.6	6,896.6	6,896.6	79.1	137.9	-92.22	1,393.1	9,481.0	7,099.0	6,882.2	216.85	32.736	
9,700.0	6,924.1	6,896.1	6,896.1	80.6	137.9	-92.20	1,393.1	9,481.0	7,046.1	6,827.8	218.34	32.271	
9,744.1	6,923.7	6,895.7	6,895.7	81.8	137.9	-92.18	1,393.1	9,481.0	7,003.3	6,783.7	219.55	31.899	
9,800.0	6,923.2	6,895.2	6,895.2	83.4	137.9	-92.17	1,393.1	9,481.0	6,948.9	6,727.8	221.08	31.432	
9,842.5	6,922.9	6,894.9	6,894.9	84.5	137.9	-92.15	1,393.1	9,481.0	6,907.5	6,685.3	222.24	31.081	
9,900.0	6,922.3	6,894.3	6,894.3	86.1	137.9	-92.13	1,393.1	9,481.0	6,851.6	6,627.8	223.82	30.613	
9,940.9	6,922.0	6,894.0	6,894.0	87.2	137.8	-92.12	1,393.1	9,481.0	6,811.9	6,586.9	224.94	30.283	
10,000.0	6,921.4	6,893.4	6,893.4	88.9	137.8	-92.10	1,393.1	9,481.0	6,754.5	6,528.0	226.56	29.813	
10,039.3	6,921.1	6,893.1	6,893.1	90.0	137.8	-92.09	1,393.1	9,481.0	6,716.3	6,488.7	227.64	29.504	
10,100.0	6,920.5	6,892.5	6,892.5	91.6	137.8	-92.07	1,393.1	9,481.0	6,657.5	6,428.2	229.31	29.033	
10,137.8	6,920.2	6,892.2	6,892.2	92.7	137.8	-92.06	1,393.1	9,481.0	6,620.8	6,390.5	230.35	28.743	
10,200.0	6,919.6	6,891.6	6,891.6	94.4	137.8	-92.04	1,393.1	9,481.0	6,560.5	6,328.5	232.06	28.271	
10,236.2	6,919.3	6,891.3	6,891.3	95.4	137.8	-92.03	1,393.1	9,481.0	6,525.4	6,292.4	233.06	27.999	
10,300.0	6,918.7	6,890.7	6,890.7	97.2	137.8	-92.01	1,393.1	9,481.0	6,463.7	6,228.9	234.81	27.527	
10,334.6	6,918.4	6,890.4	6,890.4	98.1	137.8	-91.99	1,393.1	9,481.0	6,430.1	6,194.4	235.77	27.273	
10,400.0	6,917.8	6,889.8	6,889.8	99.9	137.8	-91.97	1,393.1	9,481.0	6,366.9	6,129.3	237.57	26.800	
10,433.0	6,917.5	6,889.5	6,889.5	100.9	137.8	-91.96	1,393.1	9,481.0	6,334.9	6,096.5	238.48	26.564	
10,500.0	6,916.9	6,888.9	6,888.9	102.7	137.7	-91.94	1,393.1	9,481.0	6,270.2	6,029.9	240.32	26.091	
10,531.5	6,916.6	6,888.6	6,888.6	103.6	137.7	-91.93	1,393.1	9,481.0	6,239.8	5,998.6	241.19	25.871	
10,600.0	6,916.0	6,888.0	6,888.0	105.5	137.7	-91.91	1,393.1	9,481.0	6,173.7	5,930.6	243.08	25.397	
10,629.9	6,915.7	6,887.7	6,887.7	106.3	137.7	-91.90	1,393.1	9,481.0	6,144.8	5,900.9	243.91	25.193	
10,700.0	6,915.1	6,887.1	6,887.1	108.3	137.7	-91.88	1,393.1	9,481.0	6,077.2	5,831.4	245.84	24.720	
10,728.3	6,914.8	6,886.8	6,886.8	109.1	137.7	-91.87	1,393.1	9,481.0	6,049.9	5,803.3	246.63	24.531	
10,800.0	6,914.2	6,886.2	6,886.2	111.0	137.7	-91.84	1,393.1	9,481.0	5,980.9	5,732.3	248.61	24.058	
10,826.7	6,913.9	6,885.9	6,885.9	111.8	137.7	-91.84	1,393.1	9,481.0	5,955.2	5,705.8	249.35	23.883	
10,900.0	6,913.3	6,885.3	6,885.3	113.8	137.7	-91.81	1,393.1	9,481.0	5,884.7	5,633.3	251.37	23.410	
10,925.2	6,913.1	6,885.1	6,885.1	114.5	137.7	-91.80	1,393.1	9,481.0	5,860.5	5,608.4	252.07	23.250	
11,000.0	6,912.4	6,884.4	6,884.4	116.6	137.7	-91.78	1,393.1	9,481.0	5,788.6	5,534.5	254.14	22.778	
11,023.6	6,912.2	6,884.2	6,884.2	117.3	137.7	-91.77	1,393.1	9,481.0	5,766.0	5,511.2	254.79	22.630	
11,100.0	6,911.5	6,883.5	6,883.5	119.4	137.6	-91.75	1,393.1	9,481.0	5,692.7	5,435.8	256.90	22.159	
11,122.0	6,911.3	6,883.3	6,883.3	120.0	137.6	-91.74	1,393.1	9,481.0	5,671.6	5,414.1	257.51	22.024	
11,200.0	6,910.6	6,882.6	6,882.6	122.2	137.6	-91.72	1,393.1	9,481.0	5,596.9	5,337.2	259.67	21.554	
11,220.4	6,910.4	6,882.4	6,882.4	122.7	137.6	-91.71	1,393.1	9,481.0	5,577.3	5,317.1	260.24	21.431	
11,300.0	6,909.7	6,881.7	6,881.7	125.0	137.6	-91.68	1,393.1	9,481.0	5,501.2	5,238.8	262.44	20.962	
11,318.9	6,909.5	6,881.5	6,881.5	125.5	137.6	-91.68	1,393.1	9,481.0	5,483.2	5,220.2	262.97	20.851	
11,400.0	6,908.8	6,880.8	6,880.8	127.7	137.6	-91.65	1,393.1	9,481.0	5,405.7	5,140.5	265.21	20.383	
11,417.3	6,908.6	6,880.6	6,880.6	128.2	137.6	-91.65	1,393.1	9,481.0	5,389.2	5,123.5	265.69	20.284	
11,500.0	6,907.9	6,879.9	6,879.9	130.5	137.6	-91.62	1,393.1	9,481.0	5,310.4	5,042.4	267.99	19.816	
11,515.7	6,907.7	6,879.7	6,879.7	131.0	137.6	-91.61	1,393.1	9,481.0	5,295.4	5,027.0	268.42	19.728	
11,600.0	6,907.0	6,879.0	6,879.0	133.3	137.5	-91.59	1,393.1	9,481.0	5,215.3	4,944.5	270.76	19.262	
11,614.1	6,906.8	6,878.8	6,878.8	133.7	137.5	-91.58	1,393.1	9,481.0	5,201.8	4,930.7	271.15	19.184	
11,700.0	6,906.0	6,878.0	6,878.0	136.1	137.5	-91.56	1,393.1	9,481.0	5,120.3	4,846.8	273.53	18.719	
11,712.6	6,905.9	6,877.9	6,877.9	136.5	137.5	-91.55	1,393.1	9,481.0	5,108.4	4,834.5	273.88	18.652	
11,800.0	6,905.1	6,877.1	6,877.1	138.9	137.5	-91.52	1,393.1	9,481.0	5,025.5	4,749.2	276.31	18.188	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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		
11,811.0	6,905.0	6,877.0	6,877.0	139.2	137.5	-91.52	1,393.1	9,481.0	5,015.1	4,738.5	276.61	18.130		
11,900.0	6,904.2	6,876.2	6,876.2	141.7	137.5	-91.49	1,393.1	9,481.0	4,930.9	4,651.9	279.08	17.668		
11,909.4	6,904.2	6,876.2	6,876.2	141.9	137.5	-91.49	1,393.1	9,481.0	4,922.0	4,642.7	279.34	17.620		
12,000.0	6,903.3	6,875.3	6,875.3	144.5	137.5	-91.46	1,393.1	9,481.0	4,836.6	4,554.7	281.86	17.160		
12,007.8	6,903.3	6,875.3	6,875.3	144.7	137.5	-91.46	1,393.1	9,481.0	4,829.2	4,547.1	282.08	17.120		
12,100.0	6,902.4	6,874.4	6,874.4	147.3	137.5	-91.43	1,393.1	9,481.0	4,742.5	4,457.8	284.63	16.662		
12,106.3	6,902.4	6,874.4	6,874.4	147.4	137.5	-91.42	1,393.1	9,481.0	4,736.6	4,451.8	284.81	16.631		
12,200.0	6,901.5	6,873.5	6,873.5	150.1	137.4	-91.39	1,393.1	9,481.0	4,648.6	4,361.2	287.41	16.174		
12,204.7	6,901.5	6,873.5	6,873.5	150.2	137.4	-91.39	1,393.1	9,481.0	4,644.2	4,356.7	287.54	16.151		
12,300.0	6,900.6	6,872.6	6,872.6	152.9	137.4	-91.36	1,393.1	9,481.0	4,555.0	4,264.8	290.19	15.697		
12,303.1	6,900.6	6,872.6	6,872.6	152.9	137.4	-91.36	1,393.1	9,481.0	4,552.1	4,261.8	290.28	15.682		
12,400.0	6,899.7	6,871.7	6,871.7	155.6	137.4	-91.33	1,393.1	9,481.0	4,461.7	4,168.7	292.97	15.229		
12,401.5	6,899.7	6,871.7	6,871.7	155.7	137.4	-91.33	1,393.1	9,481.0	4,460.2	4,167.2	293.01	15.222		
12,500.0	6,898.8	6,870.8	6,870.8	158.4	137.4	-91.30	1,393.1	9,481.0	4,368.6	4,072.9	295.75	14.771		
12,598.4	6,897.9	6,869.9	6,869.9	161.2	137.4	-91.27	1,393.1	9,481.0	4,277.4	3,978.9	298.48	14.330		
12,600.0	6,897.9	6,869.9	6,869.9	161.2	137.4	-91.27	1,393.1	9,481.0	4,275.9	3,977.4	298.53	14.323		
12,696.8	6,897.0	6,869.0	6,869.0	163.9	137.3	-91.24	1,393.1	9,481.0	4,186.4	3,885.2	301.22	13.898		
12,700.0	6,897.0	6,869.0	6,869.0	164.0	137.3	-91.23	1,393.1	9,481.0	4,183.5	3,882.2	301.31	13.885		
12,795.2	6,896.1	6,868.1	6,868.1	166.7	137.3	-91.20	1,393.1	9,481.0	4,095.8	3,791.9	303.95	13.475		
12,800.0	6,896.1	6,868.1	6,868.1	166.8	137.3	-91.20	1,393.1	9,481.0	4,091.5	3,787.4	304.09	13.455		
12,893.7	6,895.3	6,867.3	6,867.3	169.4	137.3	-91.17	1,393.1	9,481.0	4,005.6	3,698.9	306.69	13.061		
12,900.0	6,895.2	6,867.2	6,867.2	169.6	137.3	-91.17	1,393.1	9,481.0	3,999.8	3,693.0	306.87	13.034		
12,992.1	6,894.4	6,866.4	6,866.4	172.2	137.3	-91.14	1,393.1	9,481.0	3,915.8	3,606.3	309.43	12.655		
13,000.0	6,894.3	6,866.3	6,866.3	172.4	137.3	-91.14	1,393.1	9,481.0	3,908.6	3,598.9	309.65	12.623		
13,090.5	6,893.5	6,865.5	6,865.5	175.0	137.3	-91.11	1,393.1	9,481.0	3,826.4	3,514.2	312.17	12.257		
13,100.0	6,893.4	6,865.4	6,865.4	175.2	137.3	-91.11	1,393.1	9,481.0	3,817.8	3,505.3	312.43	12.220		
13,188.9	6,892.6	6,864.6	6,864.6	177.7	137.3	-91.08	1,393.1	9,481.0	3,737.4	3,422.5	314.91	11.868		
13,200.0	6,892.5	6,864.5	6,864.5	178.0	137.3	-91.07	1,393.1	9,481.0	3,727.4	3,412.2	315.21	11.825		
13,287.4	6,891.7	6,863.7	6,863.7	180.5	137.2	-91.05	1,393.1	9,481.0	3,648.9	3,331.3	317.64	11.487		
13,300.0	6,891.6	6,863.6	6,863.6	180.8	137.2	-91.04	1,393.1	9,481.0	3,637.6	3,319.6	318.00	11.439		
13,385.8	6,890.8	6,862.8	6,862.8	183.2	137.2	-91.01	1,393.1	9,481.0	3,561.0	3,240.6	320.38	11.115		
13,400.0	6,890.7	6,862.7	6,862.7	183.6	137.2	-91.01	1,393.1	9,481.0	3,548.3	3,227.6	320.78	11.062		
13,484.2	6,889.9	6,861.9	6,861.9	186.0	137.2	-90.98	1,393.1	9,481.0	3,473.6	3,150.5	323.12	10.750		
13,500.0	6,889.8	6,861.8	6,861.8	186.4	137.2	-90.98	1,393.1	9,481.0	3,459.6	3,136.1	323.56	10.692		
13,582.6	6,889.0	6,861.0	6,861.0	188.7	137.2	-90.95	1,393.1	9,481.0	3,386.8	3,060.9	325.86	10.393		
13,600.0	6,888.9	6,860.9	6,860.9	189.2	137.2	-90.95	1,393.1	9,481.0	3,371.6	3,045.2	326.35	10.331		
13,681.1	6,888.1	6,860.1	6,860.1	191.5	137.2	-90.92	1,393.1	9,481.0	3,300.7	2,972.1	328.60	10.045		
13,700.0	6,888.0	6,860.0	6,860.0	192.0	137.2	-90.91	1,393.1	9,481.0	3,284.2	2,955.1	329.13	9.978		
13,779.5	6,887.3	6,859.3	6,859.3	194.2	137.2	-90.89	1,393.1	9,481.0	3,215.2	2,883.9	331.34	9.704		
13,800.0	6,887.1	6,859.1	6,859.1	194.8	137.1	-90.88	1,393.1	9,481.0	3,197.5	2,865.6	331.91	9.634		
13,877.9	6,886.4	6,858.4	6,858.4	197.0	137.1	-90.86	1,393.1	9,481.0	3,130.6	2,796.5	334.08	9.371		
13,900.0	6,886.2	6,858.2	6,858.2	197.6	137.1	-90.85	1,393.1	9,481.0	3,111.7	2,777.0	334.70	9.297		
13,976.3	6,885.5	6,857.5	6,857.5	199.7	137.1	-90.83	1,393.1	9,481.0	3,046.8	2,709.9	336.82	9.046		
14,000.0	6,885.3	6,857.3	6,857.3	200.4	137.1	-90.82	1,393.1	9,481.0	3,026.7	2,689.3	337.48	8.969		
14,074.8	6,884.6	6,856.6	6,856.6	202.5	137.1	-90.79	1,393.1	9,481.0	2,963.8	2,624.2	339.56	8.728		
14,100.0	6,884.4	6,856.4	6,856.4	203.2	137.1	-90.79	1,393.1	9,481.0	2,942.7	2,602.4	340.27	8.648		
14,173.2	6,883.7	6,855.7	6,855.7	205.3	137.1	-90.76	1,393.1	9,481.0	2,881.8	2,539.5	342.30	8.419		
14,200.0	6,883.5	6,855.5	6,855.5	206.0	137.1	-90.75	1,393.1	9,481.0	2,859.7	2,516.7	343.05	8.336		
14,271.6	6,882.8	6,854.8	6,854.8	208.0	137.1	-90.73	1,393.1	9,481.0	2,800.9	2,455.9	345.05	8.118		
14,300.0	6,882.6	6,854.6	6,854.6	208.8	137.1	-90.72	1,393.1	9,481.0	2,777.8	2,432.0	345.84	8.032		
14,370.0	6,881.9	6,853.9	6,853.9	210.8	137.0	-90.70	1,393.1	9,481.0	2,721.2	2,373.4	347.79	7.824		
14,400.0	6,881.7	6,853.7	6,853.7	211.6	137.0	-90.69	1,393.1	9,481.0	2,697.2	2,348.6	348.62	7.737		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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									
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
14,468.5	6,881.0	6,853.0	6,853.0	213.5	137.0	-90.67	1,393.1	9,481.0	2,642.7	2,292.2	350.53	7.539	
14,500.0	6,880.8	6,852.8	6,852.8	214.4	137.0	-90.66	1,393.1	9,481.0	2,617.9	2,266.4	351.41	7.450	
14,566.9	6,880.2	6,852.2	6,852.2	216.3	137.0	-90.64	1,393.1	9,481.0	2,565.6	2,212.3	353.27	7.262	
14,584.2	6,880.0	6,852.0	6,852.0	216.8	137.0	-90.63	1,393.1	9,481.0	2,552.2	2,198.5	353.75	7.215	CC, ES, SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	93.06	-323.5	6,049.7	6,058.4				
98.4	98.4	74.4	74.4	0.1	0.4	93.06	-323.5	6,049.7	6,058.3	6,057.8	0.51	N/A	
100.0	100.0	76.0	76.0	0.1	0.4	93.06	-323.5	6,049.7	6,058.3	6,057.8	0.52	N/A	
196.8	196.8	172.8	172.8	0.3	2.4	93.06	-323.5	6,049.7	6,058.3	6,055.7	2.66	2,274.069	
200.0	200.0	176.0	176.0	0.3	2.4	93.06	-323.5	6,049.7	6,058.3	6,055.6	2.75	2,204.265	
295.3	295.3	271.3	271.3	0.5	4.5	93.06	-323.5	6,049.7	6,058.3	6,053.3	5.03	1,203.455	
300.0	300.0	276.0	276.0	0.5	4.6	93.06	-323.5	6,049.7	6,058.3	6,053.2	5.14	1,177.970	
393.7	393.7	369.7	369.7	0.7	6.5	93.06	-323.5	6,049.7	6,058.3	6,051.0	7.28	832.734	
400.0	400.0	376.0	376.0	0.8	6.7	93.06	-323.5	6,049.7	6,058.3	6,050.9	7.42	816.712	
492.1	492.1	468.1	468.1	1.0	8.5	93.06	-323.5	6,049.7	6,058.3	6,048.8	9.50	637.985	
500.0	500.0	476.0	476.0	1.0	8.7	93.06	-323.5	6,049.7	6,058.3	6,048.6	9.67	626.287	
590.5	590.5	566.5	566.5	1.2	10.5	93.06	-323.5	6,049.7	6,058.3	6,046.6	11.71	517.413	
600.0	600.0	576.0	576.0	1.2	10.7	93.06	-323.5	6,049.7	6,058.3	6,046.4	11.92	508.199	
689.0	689.0	665.0	665.0	1.4	12.5	93.06	-323.5	6,049.7	6,058.3	6,044.4	13.92	435.296	
700.0	700.0	676.0	676.0	1.4	12.7	93.06	-323.5	6,049.7	6,058.3	6,044.2	14.17	427.696	
787.4	787.4	763.4	763.4	1.6	14.5	93.06	-323.5	6,049.7	6,058.3	6,042.2	16.12	375.728	
800.0	800.0	776.0	776.0	1.7	14.7	93.06	-323.5	6,049.7	6,058.3	6,041.9	16.41	369.261	
885.8	885.8	861.8	861.8	1.9	16.5	93.06	-323.5	6,049.7	6,058.3	6,040.0	18.33	330.527	
900.0	900.0	876.0	876.0	1.9	16.8	93.06	-323.5	6,049.7	6,058.3	6,039.7	18.65	324.899	
984.2	984.2	960.2	960.2	2.1	18.5	93.06	-323.5	6,049.7	6,058.3	6,037.8	20.53	295.048	
1,000.0	1,000.0	976.0	976.0	2.1	18.8	93.06	-323.5	6,049.7	6,058.3	6,037.4	20.89	290.066	
1,082.7	1,082.7	1,058.7	1,058.7	2.3	20.4	93.06	-323.5	6,049.7	6,058.3	6,035.6	22.74	266.456	
1,100.0	1,100.0	1,076.0	1,076.0	2.3	20.8	93.06	-323.5	6,049.7	6,058.3	6,035.2	23.12	261.987	
1,181.1	1,181.1	1,157.1	1,157.1	2.5	22.4	93.06	-323.5	6,049.7	6,058.3	6,033.4	24.94	242.920	
1,200.0	1,200.0	1,176.0	1,176.0	2.6	22.8	93.06	-323.5	6,049.7	6,058.3	6,033.0	25.36	238.869	
1,279.5	1,279.5	1,255.5	1,255.5	2.7	24.4	93.06	-323.5	6,049.7	6,058.3	6,031.2	27.14	223.208	
1,300.0	1,300.0	1,276.0	1,276.0	2.8	24.8	93.06	-323.5	6,049.7	6,058.3	6,030.7	27.60	219.503	
1,377.9	1,377.9	1,353.9	1,353.9	3.0	26.4	93.06	-323.5	6,049.7	6,058.3	6,029.0	29.34	206.457	
1,400.0	1,400.0	1,376.0	1,376.0	3.0	26.8	93.06	-323.5	6,049.7	6,058.3	6,028.5	29.84	203.044	
1,476.4	1,476.4	1,452.4	1,452.4	3.2	28.4	93.06	-323.5	6,049.7	6,058.3	6,026.8	31.55	192.046	
1,500.0	1,500.0	1,476.0	1,476.0	3.2	28.8	93.06	-323.5	6,049.7	6,058.3	6,026.2	32.07	188.882	
1,574.8	1,574.8	1,550.8	1,550.8	3.4	30.3	93.06	-323.5	6,049.7	6,058.3	6,024.6	33.75	179.517	
1,600.0	1,600.0	1,576.0	1,576.0	3.5	30.9	93.06	-323.5	6,049.7	6,058.3	6,024.0	34.31	176.568	
1,650.0	1,650.0	1,626.0	1,626.0	3.6	31.9	93.06	-323.5	6,049.7	6,058.3	6,022.9	35.43	170.994	
1,673.2	1,673.2	1,649.2	1,649.2	3.6	32.3	-147.35	-323.5	6,049.7	6,058.4	6,022.5	35.94	168.553	
1,700.0	1,700.0	1,676.0	1,676.0	3.7	32.9	-147.35	-323.5	6,049.7	6,058.7	6,022.2	36.53	165.839	
1,771.6	1,771.6	1,747.6	1,747.6	3.8	34.3	-147.34	-323.5	6,049.7	6,060.5	6,022.4	38.09	159.126	
1,800.0	1,799.9	1,775.9	1,775.9	3.9	34.9	-147.34	-323.5	6,049.7	6,061.6	6,022.9	38.69	156.652	
1,870.1	1,869.9	1,845.9	1,845.9	4.0	36.3	-147.32	-323.5	6,049.7	6,065.4	6,025.2	40.19	150.924	
1,900.0	1,899.7	1,875.7	1,875.7	4.1	36.9	-147.31	-323.5	6,049.7	6,067.5	6,026.7	40.82	148.642	
1,968.5	1,967.8	1,943.8	1,943.8	4.2	38.3	-147.28	-323.5	6,049.7	6,073.2	6,031.0	42.25	143.739	
2,000.0	1,999.1	1,975.1	1,975.1	4.3	38.9	-147.27	-323.5	6,049.7	6,076.3	6,033.4	42.90	141.633	
2,066.9	2,065.5	2,041.5	2,041.5	4.4	40.2	-147.23	-323.5	6,049.7	6,083.8	6,039.6	44.27	137.424	
2,100.0	2,098.2	2,074.2	2,074.2	4.5	40.9	-147.21	-323.5	6,049.7	6,088.0	6,043.1	44.94	135.479	
2,165.3	2,162.6	2,138.6	2,138.6	4.7	42.2	-147.17	-323.5	6,049.7	6,097.3	6,051.1	46.24	131.856	
2,200.0	2,196.6	2,172.6	2,172.6	4.7	42.9	-147.14	-323.5	6,049.7	6,102.7	6,055.8	46.92	130.059	
2,249.9	2,245.5	2,221.5	2,221.5	4.9	43.8	-147.10	-323.5	6,049.7	6,111.1	6,063.2	47.89	127.599	
2,263.8	2,259.1	2,235.1	2,235.1	4.9	44.1	-147.11	-323.5	6,049.7	6,113.5	6,065.4	48.20	126.850	
2,300.0	2,294.5	2,270.5	2,270.5	5.0	44.8	-147.15	-323.5	6,049.7	6,119.9	6,070.9	48.98	124.941	
2,362.2	2,355.4	2,331.4	2,331.4	5.2	46.0	-147.21	-323.5	6,049.7	6,130.8	6,080.5	50.34	121.789	
2,400.0	2,392.3	2,368.3	2,368.3	5.4	46.8	-147.25	-323.5	6,049.7	6,137.5	6,086.3	51.16	119.957	
2,460.6	2,451.6	2,427.6	2,427.6	5.6	48.0	-147.32	-323.5	6,049.7	6,148.2	6,095.7	52.49	117.128	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,466.2	2,466.2	5.7	48.8	-147.36	-323.5	6,049.7	6,155.1	6,101.7	53.36	115.359					
2,559.0	2,547.9	2,523.9	2,523.9	5.9	49.9	-147.42	-323.5	6,049.7	6,165.5	6,110.9	54.65	112.808					
2,600.0	2,588.0	2,564.0	2,564.0	6.1	50.7	-147.46	-323.5	6,049.7	6,172.7	6,117.2	55.56	111.108					
2,657.5	2,644.2	2,620.2	2,620.2	6.3	51.9	-147.52	-323.5	6,049.7	6,182.9	6,126.0	56.82	108.806					
2,700.0	2,685.8	2,661.8	2,661.8	6.4	52.7	-147.56	-323.5	6,049.7	6,190.4	6,132.6	57.76	107.167					
2,755.9	2,740.5	2,716.5	2,716.5	6.6	53.8	-147.62	-323.5	6,049.7	6,200.2	6,141.2	59.00	105.087					
2,800.0	2,783.6	2,759.6	2,759.6	6.8	54.7	-147.67	-323.5	6,049.7	6,208.0	6,148.1	59.98	103.506					
2,854.3	2,836.7	2,812.7	2,812.7	7.0	55.7	-147.72	-323.5	6,049.7	6,217.6	6,156.5	61.18	101.624					
2,900.0	2,881.4	2,857.4	2,857.4	7.2	56.6	-147.77	-323.5	6,049.7	6,225.7	6,163.5	62.20	100.097					
2,952.7	2,933.0	2,909.0	2,909.0	7.4	57.7	-147.82	-323.5	6,049.7	6,235.1	6,171.7	63.37	98.392					
3,000.0	2,979.2	2,955.2	2,955.2	7.6	58.6	-147.87	-323.5	6,049.7	6,243.4	6,179.0	64.42	96.917					
3,051.2	3,029.3	3,005.3	3,005.3	7.8	59.6	-147.92	-323.5	6,049.7	6,252.5	6,186.9	65.56	95.371					
3,100.0	3,077.1	3,053.1	3,053.1	8.0	60.6	-147.97	-323.5	6,049.7	6,261.1	6,194.5	66.65	93.944					
3,149.6	3,125.6	3,101.6	3,101.6	8.2	61.5	-148.02	-323.5	6,049.7	6,269.9	6,202.2	67.75	92.540					
3,200.0	3,174.9	3,150.9	3,150.9	8.4	62.5	-148.07	-323.5	6,049.7	6,278.9	6,210.0	68.88	91.160					
3,248.0	3,221.8	3,197.8	3,197.8	8.6	63.5	-148.12	-323.5	6,049.7	6,287.4	6,217.5	69.95	89.884					
3,300.0	3,272.7	3,248.7	3,248.7	8.9	64.5	-148.17	-323.5	6,049.7	6,296.6	6,225.5	71.11	88.546					
3,346.4	3,318.1	3,294.1	3,294.1	9.0	65.4	-148.22	-323.5	6,049.7	6,304.9	6,232.7	72.15	87.386					
3,400.0	3,370.5	3,346.5	3,346.5	9.3	66.5	-148.27	-323.5	6,049.7	6,314.4	6,241.1	73.35	86.090					
3,444.9	3,414.4	3,390.4	3,390.4	9.5	67.3	-148.31	-323.5	6,049.7	6,322.4	6,248.0	74.35	85.034					
3,500.0	3,468.3	3,444.3	3,444.3	9.7	68.4	-148.37	-323.5	6,049.7	6,332.2	6,256.6	75.58	83.776					
3,543.3	3,510.7	3,486.7	3,486.7	9.9	69.3	-148.41	-323.5	6,049.7	6,339.9	6,263.4	76.55	82.816					
3,600.0	3,566.1	3,542.1	3,542.1	10.1	70.4	-148.46	-323.5	6,049.7	6,350.0	6,272.2	77.82	81.595					
3,641.7	3,606.9	3,582.9	3,582.9	10.3	71.2	-148.51	-323.5	6,049.7	6,357.5	6,278.7	78.76	80.720					
3,700.0	3,664.0	3,640.0	3,640.0	10.6	72.4	-148.56	-323.5	6,049.7	6,367.9	6,287.8	80.07	79.534					
3,740.1	3,703.2	3,679.2	3,679.2	10.7	73.2	-148.60	-323.5	6,049.7	6,375.0	6,294.1	80.97	78.738					
3,800.0	3,761.8	3,737.8	3,737.8	11.0	74.3	-148.66	-323.5	6,049.7	6,385.7	6,303.4	82.31	77.584					
3,837.4	3,798.3	3,774.3	3,774.3	11.2	75.1	-148.69	-323.5	6,049.7	6,392.4	6,309.2	83.15	76.882					
3,838.6	3,799.5	3,775.5	3,775.5	11.2	75.1	-148.70	-323.5	6,049.7	6,392.6	6,309.4	83.18	76.855					
3,900.0	3,859.7	3,835.7	3,835.7	11.4	76.3	-148.86	-323.5	6,049.7	6,403.0	6,318.2	84.77	75.531					
3,937.0	3,896.1	3,872.1	3,872.1	11.5	77.0	-148.95	-323.5	6,049.7	6,408.7	6,323.0	85.72	74.767					
4,000.0	3,958.3	3,934.3	3,934.3	11.7	78.3	-149.09	-323.5	6,049.7	6,417.6	6,330.2	87.31	73.505					
4,035.4	3,993.3	3,969.3	3,969.3	11.8	79.0	-149.16	-323.5	6,049.7	6,422.0	6,333.8	88.19	72.820					
4,100.0	4,057.4	4,033.4	4,033.4	12.0	80.3	-149.27	-323.5	6,049.7	6,429.2	6,339.4	89.78	71.607					
4,133.8	4,091.0	4,067.0	4,067.0	12.1	81.0	-149.32	-323.5	6,049.7	6,432.4	6,341.8	90.60	70.994					
4,200.0	4,156.8	4,132.8	4,132.8	12.2	82.3	-149.41	-323.5	6,049.7	6,437.8	6,345.6	92.19	69.831					
4,232.3	4,189.0	4,165.0	4,165.0	12.3	82.9	-149.44	-323.5	6,049.7	6,439.9	6,347.0	92.95	69.284					
4,300.0	4,256.6	4,232.6	4,232.6	12.4	84.3	-149.49	-323.5	6,049.7	6,443.4	6,348.9	94.52	68.170					
4,330.7	4,287.3	4,263.3	4,263.3	12.5	84.9	-149.51	-323.5	6,049.7	6,444.5	6,349.3	95.22	67.683					
4,400.0	4,356.6	4,332.6	4,332.6	12.6	86.3	-149.53	-323.5	6,049.7	6,446.0	6,349.3	96.76	66.617					
4,429.1	4,385.7	4,361.7	4,361.7	12.6	86.9	-149.54	-323.5	6,049.7	6,446.2	6,348.8	97.40	66.184					
4,437.2	4,393.8	4,369.8	4,369.8	12.7	87.0	90.88	-323.5	6,049.7	6,446.2	6,347.2	99.01	65.110					
4,500.0	4,456.6	4,432.6	4,432.6	12.7	88.3	90.88	-323.5	6,049.7	6,446.2	6,345.9	100.37	64.226					
4,527.5	4,484.1	4,460.1	4,460.1	12.8	88.9	90.88	-323.5	6,049.7	6,446.2	6,345.3	100.97	63.845					
4,600.0	4,556.6	4,532.6	4,532.6	12.9	90.3	90.88	-323.5	6,049.7	6,446.2	6,343.7	102.55	62.862					
4,626.0	4,582.6	4,558.6	4,558.6	12.9	90.8	90.88	-323.5	6,049.7	6,446.2	6,343.1	103.11	62.516					
4,700.0	4,656.6	4,632.6	4,632.6	13.1	92.3	90.88	-323.5	6,049.7	6,446.2	6,341.5	104.73	61.553					
4,724.4	4,681.0	4,657.0	4,657.0	13.1	92.8	90.88	-323.5	6,049.7	6,446.2	6,341.0	105.26	61.241					
4,800.0	4,756.6	4,732.6	4,732.6	13.2	94.3	90.88	-323.5	6,049.7	6,446.2	6,339.3	106.91	60.296					
4,822.8	4,779.4	4,755.4	4,755.4	13.3	94.8	90.88	-323.5	6,049.7	6,446.2	6,338.8	107.41	60.016					
4,900.0	4,856.6	4,832.6	4,832.6	13.4	96.4	90.88	-323.5	6,049.7	6,446.2	6,337.1	109.09	59.089					
4,921.2	4,877.8	4,853.8	4,853.8	13.4	96.8	90.88	-323.5	6,049.7	6,446.2	6,336.7	109.56	58.838					

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,932.6	4,932.6	13.6	98.4	90.88	-323.5	6,049.7	6,446.2	6,335.0	111.28	57.928	
5,019.7	4,976.3	4,952.3	4,952.3	13.6	98.8	90.88	-323.5	6,049.7	6,446.2	6,334.5	111.71	57.705	
5,100.0	5,056.6	5,032.6	5,032.6	13.7	100.4	90.88	-323.5	6,049.7	6,446.2	6,332.8	113.47	56.812	
5,118.1	5,074.7	5,050.7	5,050.7	13.8	100.7	90.88	-323.5	6,049.7	6,446.2	6,332.4	113.86	56.614	
5,200.0	5,156.6	5,132.6	5,132.6	13.9	102.4	90.88	-323.5	6,049.7	6,446.2	6,330.6	115.66	55.737	
5,216.5	5,173.1	5,149.1	5,149.1	13.9	102.7	90.88	-323.5	6,049.7	6,446.2	6,330.2	116.02	55.563	
5,300.0	5,256.6	5,232.6	5,232.6	14.1	104.4	90.88	-323.5	6,049.7	6,446.2	6,328.4	117.85	54.701	
5,314.9	5,271.5	5,247.5	5,247.5	14.1	104.7	90.88	-323.5	6,049.7	6,446.2	6,328.1	118.17	54.549	
5,400.0	5,356.6	5,332.6	5,332.6	14.2	106.4	90.88	-323.5	6,049.7	6,446.2	6,326.2	120.04	53.702	
5,413.4	5,370.0	5,346.0	5,346.0	14.3	106.7	90.88	-323.5	6,049.7	6,446.2	6,325.9	120.33	53.571	
5,500.0	5,456.6	5,432.6	5,432.6	14.4	108.4	90.88	-323.5	6,049.7	6,446.2	6,324.0	122.23	52.739	
5,511.8	5,468.4	5,444.4	5,444.4	14.4	108.7	90.88	-323.5	6,049.7	6,446.2	6,323.7	122.49	52.627	
5,600.0	5,556.6	5,532.6	5,532.6	14.6	110.4	90.88	-323.5	6,049.7	6,446.2	6,321.8	124.42	51.809	
5,610.2	5,566.8	5,542.8	5,542.8	14.6	110.6	90.88	-323.5	6,049.7	6,446.2	6,321.6	124.65	51.715	
5,700.0	5,656.6	5,632.6	5,632.6	14.8	112.4	90.88	-323.5	6,049.7	6,446.2	6,319.6	126.62	50.910	
5,708.6	5,665.2	5,641.2	5,641.2	14.8	112.6	90.88	-323.5	6,049.7	6,446.2	6,319.4	126.81	50.834	
5,800.0	5,756.6	5,732.6	5,732.6	14.9	114.5	90.88	-323.5	6,049.7	6,446.2	6,317.4	128.82	50.042	
5,807.1	5,763.7	5,739.7	5,739.7	14.9	114.6	90.88	-323.5	6,049.7	6,446.2	6,317.3	128.97	49.982	
5,900.0	5,856.6	5,832.6	5,832.6	15.1	116.5	90.88	-323.5	6,049.7	6,446.2	6,315.2	131.01	49.203	
5,905.5	5,862.1	5,838.1	5,838.1	15.1	116.6	90.88	-323.5	6,049.7	6,446.2	6,315.1	131.13	49.158	
6,000.0	5,956.6	5,932.6	5,932.6	15.3	118.5	90.88	-323.5	6,049.7	6,446.2	6,313.0	133.21	48.391	
6,003.9	5,960.5	5,936.5	5,936.5	15.3	118.6	90.88	-323.5	6,049.7	6,446.2	6,312.9	133.30	48.360	
6,100.0	6,056.6	6,032.6	6,032.6	15.5	120.5	90.88	-323.5	6,049.7	6,446.2	6,310.8	135.41	47.605	
6,102.3	6,058.9	6,034.9	6,034.9	15.5	120.5	90.88	-323.5	6,049.7	6,446.2	6,310.8	135.46	47.587	
6,200.0	6,156.6	6,132.6	6,132.6	15.7	122.5	90.88	-323.5	6,049.7	6,446.2	6,308.6	137.61	46.844	
6,200.8	6,157.4	6,133.4	6,133.4	15.7	122.5	90.88	-323.5	6,049.7	6,446.2	6,308.6	137.63	46.838	
6,272.2	6,228.8	6,204.8	6,204.8	15.8	123.9	90.88	-323.5	6,049.7	6,446.2	6,307.0	139.20	46.309	
6,299.2	6,255.8	6,231.8	6,231.8	15.8	124.5	0.88	-323.5	6,049.7	6,445.7	6,307.2	138.50	46.540	
6,300.0	6,256.6	6,232.6	6,232.6	15.8	124.5	0.88	-323.5	6,049.7	6,445.7	6,307.2	138.51	46.536	
6,350.0	6,306.4	6,282.4	6,282.4	15.9	125.5	0.88	-323.5	6,049.7	6,442.0	6,303.2	138.84	46.397	
6,397.6	6,353.6	6,329.6	6,329.6	15.9	126.5	0.89	-323.5	6,049.7	6,435.3	6,296.8	138.52	46.456	
6,400.0	6,355.9	6,331.9	6,331.9	15.9	126.5	0.89	-323.5	6,049.7	6,434.9	6,296.4	138.49	46.464	
6,450.0	6,404.8	6,380.8	6,380.8	15.9	127.5	0.91	-323.5	6,049.7	6,424.3	6,286.8	137.44	46.743	
6,496.0	6,449.0	6,425.0	6,425.0	16.0	128.4	0.93	-323.5	6,049.7	6,411.5	6,275.7	135.85	47.197	
6,500.0	6,452.8	6,428.8	6,428.8	16.0	128.5	0.93	-323.5	6,049.7	6,410.3	6,274.6	135.68	47.245	
6,550.0	6,499.7	6,475.7	6,475.7	15.9	129.4	0.96	-323.5	6,049.7	6,393.0	6,259.8	133.22	47.990	
6,594.5	6,540.3	6,516.3	6,516.3	15.9	130.2	0.99	-323.5	6,049.7	6,375.0	6,244.5	130.43	48.876	
6,600.0	6,545.3	6,521.3	6,521.3	15.9	130.3	0.99	-323.5	6,049.7	6,372.5	6,242.5	130.05	49.002	
6,650.0	6,589.3	6,565.3	6,565.3	15.9	131.2	1.03	-323.5	6,049.7	6,348.9	6,222.7	126.18	50.315	
6,692.9	6,625.7	6,601.7	6,601.7	15.9	131.9	1.07	-323.5	6,049.7	6,326.2	6,203.9	122.32	51.717	
6,700.0	6,631.6	6,607.6	6,607.6	15.9	132.0	1.08	-323.5	6,049.7	6,322.2	6,200.6	121.64	51.976	
6,750.0	6,671.9	6,647.9	6,647.9	15.9	132.9	1.14	-323.5	6,049.7	6,292.7	6,176.3	116.44	54.044	
6,791.3	6,703.6	6,679.6	6,679.6	15.9	133.5	1.21	-323.5	6,049.7	6,266.2	6,154.6	111.66	56.118	
6,800.0	6,710.1	6,686.1	6,686.1	15.9	133.6	1.22	-323.5	6,049.7	6,260.4	6,149.8	110.61	56.601	
6,850.0	6,745.9	6,721.9	6,721.9	16.0	134.3	1.31	-323.5	6,049.7	6,225.6	6,121.4	104.18	59.758	
6,889.7	6,772.6	6,748.6	6,748.6	16.1	134.9	1.40	-323.5	6,049.7	6,196.1	6,097.5	98.67	62.794	
6,900.0	6,779.2	6,755.2	6,755.2	16.1	135.0	1.43	-323.5	6,049.7	6,188.3	6,091.1	97.20	63.666	
6,950.0	6,809.8	6,785.8	6,785.8	16.3	135.6	1.57	-323.5	6,049.7	6,148.8	6,059.1	89.72	68.536	
6,988.2	6,831.3	6,807.3	6,807.3	16.4	136.1	1.71	-323.5	6,049.7	6,117.2	6,033.5	83.70	73.083	
7,000.0	6,837.6	6,813.6	6,813.6	16.5	136.2	1.76	-323.5	6,049.7	6,107.2	6,025.5	81.79	74.669	
7,050.0	6,862.5	6,838.5	6,838.5	16.9	136.7	2.00	-323.5	6,049.7	6,063.9	5,990.4	73.49	82.509	
7,086.6	6,878.7	6,854.7	6,854.7	17.2	137.0	2.23	-323.5	6,049.7	6,031.1	5,963.8	67.24	89.698	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,860.2	6,860.2	17.3	137.1	2.33	-323.5	6,049.7	6,018.9	5,953.9	64.92	92.715	
7,150.0	6,902.7	6,878.7	6,878.7	17.8	137.5	2.80	-323.5	6,049.7	5,972.4	5,916.2	56.20	106.279	
7,185.0	6,913.8	6,889.8	6,889.8	18.3	137.7	3.26	-323.5	6,049.7	5,939.2	5,889.1	50.12	118.493	
7,200.0	6,918.0	6,894.0	6,894.0	18.5	137.8	3.51	-323.5	6,049.7	5,924.8	5,877.3	47.57	124.537	
7,250.0	6,929.9	6,905.9	6,905.9	19.2	138.0	4.71	-323.5	6,049.7	5,876.3	5,836.6	39.71	147.986	
7,283.4	6,936.0	6,912.0	6,912.0	19.7	138.2	6.10	-323.5	6,049.7	5,843.4	5,807.5	35.92	162.701	
7,300.0	6,938.4	6,914.4	6,914.4	20.0	138.2	7.14	-323.5	6,049.7	5,827.0	5,791.9	35.14	165.837	
7,350.0	6,943.4	6,919.4	6,919.4	20.9	138.3	14.55	-323.5	6,049.7	5,777.3	5,730.8	46.55	124.119	
7,381.9	6,944.8	6,920.8	6,920.8	21.4	138.3	38.75	-323.5	6,049.7	5,745.5	5,643.3	102.14	56.253	
7,403.7	6,945.0	6,921.0	6,921.0	21.8	138.4	117.73	-323.5	6,049.7	5,723.6	5,581.6	142.04	40.297	
7,480.3	6,944.3	6,920.3	6,920.3	23.3	138.3	117.41	-323.5	6,049.7	5,647.1	5,503.3	143.75	39.285	
7,500.0	6,944.1	6,920.1	6,920.1	23.7	138.3	117.33	-323.5	6,049.7	5,627.4	5,483.2	144.19	39.028	
7,578.7	6,943.4	6,919.4	6,919.4	25.4	138.3	117.01	-323.5	6,049.7	5,548.7	5,402.6	146.06	37.988	
7,600.0	6,943.2	6,919.2	6,919.2	25.8	138.3	116.91	-323.5	6,049.7	5,527.4	5,380.8	146.57	37.711	
7,677.1	6,942.5	6,918.5	6,918.5	27.5	138.3	116.59	-323.5	6,049.7	5,450.3	5,301.8	148.51	36.700	
7,700.0	6,942.3	6,918.3	6,918.3	28.0	138.3	116.49	-323.5	6,049.7	5,427.4	5,278.3	149.08	36.405	
7,775.6	6,941.6	6,917.6	6,917.6	29.8	138.3	116.17	-323.5	6,049.7	5,351.9	5,200.8	151.06	35.429	
7,800.0	6,941.4	6,917.4	6,917.4	30.3	138.3	116.07	-323.5	6,049.7	5,327.4	5,175.7	151.70	35.119	
7,874.0	6,940.7	6,916.7	6,916.7	32.1	138.3	115.75	-323.5	6,049.7	5,253.5	5,099.8	153.69	34.182	
7,900.0	6,940.5	6,916.5	6,916.5	32.7	138.3	115.64	-323.5	6,049.7	5,227.5	5,073.1	154.39	33.858	
7,972.4	6,939.8	6,915.8	6,915.8	34.5	138.2	115.33	-323.5	6,049.7	5,155.0	4,998.7	156.39	32.962	
8,000.0	6,939.6	6,915.6	6,915.6	35.2	138.2	115.21	-323.5	6,049.7	5,127.5	4,970.3	157.16	32.626	
8,070.8	6,938.9	6,914.9	6,914.9	37.0	138.2	114.90	-323.5	6,049.7	5,056.6	4,897.5	159.15	31.773	
8,100.0	6,938.7	6,914.7	6,914.7	37.7	138.2	114.77	-323.5	6,049.7	5,027.5	4,867.5	159.98	31.427	
8,169.3	6,938.0	6,914.0	6,914.0	39.5	138.2	114.47	-323.5	6,049.7	4,958.2	4,796.3	161.96	30.614	
8,200.0	6,937.7	6,913.7	6,913.7	40.3	138.2	114.34	-323.5	6,049.7	4,927.5	4,764.7	162.84	30.260	
8,267.7	6,937.1	6,913.1	6,913.1	42.0	138.2	114.04	-323.5	6,049.7	4,859.8	4,695.0	164.81	29.488	
8,300.0	6,936.8	6,912.8	6,912.8	42.8	138.2	113.90	-323.5	6,049.7	4,827.6	4,661.8	165.75	29.126	
8,366.1	6,936.2	6,912.2	6,912.2	44.6	138.2	113.60	-323.5	6,049.7	4,761.4	4,593.8	167.69	28.395	
8,400.0	6,935.9	6,911.9	6,911.9	45.5	138.2	113.45	-323.5	6,049.7	4,727.6	4,558.9	168.69	28.026	
8,464.5	6,935.3	6,911.3	6,911.3	47.2	138.2	113.17	-323.5	6,049.7	4,663.0	4,492.4	170.60	27.333	
8,500.0	6,935.0	6,911.0	6,911.0	48.1	138.2	113.01	-323.5	6,049.7	4,627.6	4,455.9	171.66	26.958	
8,563.0	6,934.5	6,910.5	6,910.5	49.8	138.1	112.73	-323.5	6,049.7	4,564.6	4,391.1	173.54	26.303	
8,600.0	6,934.1	6,910.1	6,910.1	50.7	138.1	112.56	-323.5	6,049.7	4,527.6	4,353.0	174.65	25.923	
8,661.4	6,933.6	6,909.6	6,909.6	52.4	138.1	112.28	-323.5	6,049.7	4,466.2	4,289.7	176.51	25.304	
8,700.0	6,933.2	6,909.2	6,909.2	53.4	138.1	112.11	-323.5	6,049.7	4,427.7	4,250.0	177.67	24.920	
8,759.8	6,932.7	6,908.7	6,908.7	55.0	138.1	111.84	-323.5	6,049.7	4,367.9	4,188.4	179.49	24.335	
8,800.0	6,932.3	6,908.3	6,908.3	56.1	138.1	111.65	-323.5	6,049.7	4,327.7	4,147.0	180.71	23.948	
8,858.2	6,931.8	6,907.8	6,907.8	57.7	138.1	111.39	-323.5	6,049.7	4,269.5	4,087.0	182.49	23.395	
8,900.0	6,931.4	6,907.4	6,907.4	58.8	138.1	111.20	-323.5	6,049.7	4,227.7	4,043.9	183.77	23.005	
8,956.7	6,930.9	6,906.9	6,906.9	60.3	138.1	110.94	-323.5	6,049.7	4,171.1	3,985.5	185.52	22.484	
9,000.0	6,930.5	6,906.5	6,906.5	61.5	138.1	110.74	-323.5	6,049.7	4,127.8	3,940.9	186.85	22.091	
9,055.1	6,930.0	6,906.0	6,906.0	63.0	138.0	110.48	-323.5	6,049.7	4,072.7	3,884.1	188.55	21.600	
9,100.0	6,929.6	6,905.6	6,905.6	64.2	138.0	110.27	-323.5	6,049.7	4,027.8	3,837.8	189.94	21.206	
9,153.5	6,929.1	6,905.1	6,905.1	65.6	138.0	110.03	-323.5	6,049.7	3,974.3	3,782.7	191.60	20.743	
9,200.0	6,928.7	6,904.7	6,904.7	66.9	138.0	109.81	-323.5	6,049.7	3,927.8	3,734.8	193.04	20.347	
9,251.9	6,928.2	6,904.2	6,904.2	68.3	138.0	109.57	-323.5	6,049.7	3,875.9	3,681.2	194.66	19.911	
9,300.0	6,927.8	6,903.8	6,903.8	69.6	138.0	109.34	-323.5	6,049.7	3,827.9	3,631.7	196.16	19.514	
9,350.4	6,927.3	6,903.3	6,903.3	71.0	138.0	109.10	-323.5	6,049.7	3,777.5	3,579.8	197.73	19.104	
9,400.0	6,926.9	6,902.9	6,902.9	72.4	138.0	108.87	-323.5	6,049.7	3,727.9	3,528.6	199.28	18.707	
9,448.8	6,926.4	6,902.4	6,902.4	73.7	138.0	108.64	-323.5	6,049.7	3,679.1	3,478.3	200.81	18.321	
9,500.0	6,926.0	6,902.0	6,902.0	75.1	138.0	108.40	-323.5	6,049.7	3,627.9	3,425.5	202.42	17.923	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,901.5	6,901.5	76.4	138.0	108.17	-323.5	6,049.7	3,580.7	3,376.8	203.90	17.561	
9,600.0	6,925.1	6,901.1	6,901.1	77.9	138.0	107.92	-323.5	6,049.7	3,528.0	3,322.4	205.56	17.163	
9,645.6	6,924.6	6,900.6	6,900.6	79.1	137.9	107.70	-323.5	6,049.7	3,482.3	3,275.4	206.99	16.824	
9,700.0	6,924.1	6,900.1	6,900.1	80.6	137.9	107.44	-323.5	6,049.7	3,428.0	3,219.3	208.70	16.425	
9,744.1	6,923.7	6,899.7	6,899.7	81.8	137.9	107.23	-323.5	6,049.7	3,384.0	3,173.9	210.09	16.107	
9,800.0	6,923.2	6,899.2	6,899.2	83.4	137.9	106.96	-323.5	6,049.7	3,328.1	3,116.2	211.86	15.709	
9,842.5	6,922.9	6,898.9	6,898.9	84.5	137.9	106.76	-323.5	6,049.7	3,285.6	3,072.4	213.20	15.411	
9,900.0	6,922.3	6,898.3	6,898.3	86.1	137.9	106.48	-323.5	6,049.7	3,228.1	3,013.1	215.01	15.014	
9,940.9	6,922.0	6,898.0	6,898.0	87.2	137.9	106.28	-323.5	6,049.7	3,187.2	2,970.9	216.31	14.735	
10,000.0	6,921.4	6,897.4	6,897.4	88.9	137.9	105.99	-323.5	6,049.7	3,128.2	2,910.0	218.17	14.338	
10,039.3	6,921.1	6,897.1	6,897.1	90.0	137.9	105.80	-323.5	6,049.7	3,088.8	2,869.4	219.42	14.078	
10,100.0	6,920.5	6,896.5	6,896.5	91.6	137.9	105.51	-323.5	6,049.7	3,028.2	2,806.9	221.33	13.682	
10,137.8	6,920.2	6,896.2	6,896.2	92.7	137.9	105.32	-323.5	6,049.7	2,990.5	2,767.9	222.53	13.439	
10,200.0	6,919.6	6,895.6	6,895.6	94.4	137.8	105.02	-323.5	6,049.7	2,928.3	2,703.8	224.50	13.044	
10,236.2	6,919.3	6,895.3	6,895.3	95.4	137.8	104.84	-323.5	6,049.7	2,892.1	2,666.5	225.64	12.817	
10,300.0	6,918.7	6,894.7	6,894.7	97.2	137.8	104.52	-323.5	6,049.7	2,828.3	2,600.7	227.66	12.424	
10,334.6	6,918.4	6,894.4	6,894.4	98.1	137.8	104.35	-323.5	6,049.7	2,793.7	2,565.0	228.76	12.213	
10,400.0	6,917.8	6,893.8	6,893.8	99.9	137.8	104.03	-323.5	6,049.7	2,728.4	2,497.6	230.82	11.820	
10,433.0	6,917.5	6,893.5	6,893.5	100.9	137.8	103.87	-323.5	6,049.7	2,695.4	2,463.5	231.87	11.625	
10,500.0	6,916.9	6,892.9	6,892.9	102.7	137.8	103.53	-323.5	6,049.7	2,628.5	2,394.5	233.98	11.234	
10,531.5	6,916.6	6,892.6	6,892.6	103.6	137.8	103.38	-323.5	6,049.7	2,597.0	2,362.1	234.98	11.052	
10,600.0	6,916.0	6,892.0	6,892.0	105.5	137.8	103.03	-323.5	6,049.7	2,528.6	2,291.4	237.14	10.663	
10,629.9	6,915.7	6,891.7	6,891.7	106.3	137.8	102.89	-323.5	6,049.7	2,498.7	2,260.6	238.08	10.495	
10,700.0	6,915.1	6,891.1	6,891.1	108.3	137.8	102.53	-323.5	6,049.7	2,428.6	2,188.4	240.29	10.107	
10,728.3	6,914.8	6,890.8	6,890.8	109.1	137.7	102.39	-323.5	6,049.7	2,400.3	2,159.2	241.19	9.952	
10,800.0	6,914.2	6,890.2	6,890.2	111.0	137.7	102.03	-323.5	6,049.7	2,328.7	2,085.3	243.44	9.566	
10,826.7	6,913.9	6,889.9	6,889.9	111.8	137.7	101.90	-323.5	6,049.7	2,302.0	2,057.7	244.28	9.423	
10,900.0	6,913.3	6,889.3	6,889.3	113.8	137.7	101.53	-323.5	6,049.7	2,228.8	1,982.3	246.59	9.039	
10,925.2	6,913.1	6,889.1	6,889.1	114.5	137.7	101.40	-323.5	6,049.7	2,203.7	1,956.3	247.38	8.908	
11,000.0	6,912.4	6,888.4	6,888.4	116.6	137.7	101.02	-323.5	6,049.7	2,128.9	1,879.2	249.72	8.525	
11,023.6	6,912.2	6,888.2	6,888.2	117.3	137.7	100.90	-323.5	6,049.7	2,105.4	1,854.9	250.46	8.406	
11,100.0	6,911.5	6,887.5	6,887.5	119.4	137.7	100.52	-323.5	6,049.7	2,029.1	1,776.2	252.85	8.025	
11,122.0	6,911.3	6,887.3	6,887.3	120.0	137.7	100.40	-323.5	6,049.7	2,007.1	1,753.5	253.54	7.916	
11,200.0	6,910.6	6,886.6	6,886.6	122.2	137.7	100.01	-323.5	6,049.7	1,929.2	1,673.2	255.97	7.537	
11,220.4	6,910.4	6,886.4	6,886.4	122.7	137.7	99.90	-323.5	6,049.7	1,908.8	1,652.2	256.61	7.438	
11,300.0	6,909.7	6,885.7	6,885.7	125.0	137.6	99.50	-323.5	6,049.7	1,829.3	1,570.2	259.09	7.061	
11,318.9	6,909.5	6,885.5	6,885.5	125.5	137.6	99.40	-323.5	6,049.7	1,810.5	1,550.8	259.67	6.972	
11,400.0	6,908.8	6,884.8	6,884.8	127.7	137.6	98.98	-323.5	6,049.7	1,729.5	1,467.3	262.19	6.596	
11,417.3	6,908.6	6,884.6	6,884.6	128.2	137.6	98.90	-323.5	6,049.7	1,712.2	1,449.5	262.72	6.517	
11,500.0	6,907.9	6,883.9	6,883.9	130.5	137.6	98.47	-323.5	6,049.7	1,629.7	1,364.4	265.28	6.143	
11,515.7	6,907.7	6,883.7	6,883.7	131.0	137.6	98.39	-323.5	6,049.7	1,614.0	1,348.2	265.76	6.073	
11,600.0	6,907.0	6,883.0	6,883.0	133.3	137.6	97.96	-323.5	6,049.7	1,529.9	1,261.5	268.36	5.701	
11,614.1	6,906.8	6,882.8	6,882.8	133.7	137.6	97.88	-323.5	6,049.7	1,515.7	1,247.0	268.79	5.639	
11,700.0	6,906.0	6,882.0	6,882.0	136.1	137.6	97.44	-323.5	6,049.7	1,430.1	1,158.7	271.42	5.269	
11,712.6	6,905.9	6,881.9	6,881.9	136.5	137.6	97.38	-323.5	6,049.7	1,417.6	1,145.7	271.81	5.215	
11,800.0	6,905.1	6,881.1	6,881.1	138.9	137.6	96.92	-323.5	6,049.7	1,330.4	1,055.9	274.47	4.847	
11,811.0	6,905.0	6,881.0	6,881.0	139.2	137.5	96.87	-323.5	6,049.7	1,319.4	1,044.6	274.81	4.801	
11,900.0	6,904.2	6,880.2	6,880.2	141.7	137.5	96.41	-323.5	6,049.7	1,230.7	953.1	277.51	4.435	
11,909.4	6,904.2	6,880.2	6,880.2	141.9	137.5	96.36	-323.5	6,049.7	1,221.3	943.5	277.80	4.396	
12,000.0	6,903.3	6,879.3	6,879.3	144.5	137.5	95.89	-323.5	6,049.7	1,131.0	850.5	280.53	4.032	
12,007.8	6,903.3	6,879.3	6,879.3	144.7	137.5	95.85	-323.5	6,049.7	1,123.2	842.4	280.77	4.000	
12,100.0	6,902.4	6,878.4	6,878.4	147.3	137.5	95.37	-323.5	6,049.7	1,031.4	747.9	283.54	3.638	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,878.4	6,878.4	147.4	137.5	95.33	-323.5	6,049.7	1,025.2	741.5	283.73	3.613	
12,200.0	6,901.5	6,877.5	6,877.5	150.1	137.5	94.85	-323.5	6,049.7	932.0	645.4	286.53	3.253	
12,204.7	6,901.5	6,877.5	6,877.5	150.2	137.5	94.82	-323.5	6,049.7	927.3	640.6	286.67	3.235	
12,300.0	6,900.6	6,876.6	6,876.6	152.9	137.5	94.33	-323.5	6,049.7	832.6	543.1	289.50	2.876	
12,303.1	6,900.6	6,876.6	6,876.6	152.9	137.5	94.31	-323.5	6,049.7	829.5	539.9	289.59	2.864	
12,400.0	6,899.7	6,875.7	6,875.7	155.6	137.4	93.80	-323.5	6,049.7	733.4	440.9	292.45	2.508	
12,401.5	6,899.7	6,875.7	6,875.7	155.7	137.4	93.80	-323.5	6,049.7	731.9	439.4	292.50	2.502	
12,500.0	6,898.8	6,874.8	6,874.8	158.4	137.4	93.28	-323.5	6,049.7	634.4	339.1	295.38	2.148	
12,598.4	6,897.9	6,873.9	6,873.9	161.2	137.4	92.77	-323.5	6,049.7	537.5	239.2	298.25	1.802	
12,600.0	6,897.9	6,873.9	6,873.9	161.2	137.4	92.76	-323.5	6,049.7	535.9	237.6	298.29	1.797	
12,696.8	6,897.0	6,873.0	6,873.0	163.9	137.4	92.25	-323.5	6,049.7	441.1	140.0	301.09	1.465	Level 3
12,700.0	6,897.0	6,873.0	6,873.0	164.0	137.4	92.24	-323.5	6,049.7	438.0	136.8	301.19	1.454	Level 3
12,795.2	6,896.1	6,872.1	6,872.1	166.7	137.4	91.74	-323.5	6,049.7	345.9	42.0	303.92	1.138	Level 2
12,800.0	6,896.1	6,872.1	6,872.1	166.8	137.4	91.71	-323.5	6,049.7	341.3	37.3	304.05	1.123	Level 2
12,893.7	6,895.3	6,871.3	6,871.3	169.4	137.4	91.22	-323.5	6,049.7	253.1	-53.6	306.72	0.825	Level 1
12,900.0	6,895.2	6,871.2	6,871.2	169.6	137.4	91.19	-323.5	6,049.7	247.3	-59.6	306.90	0.806	Level 1
12,992.1	6,894.4	6,870.4	6,870.4	172.2	137.3	90.71	-323.5	6,049.7	167.0	-142.5	309.50	0.540	Level 1
13,000.0	6,894.3	6,870.3	6,870.3	172.4	137.3	90.66	-323.5	6,049.7	160.7	-149.0	309.72	0.519	Level 1
13,090.5	6,893.5	6,869.5	6,869.5	175.0	137.3	90.19	-323.5	6,049.7	105.2	-207.1	312.26	0.337	Level 1
13,100.0	6,893.4	6,869.4	6,869.4	175.2	137.3	90.14	-323.5	6,049.7	102.3	-210.2	312.52	0.327	Level 1
13,126.7	6,893.2	6,869.2	6,869.2	176.0	137.3	90.00	-323.5	6,049.7	98.8	-214.5	313.27	0.315	Level 1, CC, ES, SF
13,188.9	6,892.6	6,868.6	6,868.6	177.7	137.3	89.67	-323.5	6,049.7	116.7	-198.3	314.99	0.371	Level 1
13,200.0	6,892.5	6,868.5	6,868.5	178.0	137.3	89.62	-323.5	6,049.7	123.0	-192.3	315.30	0.390	Level 1
13,287.4	6,891.7	6,867.7	6,867.7	180.5	137.3	89.16	-323.5	6,049.7	188.6	-129.1	317.70	0.594	Level 1
13,300.0	6,891.6	6,867.6	6,867.6	180.8	137.3	89.09	-323.5	6,049.7	199.4	-118.6	318.05	0.627	Level 1
13,385.8	6,890.8	6,866.8	6,866.8	183.2	137.3	88.64	-323.5	6,049.7	277.2	-43.1	320.39	0.865	Level 1
13,400.0	6,890.7	6,866.7	6,866.7	183.6	137.3	88.57	-323.5	6,049.7	290.6	-30.2	320.77	0.906	Level 1
13,484.2	6,889.9	6,865.9	6,865.9	186.0	137.2	88.13	-323.5	6,049.7	370.9	47.8	323.04	1.148	Level 2
13,500.0	6,889.8	6,865.8	6,865.8	186.4	137.2	88.05	-323.5	6,049.7	386.1	62.6	323.47	1.194	Level 2
13,582.6	6,889.0	6,865.0	6,865.0	188.7	137.2	87.61	-323.5	6,049.7	466.5	140.8	325.68	1.432	Level 3
13,600.0	6,888.9	6,864.9	6,864.9	189.2	137.2	87.52	-323.5	6,049.7	483.4	157.3	326.14	1.482	Level 3
13,681.1	6,888.1	6,864.1	6,864.1	191.5	137.2	87.10	-323.5	6,049.7	563.0	234.8	328.28	1.715	
13,700.0	6,888.0	6,864.0	6,864.0	192.0	137.2	87.00	-323.5	6,049.7	581.7	252.9	328.78	1.769	
13,779.5	6,887.3	6,863.3	6,863.3	194.2	137.2	86.59	-323.5	6,049.7	660.2	329.3	330.86	1.995	
13,800.0	6,887.1	6,863.1	6,863.1	194.8	137.2	86.48	-323.5	6,049.7	680.4	349.0	331.39	2.053	
13,877.9	6,886.4	6,862.4	6,862.4	197.0	137.2	86.07	-323.5	6,049.7	757.6	424.2	333.41	2.272	
13,900.0	6,886.2	6,862.2	6,862.2	197.6	137.2	85.96	-323.5	6,049.7	779.5	445.5	333.98	2.334	
13,976.3	6,885.5	6,861.5	6,861.5	199.7	137.2	85.56	-323.5	6,049.7	855.3	519.4	335.93	2.546	
14,000.0	6,885.3	6,861.3	6,861.3	200.4	137.2	85.44	-323.5	6,049.7	878.8	542.3	336.54	2.611	
14,074.8	6,884.6	6,860.6	6,860.6	202.5	137.1	85.05	-323.5	6,049.7	953.1	614.7	338.43	2.816	
14,100.0	6,884.4	6,860.4	6,860.4	203.2	137.1	84.92	-323.5	6,049.7	978.2	639.2	339.06	2.885	
14,173.2	6,883.7	6,859.7	6,859.7	205.3	137.1	84.54	-323.5	6,049.7	1,051.1	710.2	340.89	3.083	
14,200.0	6,883.5	6,859.5	6,859.5	206.0	137.1	84.40	-323.5	6,049.7	1,077.8	736.2	341.56	3.155	
14,271.6	6,882.8	6,858.8	6,858.8	208.0	137.1	84.03	-323.5	6,049.7	1,149.1	805.8	343.33	3.347	
14,300.0	6,882.6	6,858.6	6,858.6	208.8	137.1	83.88	-323.5	6,049.7	1,177.4	833.3	344.02	3.422	
14,370.0	6,881.9	6,857.9	6,857.9	210.8	137.1	83.52	-323.5	6,049.7	1,247.2	901.4	345.73	3.607	
14,400.0	6,881.7	6,857.7	6,857.7	211.6	137.1	83.37	-323.5	6,049.7	1,277.0	930.6	346.46	3.686	
14,468.5	6,881.0	6,857.0	6,857.0	213.5	137.1	83.01	-323.5	6,049.7	1,345.3	997.2	348.11	3.865	
14,500.0	6,880.8	6,856.8	6,856.8	214.4	137.1	82.85	-323.5	6,049.7	1,376.8	1,027.9	348.86	3.946	
14,566.9	6,880.2	6,856.2	6,856.2	216.3	137.0	82.51	-323.5	6,049.7	1,443.5	1,093.0	350.45	4.119	
14,584.2	6,880.0	6,856.0	6,856.0	216.8	137.0	82.42	-323.5	6,049.7	1,460.7	1,109.8	350.86	4.163	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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)	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	9.24	1,559.2	253.6	1,579.8				
98.4	98.4	81.4	81.4	0.1	0.4	9.24	1,559.2	253.6	1,579.7	1,579.3	0.48	3,325.557	
100.0	100.0	83.0	83.0	0.1	0.4	9.24	1,559.2	253.6	1,579.7	1,579.2	0.48	3,261.573	
196.8	196.8	179.8	179.8	0.3	2.5	9.24	1,559.2	253.6	1,579.7	1,577.0	2.77	571.074	
200.0	200.0	183.0	183.0	0.3	2.5	9.24	1,559.2	253.6	1,579.7	1,576.9	2.85	553.992	
295.3	295.3	278.3	278.3	0.5	4.6	9.24	1,559.2	253.6	1,579.7	1,574.6	5.11	308.863	
300.0	300.0	283.0	283.0	0.5	4.7	9.24	1,559.2	253.6	1,579.7	1,574.5	5.22	302.428	
393.7	393.7	376.7	376.7	0.7	6.6	9.24	1,559.2	253.6	1,579.7	1,572.4	7.35	214.878	
400.0	400.0	383.0	383.0	0.8	6.7	9.24	1,559.2	253.6	1,579.7	1,572.2	7.49	210.788	
492.1	492.1	475.1	475.1	1.0	8.6	9.24	1,559.2	253.6	1,579.7	1,570.2	9.57	165.056	
500.0	500.0	483.0	483.0	1.0	8.8	9.24	1,559.2	253.6	1,579.7	1,570.0	9.75	162.054	
590.5	590.5	573.5	573.5	1.2	10.6	9.24	1,559.2	253.6	1,579.7	1,567.9	11.78	134.072	
600.0	600.0	583.0	583.0	1.2	10.8	9.24	1,559.2	253.6	1,579.7	1,567.7	11.99	131.699	
689.0	689.0	672.0	672.0	1.4	12.6	9.24	1,559.2	253.6	1,579.7	1,565.7	13.99	112.911	
700.0	700.0	683.0	683.0	1.4	12.8	9.24	1,559.2	253.6	1,579.7	1,565.5	14.24	110.950	
787.4	787.4	770.4	770.4	1.6	14.6	9.24	1,559.2	253.6	1,579.7	1,563.5	16.20	97.532	
800.0	800.0	783.0	783.0	1.7	14.8	9.24	1,559.2	253.6	1,579.7	1,563.2	16.48	95.861	
885.8	885.8	868.8	868.8	1.9	16.5	9.24	1,559.2	253.6	1,579.7	1,561.3	18.40	85.847	
900.0	900.0	883.0	883.0	1.9	16.8	9.24	1,559.2	253.6	1,579.7	1,561.0	18.72	84.391	
984.2	984.2	967.2	967.2	2.1	18.5	9.24	1,559.2	253.6	1,579.7	1,559.1	20.61	76.665	
1,000.0	1,000.0	983.0	983.0	2.1	18.8	9.24	1,559.2	253.6	1,579.7	1,558.8	20.96	75.375	
1,082.7	1,082.7	1,065.7	1,065.7	2.3	20.5	9.24	1,559.2	253.6	1,579.7	1,556.9	22.81	69.260	
1,100.0	1,100.0	1,083.0	1,083.0	2.3	20.9	9.24	1,559.2	253.6	1,579.7	1,556.5	23.20	68.102	
1,181.1	1,181.1	1,164.1	1,164.1	2.5	22.5	9.24	1,559.2	253.6	1,579.7	1,554.7	25.01	63.160	
1,200.0	1,200.0	1,183.0	1,183.0	2.6	22.9	9.24	1,559.2	253.6	1,579.7	1,554.3	25.43	62.110	
1,279.5	1,279.5	1,262.5	1,262.5	2.7	24.5	9.24	1,559.2	253.6	1,579.7	1,552.5	27.21	58.049	
1,300.0	1,300.0	1,283.0	1,283.0	2.8	24.9	9.24	1,559.2	253.6	1,579.7	1,552.1	27.67	57.088	
1,377.9	1,377.9	1,360.9	1,360.9	3.0	26.5	9.24	1,559.2	253.6	1,579.7	1,550.3	29.42	53.703	
1,400.0	1,400.0	1,383.0	1,383.0	3.0	26.9	9.24	1,559.2	253.6	1,579.7	1,549.8	29.91	52.818	
1,476.4	1,476.4	1,459.4	1,459.4	3.2	28.4	9.24	1,559.2	253.6	1,579.7	1,548.1	31.62	49.963	
1,500.0	1,500.0	1,483.0	1,483.0	3.2	28.9	9.24	1,559.2	253.6	1,579.7	1,547.6	32.15	49.142	
1,574.8	1,574.8	1,557.8	1,557.8	3.4	30.4	9.24	1,559.2	253.6	1,579.7	1,545.9	33.82	46.711	
1,600.0	1,600.0	1,583.0	1,583.0	3.5	30.9	9.24	1,559.2	253.6	1,579.7	1,545.3	34.38	45.945	
1,650.0	1,650.0	1,633.0	1,633.0	3.6	31.9	9.24	1,559.2	253.6	1,579.7	1,544.2	35.50	44.498 CC	
1,673.2	1,673.2	1,656.2	1,656.2	3.6	32.4	128.82	1,559.2	253.6	1,579.8	1,543.8	36.02	43.864	
1,700.0	1,700.0	1,683.0	1,683.0	3.7	32.9	128.83	1,559.2	253.6	1,580.0	1,543.4	36.61	43.161	
1,771.6	1,771.6	1,754.6	1,754.6	3.8	34.4	128.87	1,559.2	253.6	1,581.3	1,543.2	38.17	41.429 ES	
1,800.0	1,799.9	1,782.9	1,782.9	3.9	34.9	128.89	1,559.2	253.6	1,582.2	1,543.4	38.79	40.794	
1,870.1	1,869.9	1,852.9	1,852.9	4.0	36.4	128.98	1,559.2	253.6	1,585.0	1,544.7	40.30	39.329	
1,900.0	1,899.7	1,882.7	1,882.7	4.1	37.0	129.02	1,559.2	253.6	1,586.6	1,545.6	40.95	38.749	
1,968.5	1,967.8	1,950.8	1,950.8	4.2	38.3	129.14	1,559.2	253.6	1,590.9	1,548.5	42.42	37.507	
2,000.0	1,999.1	1,982.1	1,982.1	4.3	39.0	129.21	1,559.2	253.6	1,593.2	1,550.1	43.09	36.978	
2,066.9	2,065.5	2,048.5	2,048.5	4.4	40.3	129.37	1,559.2	253.6	1,598.9	1,554.4	44.51	35.925	
2,100.0	2,098.2	2,081.2	2,081.2	4.5	40.9	129.45	1,559.2	253.6	1,602.1	1,556.9	45.20	35.443	
2,165.3	2,162.6	2,145.6	2,145.6	4.7	42.2	129.64	1,559.2	253.6	1,609.1	1,562.5	46.57	34.549	
2,200.0	2,196.6	2,179.6	2,179.6	4.7	42.9	129.75	1,559.2	253.6	1,613.2	1,566.0	47.29	34.111	
2,249.9	2,245.5	2,228.5	2,228.5	4.9	43.9	129.92	1,559.2	253.6	1,619.7	1,571.4	48.33	33.515	
2,263.8	2,259.1	2,242.1	2,242.1	4.9	44.2	130.00	1,559.2	253.6	1,621.6	1,572.9	48.63	33.342	
2,300.0	2,294.5	2,277.5	2,277.5	5.0	44.9	130.20	1,559.2	253.6	1,626.5	1,577.0	49.43	32.903	
2,362.2	2,355.4	2,338.4	2,338.4	5.2	46.1	130.54	1,559.2	253.6	1,635.0	1,584.2	50.81	32.177	
2,400.0	2,392.3	2,375.3	2,375.3	5.4	46.9	130.75	1,559.2	253.6	1,640.1	1,588.5	51.65	31.756	
2,460.6	2,451.6	2,434.6	2,434.6	5.6	48.1	131.07	1,559.2	253.6	1,648.5	1,595.5	53.00	31.104	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,473.2	2,473.2	5.7	48.8	131.29	1,559.2	253.6	1,654.0	1,600.1	53.88	30.700		
2,559.0	2,547.9	2,530.9	2,530.9	5.9	50.0	131.60	1,559.2	253.6	1,662.2	1,607.0	55.20	30.115		
2,600.0	2,588.0	2,571.0	2,571.0	6.1	50.8	131.82	1,559.2	253.6	1,667.9	1,611.8	56.11	29.725		
2,657.5	2,644.2	2,627.2	2,627.2	6.3	51.9	132.12	1,559.2	253.6	1,676.0	1,618.6	57.40	29.199		
2,700.0	2,685.8	2,668.8	2,668.8	6.4	52.8	132.34	1,559.2	253.6	1,682.0	1,623.7	58.35	28.825		
2,755.9	2,740.5	2,723.5	2,723.5	6.6	53.9	132.63	1,559.2	253.6	1,690.0	1,630.3	59.61	28.351		
2,800.0	2,783.6	2,766.6	2,766.6	6.8	54.7	132.85	1,559.2	253.6	1,696.3	1,635.7	60.60	27.991		
2,854.3	2,836.7	2,819.7	2,819.7	7.0	55.8	133.13	1,559.2	253.6	1,704.0	1,642.2	61.82	27.563		
2,900.0	2,881.4	2,864.4	2,864.4	7.2	56.7	133.36	1,559.2	253.6	1,710.6	1,647.8	62.85	27.217		
2,952.7	2,933.0	2,916.0	2,916.0	7.4	57.7	133.62	1,559.2	253.6	1,718.3	1,654.2	64.04	26.831		
3,000.0	2,979.2	2,962.2	2,962.2	7.6	58.7	133.85	1,559.2	253.6	1,725.1	1,660.0	65.10	26.498		
3,051.2	3,029.3	3,012.3	3,012.3	7.8	59.7	134.10	1,559.2	253.6	1,732.6	1,666.3	66.26	26.149		
3,100.0	3,077.1	3,060.1	3,060.1	8.0	60.6	134.34	1,559.2	253.6	1,739.8	1,672.4	67.36	25.828		
3,149.6	3,125.6	3,108.6	3,108.6	8.2	61.6	134.58	1,559.2	253.6	1,747.1	1,678.6	68.48	25.512		
3,200.0	3,174.9	3,157.9	3,157.9	8.4	62.6	134.82	1,559.2	253.6	1,754.5	1,684.9	69.62	25.202		
3,248.0	3,221.8	3,204.8	3,204.8	8.6	63.5	135.05	1,559.2	253.6	1,761.6	1,690.9	70.70	24.916		
3,300.0	3,272.7	3,255.7	3,255.7	8.9	64.6	135.29	1,559.2	253.6	1,769.4	1,697.5	71.87	24.618		
3,346.4	3,318.1	3,301.1	3,301.1	9.0	65.5	135.51	1,559.2	253.6	1,776.3	1,703.4	72.92	24.359		
3,400.0	3,370.5	3,353.5	3,353.5	9.3	66.5	135.76	1,559.2	253.6	1,784.4	1,710.2	74.13	24.070		
3,444.9	3,414.4	3,397.4	3,397.4	9.5	67.4	135.96	1,559.2	253.6	1,791.1	1,716.0	75.15	23.835		
3,500.0	3,468.3	3,451.3	3,451.3	9.7	68.5	136.21	1,559.2	253.6	1,799.5	1,723.1	76.39	23.556		
3,543.3	3,510.7	3,493.7	3,493.7	9.9	69.4	136.41	1,559.2	253.6	1,806.1	1,728.7	77.37	23.344		
3,600.0	3,566.1	3,549.1	3,549.1	10.1	70.5	136.66	1,559.2	253.6	1,814.7	1,736.1	78.65	23.074		
3,641.7	3,606.9	3,589.9	3,589.9	10.3	71.3	136.85	1,559.2	253.6	1,821.1	1,741.5	79.59	22.881		
3,700.0	3,664.0	3,647.0	3,647.0	10.6	72.4	137.11	1,559.2	253.6	1,830.0	1,749.1	80.90	22.620		
3,740.1	3,703.2	3,686.2	3,686.2	10.7	73.2	137.28	1,559.2	253.6	1,836.2	1,754.4	81.81	22.445		
3,800.0	3,761.8	3,744.8	3,744.8	11.0	74.4	137.54	1,559.2	253.6	1,845.5	1,762.3	83.16	22.192		
3,837.4	3,798.3	3,781.3	3,781.3	11.2	75.1	137.70	1,559.2	253.6	1,851.3	1,767.3	84.00	22.038		
3,838.6	3,799.5	3,782.5	3,782.5	11.2	75.2	137.71	1,559.2	253.6	1,851.4	1,767.4	84.03	22.033		
3,900.0	3,859.7	3,842.7	3,842.7	11.4	76.4	138.08	1,559.2	253.6	1,860.5	1,774.9	85.57	21.742		
3,937.0	3,896.1	3,879.1	3,879.1	11.5	77.1	138.28	1,559.2	253.6	1,865.5	1,779.0	86.48	21.571		
4,000.0	3,958.3	3,941.3	3,941.3	11.7	78.4	138.59	1,559.2	253.6	1,873.2	1,785.2	88.03	21.280		
4,035.4	3,993.3	3,976.3	3,976.3	11.8	79.1	138.75	1,559.2	253.6	1,877.1	1,788.2	88.89	21.118		
4,100.0	4,057.4	4,040.4	4,040.4	12.0	80.4	139.00	1,559.2	253.6	1,883.4	1,793.0	90.44	20.824		
4,133.8	4,091.0	4,074.0	4,074.0	12.1	81.0	139.11	1,559.2	253.6	1,886.3	1,795.0	91.25	20.672		
4,200.0	4,156.8	4,139.8	4,139.8	12.2	82.4	139.30	1,559.2	253.6	1,891.0	1,798.2	92.81	20.376		
4,232.3	4,189.0	4,172.0	4,172.0	12.3	83.0	139.37	1,559.2	253.6	1,892.9	1,799.3	93.55	20.233		
4,300.0	4,256.6	4,239.6	4,239.6	12.4	84.4	139.49	1,559.2	253.6	1,896.0	1,800.8	95.11	19.935		
4,330.7	4,287.3	4,270.3	4,270.3	12.5	85.0	139.53	1,559.2	253.6	1,896.9	1,801.2	95.80	19.802		
4,400.0	4,356.6	4,339.6	4,339.6	12.6	86.4	139.58	1,559.2	253.6	1,898.3	1,800.9	97.34	19.502		
4,429.1	4,385.7	4,368.7	4,368.7	12.6	87.0	139.59	1,559.2	253.6	1,898.4	1,800.5	97.97	19.378		
4,437.2	4,393.8	4,376.8	4,376.8	12.7	87.1	20.00	1,559.2	253.6	1,898.5	1,799.8	98.62	19.251		
4,500.0	4,456.6	4,439.6	4,439.6	12.7	88.4	20.00	1,559.2	253.6	1,898.5	1,798.5	99.98	18.988		
4,527.5	4,484.1	4,467.1	4,467.1	12.8	88.9	20.00	1,559.2	253.6	1,898.5	1,797.9	100.58	18.875		
4,600.0	4,556.6	4,539.6	4,539.6	12.9	90.4	20.00	1,559.2	253.6	1,898.5	1,796.3	102.16	18.583		
4,626.0	4,582.6	4,565.6	4,565.6	12.9	90.9	20.00	1,559.2	253.6	1,898.5	1,795.7	102.73	18.480		
4,700.0	4,656.6	4,639.6	4,639.6	13.1	92.4	20.00	1,559.2	253.6	1,898.5	1,794.1	104.35	18.194		
4,724.4	4,681.0	4,664.0	4,664.0	13.1	92.9	20.00	1,559.2	253.6	1,898.5	1,793.6	104.88	18.101		
4,800.0	4,756.6	4,739.6	4,739.6	13.2	94.4	20.00	1,559.2	253.6	1,898.5	1,791.9	106.53	17.821		
4,822.8	4,779.4	4,762.4	4,762.4	13.3	94.9	20.00	1,559.2	253.6	1,898.5	1,791.4	107.03	17.738		
4,900.0	4,856.6	4,839.6	4,839.6	13.4	96.4	20.00	1,559.2	253.6	1,898.5	1,789.7	108.72	17.462		
4,921.2	4,877.8	4,860.8	4,860.8	13.4	96.9	20.00	1,559.2	253.6	1,898.5	1,789.3	109.18	17.388		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,939.6	4,939.6	13.6	98.4	20.00	1,559.2	253.6	1,898.5	1,787.6	110.90	17.118	
5,019.7	4,976.3	4,959.3	4,959.3	13.6	98.8	20.00	1,559.2	253.6	1,898.5	1,787.1	111.33	17.052	
5,100.0	5,056.6	5,039.6	5,039.6	13.7	100.4	20.00	1,559.2	253.6	1,898.5	1,785.4	113.09	16.787	
5,118.1	5,074.7	5,057.7	5,057.7	13.8	100.8	20.00	1,559.2	253.6	1,898.5	1,785.0	113.49	16.728	
5,200.0	5,156.6	5,139.6	5,139.6	13.9	102.5	20.00	1,559.2	253.6	1,898.5	1,783.2	115.28	16.468	
5,216.5	5,173.1	5,156.1	5,156.1	13.9	102.8	20.00	1,559.2	253.6	1,898.5	1,782.8	115.65	16.416	
5,300.0	5,256.6	5,239.6	5,239.6	14.1	104.5	20.00	1,559.2	253.6	1,898.5	1,781.0	117.48	16.160	
5,314.9	5,271.5	5,254.5	5,254.5	14.1	104.8	20.00	1,559.2	253.6	1,898.5	1,780.7	117.80	16.115	
5,400.0	5,356.6	5,339.6	5,339.6	14.2	106.5	20.00	1,559.2	253.6	1,898.5	1,778.8	119.67	15.864	
5,413.4	5,370.0	5,353.0	5,353.0	14.3	106.7	20.00	1,559.2	253.6	1,898.5	1,778.5	119.96	15.825	
5,500.0	5,456.6	5,439.6	5,439.6	14.4	108.5	20.00	1,559.2	253.6	1,898.5	1,776.6	121.86	15.578	
5,511.8	5,468.4	5,451.4	5,451.4	14.4	108.7	20.00	1,559.2	253.6	1,898.5	1,776.3	122.12	15.545	
5,600.0	5,556.6	5,539.6	5,539.6	14.6	110.5	20.00	1,559.2	253.6	1,898.5	1,774.4	124.06	15.303	
5,610.2	5,566.8	5,549.8	5,549.8	14.6	110.7	20.00	1,559.2	253.6	1,898.5	1,774.2	124.28	15.275	
5,700.0	5,656.6	5,639.6	5,639.6	14.8	112.5	20.00	1,559.2	253.6	1,898.5	1,772.2	126.26	15.036	
5,708.6	5,665.2	5,648.2	5,648.2	14.8	112.7	20.00	1,559.2	253.6	1,898.5	1,772.0	126.45	15.014	
5,800.0	5,756.6	5,739.6	5,739.6	14.9	114.5	20.00	1,559.2	253.6	1,898.5	1,770.0	128.46	14.779	
5,807.1	5,763.7	5,746.7	5,746.7	14.9	114.7	20.00	1,559.2	253.6	1,898.5	1,769.8	128.61	14.761	
5,900.0	5,856.6	5,839.6	5,839.6	15.1	116.5	20.00	1,559.2	253.6	1,898.5	1,767.8	130.65	14.530	
5,905.5	5,862.1	5,845.1	5,845.1	15.1	116.6	20.00	1,559.2	253.6	1,898.5	1,767.7	130.78	14.517	
6,000.0	5,956.6	5,939.6	5,939.6	15.3	118.5	20.00	1,559.2	253.6	1,898.5	1,765.6	132.86	14.290	
6,003.9	5,960.5	5,943.5	5,943.5	15.3	118.6	20.00	1,559.2	253.6	1,898.5	1,765.5	132.94	14.280	
6,100.0	6,056.6	6,039.6	6,039.6	15.5	120.6	20.00	1,559.2	253.6	1,898.5	1,763.4	135.06	14.057	
6,102.3	6,058.9	6,041.9	6,041.9	15.5	120.6	20.00	1,559.2	253.6	1,898.5	1,763.3	135.11	14.051	
6,200.0	6,156.6	6,139.6	6,139.6	15.7	122.6	20.00	1,559.2	253.6	1,898.5	1,761.2	137.26	13.831	
6,200.8	6,157.4	6,140.4	6,140.4	15.7	122.6	20.00	1,559.2	253.6	1,898.5	1,761.2	137.28	13.829	
6,272.2	6,228.8	6,211.8	6,211.8	15.8	124.0	20.00	1,559.2	253.6	1,898.5	1,759.6	138.85	13.673	
6,299.2	6,255.8	6,238.8	6,238.8	15.8	124.6	-70.03	1,559.2	253.6	1,898.3	1,759.2	139.12	13.645	
6,300.0	6,256.6	6,239.6	6,239.6	15.8	124.6	-70.03	1,559.2	253.6	1,898.3	1,759.1	139.13	13.644	
6,350.0	6,306.4	6,289.4	6,289.4	15.9	125.6	-70.23	1,559.2	253.6	1,897.0	1,756.9	140.12	13.538	
6,397.6	6,353.6	6,336.6	6,336.6	15.9	126.5	-70.59	1,559.2	253.6	1,894.7	1,753.7	140.99	13.439	
6,400.0	6,355.9	6,338.9	6,338.9	15.9	126.6	-70.61	1,559.2	253.6	1,894.6	1,753.6	141.03	13.434	
6,450.0	6,404.8	6,387.8	6,387.8	15.9	127.6	-71.17	1,559.2	253.6	1,891.1	1,749.2	141.87	13.329	
6,496.0	6,449.0	6,432.0	6,432.0	16.0	128.4	-71.85	1,559.2	253.6	1,886.9	1,744.3	142.61	13.231	
6,500.0	6,452.8	6,435.8	6,435.8	16.0	128.5	-71.91	1,559.2	253.6	1,886.5	1,743.8	142.67	13.223	
6,550.0	6,499.7	6,482.7	6,482.7	15.9	129.5	-72.81	1,559.2	253.6	1,880.9	1,737.5	143.45	13.112	
6,594.5	6,540.3	6,523.3	6,523.3	15.9	130.3	-73.73	1,559.2	253.6	1,875.3	1,731.1	144.14	13.010	
6,600.0	6,545.3	6,528.3	6,528.3	15.9	130.4	-73.86	1,559.2	253.6	1,874.5	1,730.3	144.23	12.997	
6,650.0	6,589.3	6,572.3	6,572.3	15.9	131.3	-75.03	1,559.2	253.6	1,867.4	1,722.4	145.04	12.875	
6,692.9	6,625.7	6,608.7	6,608.7	15.9	132.0	-76.13	1,559.2	253.6	1,860.8	1,715.0	145.78	12.765	
6,700.0	6,631.6	6,614.6	6,614.6	15.9	132.1	-76.31	1,559.2	253.6	1,859.7	1,713.8	145.90	12.746	
6,750.0	6,671.9	6,654.9	6,654.9	15.9	132.9	-77.68	1,559.2	253.6	1,851.6	1,704.7	146.83	12.611	
6,791.3	6,703.6	6,686.6	6,686.6	15.9	133.6	-78.86	1,559.2	253.6	1,844.6	1,697.0	147.64	12.495	
6,800.0	6,710.1	6,693.1	6,693.1	15.9	133.7	-79.11	1,559.2	253.6	1,843.2	1,695.4	147.81	12.470	
6,850.0	6,745.9	6,728.9	6,728.9	16.0	134.4	-80.56	1,559.2	253.6	1,834.7	1,685.9	148.85	12.326	
6,889.7	6,772.6	6,755.6	6,755.6	16.1	135.0	-81.71	1,559.2	253.6	1,828.1	1,678.4	149.70	12.211	
6,900.0	6,779.2	6,762.2	6,762.2	16.1	135.1	-82.01	1,559.2	253.6	1,826.4	1,676.5	149.92	12.182	
6,950.0	6,809.8	6,792.8	6,792.8	16.3	135.7	-83.42	1,559.2	253.6	1,818.3	1,667.3	151.02	12.041	
6,988.2	6,831.3	6,814.3	6,814.3	16.4	136.1	-84.46	1,559.2	253.6	1,812.5	1,660.6	151.86	11.935	
7,000.0	6,837.6	6,820.6	6,820.6	16.5	136.3	-84.77	1,559.2	253.6	1,810.7	1,658.6	152.11	11.904	
7,050.0	6,862.5	6,845.5	6,845.5	16.9	136.8	-86.01	1,559.2	253.6	1,803.8	1,650.6	153.20	11.774	
7,086.6	6,878.7	6,861.7	6,861.7	17.2	137.1	-86.84	1,559.2	253.6	1,799.2	1,645.3	153.99	11.684	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,867.2	6,867.2	17.3	137.2	-87.13	1,559.2	253.6	1,797.7	1,643.4	154.26	11.654	
7,150.0	6,902.7	6,885.7	6,885.7	17.8	137.6	-88.09	1,559.2	253.6	1,792.6	1,637.3	155.30	11.542	
7,185.0	6,913.8	6,896.8	6,896.8	18.3	137.8	-88.67	1,559.2	253.6	1,789.6	1,633.6	156.02	11.470	
7,200.0	6,918.0	6,901.0	6,901.0	18.5	137.9	-88.88	1,559.2	253.6	1,788.5	1,632.2	156.32	11.442	
7,250.0	6,929.9	6,912.9	6,912.9	19.2	138.1	-89.48	1,559.2	253.6	1,785.7	1,628.4	157.31	11.352	
7,283.4	6,936.0	6,919.0	6,919.0	19.7	138.2	-89.76	1,559.2	253.6	1,784.6	1,626.6	157.97	11.297	
7,300.0	6,938.4	6,921.4	6,921.4	20.0	138.3	-89.87	1,559.2	253.6	1,784.2	1,625.9	158.29	11.272	
7,330.3	6,941.9	6,924.9	6,924.9	20.5	138.4	-90.00	1,559.2	253.6	1,783.9	1,625.1	158.88	11.229	
7,350.0	6,943.4	6,926.4	6,926.4	20.9	138.4	-90.04	1,559.2	253.6	1,784.1	1,624.8	159.24	11.203	
7,381.9	6,944.8	6,927.8	6,927.8	21.4	138.4	-90.04	1,559.2	253.6	1,784.7	1,624.8	159.85	11.165	
7,403.7	6,945.0	6,928.0	6,928.0	21.8	138.4	-89.98	1,559.2	253.6	1,785.5	1,625.2	160.25	11.142	
7,480.3	6,944.3	6,927.3	6,927.3	23.3	138.4	-89.96	1,559.2	253.6	1,790.2	1,628.5	161.72	11.070	
7,500.0	6,944.1	6,927.1	6,927.1	23.7	138.4	-89.95	1,559.2	253.6	1,792.0	1,629.9	162.10	11.055	
7,578.7	6,943.4	6,926.4	6,926.4	25.4	138.4	-89.93	1,559.2	253.6	1,801.1	1,637.4	163.73	11.001	
7,600.0	6,943.2	6,926.2	6,926.2	25.8	138.4	-89.92	1,559.2	253.6	1,804.2	1,640.0	164.17	10.990	
7,677.1	6,942.5	6,925.5	6,925.5	27.5	138.4	-89.90	1,559.2	253.6	1,817.3	1,651.5	165.87	10.956	
7,700.0	6,942.3	6,925.3	6,925.3	28.0	138.4	-89.89	1,559.2	253.6	1,821.8	1,655.5	166.37	10.950	
7,775.6	6,941.6	6,924.6	6,924.6	29.8	138.4	-89.87	1,559.2	253.6	1,838.7	1,670.5	168.12	10.937	
7,800.0	6,941.4	6,924.4	6,924.4	30.3	138.3	-89.86	1,559.2	253.6	1,844.7	1,676.0	168.68	10.936 SF	
7,874.0	6,940.7	6,923.7	6,923.7	32.1	138.3	-89.84	1,559.2	253.6	1,864.9	1,694.5	170.44	10.942	
7,900.0	6,940.5	6,923.5	6,923.5	32.7	138.3	-89.83	1,559.2	253.6	1,872.7	1,701.6	171.06	10.948	
7,972.4	6,939.8	6,922.8	6,922.8	34.5	138.3	-89.81	1,559.2	253.6	1,896.0	1,723.1	172.83	10.970	
8,000.0	6,939.6	6,922.6	6,922.6	35.2	138.3	-89.80	1,559.2	253.6	1,905.5	1,732.0	173.50	10.983	
8,070.8	6,938.9	6,921.9	6,921.9	37.0	138.3	-89.78	1,559.2	253.6	1,931.5	1,756.2	175.26	11.020	
8,100.0	6,938.7	6,921.7	6,921.7	37.7	138.3	-89.78	1,559.2	253.6	1,942.9	1,766.9	175.99	11.040	
8,169.3	6,938.0	6,921.0	6,921.0	39.5	138.3	-89.76	1,559.2	253.6	1,971.3	1,793.6	177.74	11.091	
8,200.0	6,937.7	6,920.7	6,920.7	40.3	138.3	-89.75	1,559.2	253.6	1,984.6	1,806.1	178.52	11.117	
8,267.7	6,937.1	6,920.1	6,920.1	42.0	138.3	-89.73	1,559.2	253.6	2,015.2	1,834.9	180.26	11.180	
8,300.0	6,936.8	6,919.8	6,919.8	42.8	138.3	-89.72	1,559.2	253.6	2,030.4	1,849.3	181.08	11.213	
8,366.1	6,936.2	6,919.2	6,919.2	44.6	138.2	-89.70	1,559.2	253.6	2,062.8	1,880.0	182.80	11.285	
8,400.0	6,935.9	6,918.9	6,918.9	45.5	138.2	-89.69	1,559.2	253.6	2,080.0	1,896.3	183.67	11.325	
8,464.5	6,935.3	6,918.3	6,918.3	47.2	138.2	-89.67	1,559.2	253.6	2,113.9	1,928.6	185.36	11.404	
8,500.0	6,935.0	6,918.0	6,918.0	48.1	138.2	-89.66	1,559.2	253.6	2,133.2	1,946.9	186.29	11.451	
8,563.0	6,934.5	6,917.5	6,917.5	49.8	138.2	-89.64	1,559.2	253.6	2,168.3	1,980.4	187.94	11.537	
8,600.0	6,934.1	6,917.1	6,917.1	50.7	138.2	-89.63	1,559.2	253.6	2,189.6	2,000.7	188.92	11.590	
8,661.4	6,933.6	6,916.6	6,916.6	52.4	138.2	-89.61	1,559.2	253.6	2,225.7	2,035.2	190.54	11.681	
8,700.0	6,933.2	6,916.2	6,916.2	53.4	138.2	-89.60	1,559.2	253.6	2,249.0	2,057.5	191.56	11.740	
8,759.8	6,932.7	6,915.7	6,915.7	55.0	138.2	-89.58	1,559.2	253.6	2,286.0	2,092.8	193.16	11.835	
8,800.0	6,932.3	6,915.3	6,915.3	56.1	138.2	-89.57	1,559.2	253.6	2,311.3	2,117.1	194.23	11.900	
8,858.2	6,931.8	6,914.8	6,914.8	57.7	138.2	-89.56	1,559.2	253.6	2,348.8	2,153.0	195.78	11.997	
8,900.0	6,931.4	6,914.4	6,914.4	58.8	138.1	-89.54	1,559.2	253.6	2,376.1	2,179.2	196.90	12.068	
8,956.7	6,930.9	6,913.9	6,913.9	60.3	138.1	-89.53	1,559.2	253.6	2,413.9	2,215.5	198.42	12.166	
9,000.0	6,930.5	6,913.5	6,913.5	61.5	138.1	-89.51	1,559.2	253.6	2,443.3	2,243.7	199.58	12.242	
9,055.1	6,930.0	6,913.0	6,913.0	63.0	138.1	-89.50	1,559.2	253.6	2,481.3	2,280.2	201.07	12.341	
9,100.0	6,929.6	6,912.6	6,912.6	64.2	138.1	-89.48	1,559.2	253.6	2,512.7	2,310.4	202.28	12.422	
9,153.5	6,929.1	6,912.1	6,912.1	65.6	138.1	-89.47	1,559.2	253.6	2,550.7	2,347.0	203.72	12.520	
9,200.0	6,928.7	6,911.7	6,911.7	66.9	138.1	-89.46	1,559.2	253.6	2,584.1	2,379.1	204.98	12.607	
9,251.9	6,928.2	6,911.2	6,911.2	68.3	138.1	-89.44	1,559.2	253.6	2,621.9	2,415.6	206.39	12.704	
9,300.0	6,927.8	6,910.8	6,910.8	69.6	138.1	-89.43	1,559.2	253.6	2,657.4	2,449.7	207.69	12.795	
9,350.4	6,927.3	6,910.3	6,910.3	71.0	138.1	-89.41	1,559.2	253.6	2,694.9	2,485.8	209.05	12.891	
9,400.0	6,926.9	6,909.9	6,909.9	72.4	138.1	-89.40	1,559.2	253.6	2,732.3	2,521.9	210.40	12.986	
9,448.8	6,926.4	6,909.4	6,909.4	73.7	138.0	-89.38	1,559.2	253.6	2,769.4	2,557.7	211.73	13.080	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,926.0	6,909.0	6,909.0	75.1	138.0	-89.37	1,559.2	253.6	2,808.8	2,595.7	213.12	13.179	
9,547.2	6,925.5	6,908.5	6,908.5	76.4	138.0	-89.36	1,559.2	253.6	2,845.4	2,631.0	214.41	13.271	
9,600.0	6,925.1	6,908.1	6,908.1	77.9	138.0	-89.34	1,559.2	253.6	2,886.7	2,670.9	215.85	13.374	
9,645.6	6,924.6	6,907.6	6,907.6	79.1	138.0	-89.33	1,559.2	253.6	2,922.8	2,705.7	217.09	13.463	
9,700.0	6,924.1	6,907.1	6,907.1	80.6	138.0	-89.31	1,559.2	253.6	2,966.0	2,747.4	218.58	13.570	
9,744.1	6,923.7	6,906.7	6,906.7	81.8	138.0	-89.30	1,559.2	253.6	3,001.3	2,781.5	219.78	13.656	
9,800.0	6,923.2	6,906.2	6,906.2	83.4	138.0	-89.28	1,559.2	253.6	3,046.5	2,825.2	221.31	13.766	
9,842.5	6,922.9	6,905.9	6,905.9	84.5	138.0	-89.27	1,559.2	253.6	3,081.0	2,858.5	222.47	13.849	
9,900.0	6,922.3	6,905.3	6,905.3	86.1	138.0	-89.25	1,559.2	253.6	3,128.1	2,904.0	224.05	13.962	
9,940.9	6,922.0	6,905.0	6,905.0	87.2	138.0	-89.24	1,559.2	253.6	3,161.8	2,936.6	225.17	14.042	
10,000.0	6,921.4	6,904.4	6,904.4	88.9	137.9	-89.22	1,559.2	253.6	3,210.7	2,983.9	226.79	14.158	
10,039.3	6,921.1	6,904.1	6,904.1	90.0	137.9	-89.21	1,559.2	253.6	3,243.5	3,015.6	227.86	14.234	
10,100.0	6,920.5	6,903.5	6,903.5	91.6	137.9	-89.19	1,559.2	253.6	3,294.3	3,064.8	229.53	14.353	
10,137.8	6,920.2	6,903.2	6,903.2	92.7	137.9	-89.18	1,559.2	253.6	3,326.2	3,095.6	230.57	14.426	
10,200.0	6,919.6	6,902.6	6,902.6	94.4	137.9	-89.17	1,559.2	253.6	3,378.8	3,146.6	232.27	14.547	
10,236.2	6,919.3	6,902.3	6,902.3	95.4	137.9	-89.16	1,559.2	253.6	3,409.6	3,176.4	233.27	14.617	
10,300.0	6,918.7	6,901.7	6,901.7	97.2	137.9	-89.14	1,559.2	253.6	3,464.2	3,229.1	235.02	14.740	
10,334.6	6,918.4	6,901.4	6,901.4	98.1	137.9	-89.13	1,559.2	253.6	3,493.9	3,257.9	235.97	14.806	
10,400.0	6,917.8	6,900.8	6,900.8	99.9	137.9	-89.11	1,559.2	253.6	3,550.2	3,312.5	237.77	14.931	
10,433.0	6,917.5	6,900.5	6,900.5	100.9	137.9	-89.10	1,559.2	253.6	3,578.9	3,340.2	238.68	14.994	
10,500.0	6,916.9	6,899.9	6,899.9	102.7	137.9	-89.08	1,559.2	253.6	3,637.0	3,396.5	240.53	15.121	
10,531.5	6,916.6	6,899.6	6,899.6	103.6	137.9	-89.07	1,559.2	253.6	3,664.5	3,423.1	241.39	15.181	
10,600.0	6,916.0	6,899.0	6,899.0	105.5	137.8	-89.05	1,559.2	253.6	3,724.5	3,481.2	243.28	15.310	
10,629.9	6,915.7	6,898.7	6,898.7	106.3	137.8	-89.04	1,559.2	253.6	3,750.8	3,506.7	244.10	15.366	
10,700.0	6,915.1	6,898.1	6,898.1	108.3	137.8	-89.02	1,559.2	253.6	3,812.6	3,566.6	246.04	15.496	
10,728.3	6,914.8	6,897.8	6,897.8	109.1	137.8	-89.01	1,559.2	253.6	3,837.6	3,590.8	246.82	15.549	
10,800.0	6,914.2	6,897.2	6,897.2	111.0	137.8	-88.99	1,559.2	253.6	3,901.2	3,652.5	248.79	15.681	
10,826.7	6,913.9	6,896.9	6,896.9	111.8	137.8	-88.98	1,559.2	253.6	3,925.1	3,675.5	249.53	15.730	
10,900.0	6,913.3	6,896.3	6,896.3	113.8	137.8	-88.96	1,559.2	253.6	3,990.4	3,738.9	251.55	15.863	
10,925.2	6,913.1	6,896.1	6,896.1	114.5	137.8	-88.96	1,559.2	253.6	4,013.0	3,760.7	252.25	15.909	
11,000.0	6,912.4	6,895.4	6,895.4	116.6	137.8	-88.93	1,559.2	253.6	4,080.1	3,825.8	254.31	16.044	
11,023.6	6,912.2	6,895.2	6,895.2	117.3	137.8	-88.93	1,559.2	253.6	4,101.4	3,846.4	254.96	16.086	
11,100.0	6,911.5	6,894.5	6,894.5	119.4	137.7	-88.90	1,559.2	253.6	4,170.3	3,913.2	257.07	16.222	
11,122.0	6,911.3	6,894.3	6,894.3	120.0	137.7	-88.90	1,559.2	253.6	4,190.2	3,932.5	257.68	16.261	
11,200.0	6,910.6	6,893.6	6,893.6	122.2	137.7	-88.88	1,559.2	253.6	4,260.9	4,001.1	259.84	16.398	
11,220.4	6,910.4	6,893.4	6,893.4	122.7	137.7	-88.87	1,559.2	253.6	4,279.5	4,019.1	260.40	16.434	
11,300.0	6,909.7	6,892.7	6,892.7	125.0	137.7	-88.85	1,559.2	253.6	4,351.9	4,089.3	262.60	16.572	
11,318.9	6,909.5	6,892.5	6,892.5	125.5	137.7	-88.84	1,559.2	253.6	4,369.1	4,106.0	263.12	16.605	
11,400.0	6,908.8	6,891.8	6,891.8	127.7	137.7	-88.82	1,559.2	253.6	4,443.3	4,177.9	265.37	16.744	
11,417.3	6,908.6	6,891.6	6,891.6	128.2	137.7	-88.81	1,559.2	253.6	4,459.1	4,193.3	265.84	16.774	
11,500.0	6,907.9	6,890.9	6,890.9	130.5	137.7	-88.79	1,559.2	253.6	4,535.1	4,266.9	268.13	16.914	
11,515.7	6,907.7	6,890.7	6,890.7	131.0	137.7	-88.78	1,559.2	253.6	4,549.5	4,281.0	268.57	16.940	
11,600.0	6,907.0	6,890.0	6,890.0	133.3	137.7	-88.76	1,559.2	253.6	4,627.2	4,356.3	270.90	17.081	
11,614.1	6,906.8	6,889.8	6,889.8	133.7	137.7	-88.76	1,559.2	253.6	4,640.2	4,368.9	271.29	17.104	
11,700.0	6,906.0	6,889.0	6,889.0	136.1	137.6	-88.73	1,559.2	253.6	4,719.6	4,445.9	273.67	17.246	
11,712.6	6,905.9	6,888.9	6,888.9	136.5	137.6	-88.73	1,559.2	253.6	4,731.2	4,457.2	274.01	17.266	
11,800.0	6,905.1	6,888.1	6,888.1	138.9	137.6	-88.70	1,559.2	253.6	4,812.3	4,535.9	276.43	17.409	
11,811.0	6,905.0	6,888.0	6,888.0	139.2	137.6	-88.70	1,559.2	253.6	4,822.5	4,545.8	276.74	17.426	
11,900.0	6,904.2	6,887.2	6,887.2	141.7	137.6	-88.67	1,559.2	253.6	4,905.3	4,626.1	279.20	17.569	
11,909.4	6,904.2	6,887.2	6,887.2	141.9	137.6	-88.67	1,559.2	253.6	4,914.1	4,634.6	279.46	17.584	
12,000.0	6,903.3	6,886.3	6,886.3	144.5	137.6	-88.64	1,559.2	253.6	4,998.6	4,716.6	281.97	17.727	
12,007.8	6,903.3	6,886.3	6,886.3	144.7	137.6	-88.64	1,559.2	253.6	5,005.9	4,723.7	282.19	17.740	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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						
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	6,902.4	6,885.4	6,885.4	147.3	137.6	-88.62	1,559.2	253.6	5,092.1	4,807.4	284.74	17.883	
12,106.3	6,902.4	6,885.4	6,885.4	147.4	137.6	-88.61	1,559.2	253.6	5,098.0	4,813.1	284.92	17.893	
12,200.0	6,901.5	6,884.5	6,884.5	150.1	137.5	-88.59	1,559.2	253.6	5,185.9	4,898.4	287.51	18.037	
12,204.7	6,901.5	6,884.5	6,884.5	150.2	137.5	-88.59	1,559.2	253.6	5,190.3	4,902.7	287.64	18.044	
12,300.0	6,900.6	6,883.6	6,883.6	152.9	137.5	-88.56	1,559.2	253.6	5,279.9	4,989.6	290.28	18.189	
12,303.1	6,900.6	6,883.6	6,883.6	152.9	137.5	-88.56	1,559.2	253.6	5,282.9	4,992.5	290.37	18.194	
12,400.0	6,899.7	6,882.7	6,882.7	155.6	137.5	-88.53	1,559.2	253.6	5,374.1	5,081.1	293.05	18.338	
12,401.5	6,899.7	6,882.7	6,882.7	155.7	137.5	-88.53	1,559.2	253.6	5,375.6	5,082.5	293.10	18.341	
12,500.0	6,898.8	6,881.8	6,881.8	158.4	137.5	-88.50	1,559.2	253.6	5,468.6	5,172.7	295.83	18.486	
12,598.4	6,897.9	6,880.9	6,880.9	161.2	137.5	-88.47	1,559.2	253.6	5,561.7	5,263.1	298.55	18.629	
12,600.0	6,897.9	6,880.9	6,880.9	161.2	137.5	-88.47	1,559.2	253.6	5,563.2	5,264.6	298.60	18.631	
12,696.8	6,897.0	6,880.0	6,880.0	163.9	137.5	-88.44	1,559.2	253.6	5,655.0	5,353.7	301.28	18.770	
12,700.0	6,897.0	6,880.0	6,880.0	164.0	137.5	-88.44	1,559.2	253.6	5,658.0	5,356.6	301.37	18.774	
12,795.2	6,896.1	6,879.1	6,879.1	166.7	137.4	-88.41	1,559.2	253.6	5,748.5	5,444.5	304.01	18.909	
12,800.0	6,896.1	6,879.1	6,879.1	166.8	137.4	-88.41	1,559.2	253.6	5,753.0	5,448.8	304.14	18.915	
12,893.7	6,895.3	6,878.3	6,878.3	169.4	137.4	-88.39	1,559.2	253.6	5,842.1	5,535.4	306.74	19.046	
12,900.0	6,895.2	6,878.2	6,878.2	169.6	137.4	-88.38	1,559.2	253.6	5,848.1	5,541.2	306.92	19.054	
12,992.1	6,894.4	6,877.4	6,877.4	172.2	137.4	-88.36	1,559.2	253.6	5,935.9	5,626.4	309.47	19.181	
13,000.0	6,894.3	6,877.3	6,877.3	172.4	137.4	-88.36	1,559.2	253.6	5,943.4	5,633.7	309.69	19.192	
13,090.5	6,893.5	6,876.5	6,876.5	175.0	137.4	-88.33	1,559.2	253.6	6,029.8	5,717.6	312.20	19.314	
13,100.0	6,893.4	6,876.4	6,876.4	175.2	137.4	-88.33	1,559.2	253.6	6,038.9	5,726.4	312.46	19.327	
13,188.9	6,892.6	6,875.6	6,875.6	177.7	137.4	-88.30	1,559.2	253.6	6,123.9	5,809.0	314.93	19.445	
13,200.0	6,892.5	6,875.5	6,875.5	178.0	137.4	-88.30	1,559.2	253.6	6,134.5	5,819.3	315.24	19.460	
13,287.4	6,891.7	6,874.7	6,874.7	180.5	137.4	-88.27	1,559.2	253.6	6,218.1	5,900.5	317.66	19.575	
13,300.0	6,891.6	6,874.6	6,874.6	180.8	137.3	-88.27	1,559.2	253.6	6,230.2	5,912.2	318.01	19.591	
13,385.8	6,890.8	6,873.8	6,873.8	183.2	137.3	-88.24	1,559.2	253.6	6,312.5	5,992.1	320.39	19.702	
13,400.0	6,890.7	6,873.7	6,873.7	183.6	137.3	-88.24	1,559.2	253.6	6,326.1	6,005.3	320.79	19.721	
13,484.2	6,889.9	6,872.9	6,872.9	186.0	137.3	-88.22	1,559.2	253.6	6,407.0	6,083.8	323.12	19.828	
13,500.0	6,889.8	6,872.8	6,872.8	186.4	137.3	-88.21	1,559.2	253.6	6,422.1	6,098.6	323.56	19.848	
13,582.6	6,889.0	6,872.0	6,872.0	188.7	137.3	-88.19	1,559.2	253.6	6,501.6	6,175.7	325.86	19.952	
13,600.0	6,888.9	6,871.9	6,871.9	189.2	137.3	-88.18	1,559.2	253.6	6,518.2	6,191.9	326.34	19.974	
13,681.1	6,888.1	6,871.1	6,871.1	191.5	137.3	-88.16	1,559.2	253.6	6,596.2	6,267.7	328.59	20.075	
13,700.0	6,888.0	6,871.0	6,871.0	192.0	137.3	-88.15	1,559.2	253.6	6,614.5	6,285.4	329.11	20.098	
13,779.5	6,887.3	6,870.3	6,870.3	194.2	137.3	-88.13	1,559.2	253.6	6,691.1	6,359.7	331.32	20.195	
13,800.0	6,887.1	6,870.1	6,870.1	194.8	137.3	-88.13	1,559.2	253.6	6,710.8	6,378.9	331.89	20.220	
13,877.9	6,886.4	6,869.4	6,869.4	197.0	137.2	-88.10	1,559.2	253.6	6,786.0	6,451.9	334.05	20.314	
13,900.0	6,886.2	6,869.2	6,869.2	197.6	137.2	-88.10	1,559.2	253.6	6,807.3	6,472.6	334.66	20.341	
13,976.3	6,885.5	6,868.5	6,868.5	199.7	137.2	-88.07	1,559.2	253.6	6,881.0	6,544.2	336.78	20.432	
14,000.0	6,885.3	6,868.3	6,868.3	200.4	137.2	-88.07	1,559.2	253.6	6,903.8	6,566.4	337.44	20.459	
14,074.8	6,884.6	6,867.6	6,867.6	202.5	137.2	-88.05	1,559.2	253.6	6,976.1	6,636.6	339.51	20.547	
14,100.0	6,884.4	6,867.4	6,867.4	203.2	137.2	-88.04	1,559.2	253.6	7,000.5	6,660.2	340.21	20.577	
14,173.2	6,883.7	6,866.7	6,866.7	205.3	137.2	-88.02	1,559.2	253.6	7,071.3	6,729.0	342.25	20.661	
14,200.0	6,883.5	6,866.5	6,866.5	206.0	137.2	-88.01	1,559.2	253.6	7,097.2	6,754.2	342.99	20.692	
14,271.6	6,882.8	6,865.8	6,865.8	208.0	137.2	-87.99	1,559.2	253.6	7,166.5	6,821.6	344.98	20.774	
14,300.0	6,882.6	6,865.6	6,865.6	208.8	137.2	-87.98	1,559.2	253.6	7,194.0	6,848.3	345.77	20.806	
14,370.0	6,881.9	6,864.9	6,864.9	210.8	137.2	-87.96	1,559.2	253.6	7,261.9	6,914.2	347.71	20.885	
14,400.0	6,881.7	6,864.7	6,864.7	211.6	137.1	-87.95	1,559.2	253.6	7,290.9	6,942.4	348.54	20.918	
14,468.5	6,881.0	6,864.0	6,864.0	213.5	137.1	-87.93	1,559.2	253.6	7,357.4	7,006.9	350.44	20.994	
14,500.0	6,880.8	6,863.8	6,863.8	214.4	137.1	-87.92	1,559.2	253.6	7,387.9	7,036.6	351.32	21.029	
14,566.9	6,880.2	6,863.2	6,863.2	216.3	137.1	-87.90	1,559.2	253.6	7,452.9	7,099.7	353.17	21.103	
14,584.2	6,880.0	6,863.0	6,863.0	216.8	137.1	-87.90	1,559.2	253.6	7,469.6	7,116.0	353.65	21.121	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	41.06	1,807.0	1,574.3	2,396.6				
98.4	98.4	88.4	88.4	0.1	0.3	41.06	1,807.0	1,574.3	2,396.6	2,396.2	0.43	5,623.599	
100.0	100.0	90.0	90.0	0.1	0.3	41.06	1,807.0	1,574.3	2,396.6	2,396.2	0.43	5,521.873	
196.8	196.8	186.8	186.8	0.3	2.6	41.06	1,807.0	1,574.3	2,396.6	2,393.7	2.87	833.916	
200.0	200.0	190.0	190.0	0.3	2.6	41.06	1,807.0	1,574.3	2,396.6	2,393.6	2.96	809.610	
295.3	295.3	285.3	285.3	0.5	4.7	41.06	1,807.0	1,574.3	2,396.6	2,391.4	5.20	461.245	
300.0	300.0	290.0	290.0	0.5	4.8	41.06	1,807.0	1,574.3	2,396.6	2,391.3	5.30	451.793	
393.7	393.7	383.7	383.7	0.7	6.7	41.06	1,807.0	1,574.3	2,396.6	2,389.2	7.43	322.611	
400.0	400.0	390.0	390.0	0.8	6.8	41.06	1,807.0	1,574.3	2,396.6	2,389.0	7.57	316.537	
492.1	492.1	482.1	482.1	1.0	8.7	41.06	1,807.0	1,574.3	2,396.6	2,387.0	9.65	248.455	
500.0	500.0	490.0	490.0	1.0	8.8	41.06	1,807.0	1,574.3	2,396.6	2,386.8	9.82	243.972	
590.5	590.5	580.5	580.5	1.2	10.7	41.06	1,807.0	1,574.3	2,396.6	2,384.7	11.86	202.128	
600.0	600.0	590.0	590.0	1.2	10.9	41.06	1,807.0	1,574.3	2,396.6	2,384.5	12.07	198.574	
689.0	689.0	679.0	679.0	1.4	12.7	41.06	1,807.0	1,574.3	2,396.6	2,382.5	14.06	170.402	
700.0	700.0	690.0	690.0	1.4	12.9	41.06	1,807.0	1,574.3	2,396.6	2,382.3	14.31	167.458	
787.4	787.4	777.4	777.4	1.6	14.6	41.06	1,807.0	1,574.3	2,396.6	2,380.3	16.27	147.301	
800.0	800.0	790.0	790.0	1.7	14.9	41.06	1,807.0	1,574.3	2,396.6	2,380.1	16.55	144.789	
885.8	885.8	875.8	875.8	1.9	16.6	41.06	1,807.0	1,574.3	2,396.6	2,378.1	18.47	129.725	
900.0	900.0	890.0	890.0	1.9	16.9	41.06	1,807.0	1,574.3	2,396.6	2,377.8	18.79	127.534	
984.2	984.2	974.2	974.2	2.1	18.6	41.06	1,807.0	1,574.3	2,396.6	2,375.9	20.68	115.901	
1,000.0	1,000.0	990.0	990.0	2.1	18.9	41.06	1,807.0	1,574.3	2,396.6	2,375.6	21.03	113.958	
1,082.7	1,082.7	1,072.7	1,072.7	2.3	20.6	41.06	1,807.0	1,574.3	2,396.6	2,373.7	22.88	104.742	
1,100.0	1,100.0	1,090.0	1,090.0	2.3	20.9	41.06	1,807.0	1,574.3	2,396.6	2,373.3	23.27	102.997	
1,181.1	1,181.1	1,171.1	1,171.1	2.5	22.6	41.06	1,807.0	1,574.3	2,396.6	2,371.5	25.08	95.545	
1,200.0	1,200.0	1,190.0	1,190.0	2.6	22.9	41.06	1,807.0	1,574.3	2,396.6	2,371.1	25.51	93.961	
1,279.5	1,279.5	1,269.5	1,269.5	2.7	24.5	41.06	1,807.0	1,574.3	2,396.6	2,369.3	27.29	87.834	
1,300.0	1,300.0	1,290.0	1,290.0	2.8	25.0	41.06	1,807.0	1,574.3	2,396.6	2,368.9	27.74	86.383	
1,377.9	1,377.9	1,367.9	1,367.9	3.0	26.5	41.06	1,807.0	1,574.3	2,396.6	2,367.1	29.49	81.275	
1,400.0	1,400.0	1,390.0	1,390.0	3.0	27.0	41.06	1,807.0	1,574.3	2,396.6	2,366.6	29.98	79.938	
1,476.4	1,476.4	1,466.4	1,466.4	3.2	28.5	41.06	1,807.0	1,574.3	2,396.6	2,364.9	31.69	75.628	
1,500.0	1,500.0	1,490.0	1,490.0	3.2	29.0	41.06	1,807.0	1,574.3	2,396.6	2,364.4	32.22	74.387	
1,574.8	1,574.8	1,564.8	1,564.8	3.4	30.5	41.06	1,807.0	1,574.3	2,396.6	2,362.7	33.89	70.715	
1,600.0	1,600.0	1,590.0	1,590.0	3.5	31.0	41.06	1,807.0	1,574.3	2,396.6	2,362.2	34.45	69.558	
1,650.0	1,650.0	1,640.0	1,640.0	3.6	32.0	41.06	1,807.0	1,574.3	2,396.6	2,361.0	35.57	67.372	
1,673.2	1,673.2	1,663.2	1,663.2	3.6	32.5	160.65	1,807.0	1,574.3	2,396.7	2,360.6	36.09	66.415	
1,700.0	1,700.0	1,690.0	1,690.0	3.7	33.0	160.65	1,807.0	1,574.3	2,397.0	2,360.3	36.68	65.357	
1,771.6	1,771.6	1,761.6	1,761.6	3.8	34.4	160.65	1,807.0	1,574.3	2,399.0	2,360.8	38.22	62.763	
1,800.0	1,799.9	1,789.9	1,789.9	3.9	35.0	160.65	1,807.0	1,574.3	2,400.3	2,361.5	38.83	61.817	
1,870.1	1,869.9	1,859.9	1,859.9	4.0	36.4	160.66	1,807.0	1,574.3	2,404.6	2,364.3	40.31	59.648	
1,900.0	1,899.7	1,889.7	1,889.7	4.1	37.0	160.66	1,807.0	1,574.3	2,406.9	2,366.0	40.94	58.795	
1,968.5	1,967.8	1,957.8	1,957.8	4.2	38.4	160.68	1,807.0	1,574.3	2,413.3	2,370.9	42.35	56.984	
2,000.0	1,999.1	1,989.1	1,989.1	4.3	39.0	160.68	1,807.0	1,574.3	2,416.8	2,373.8	42.99	56.218	
2,066.9	2,065.5	2,055.5	2,055.5	4.4	40.4	160.69	1,807.0	1,574.3	2,425.2	2,380.9	44.33	54.709	
2,100.0	2,098.2	2,088.2	2,088.2	4.5	41.0	160.70	1,807.0	1,574.3	2,429.9	2,384.9	44.98	54.025	
2,165.3	2,162.6	2,152.6	2,152.6	4.7	42.3	160.72	1,807.0	1,574.3	2,440.3	2,394.0	46.24	52.771	
2,200.0	2,196.6	2,186.6	2,186.6	4.7	43.0	160.73	1,807.0	1,574.3	2,446.3	2,399.4	46.90	52.164	
2,249.9	2,245.5	2,235.5	2,235.5	4.9	44.0	160.74	1,807.0	1,574.3	2,455.7	2,407.9	47.83	51.348	
2,263.8	2,259.1	2,249.1	2,249.1	4.9	44.3	160.76	1,807.0	1,574.3	2,458.5	2,410.3	48.12	51.085	
2,300.0	2,294.5	2,284.5	2,284.5	5.0	45.0	160.82	1,807.0	1,574.3	2,465.6	2,416.7	48.90	50.418	
2,362.2	2,355.4	2,345.4	2,345.4	5.2	46.2	160.92	1,807.0	1,574.3	2,477.8	2,427.6	50.25	49.315	
2,400.0	2,392.3	2,382.3	2,382.3	5.4	46.9	160.98	1,807.0	1,574.3	2,485.3	2,434.2	51.06	48.676	
2,460.6	2,451.6	2,441.6	2,441.6	5.6	48.1	161.07	1,807.0	1,574.3	2,497.2	2,444.9	52.37	47.686	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,480.2	2,480.2	5.7	48.9	161.13	1,807.0	1,574.3	2,505.0	2,451.8	53.22	47.070	
2,559.0	2,547.9	2,537.9	2,537.9	5.9	50.1	161.22	1,807.0	1,574.3	2,516.6	2,462.1	54.50	46.179	
2,600.0	2,588.0	2,578.0	2,578.0	6.1	50.9	161.28	1,807.0	1,574.3	2,524.7	2,469.3	55.38	45.585	
2,657.5	2,644.2	2,634.2	2,634.2	6.3	52.0	161.37	1,807.0	1,574.3	2,536.1	2,479.4	56.63	44.781	
2,700.0	2,685.8	2,675.8	2,675.8	6.4	52.8	161.43	1,807.0	1,574.3	2,544.4	2,486.9	57.55	44.209	
2,755.9	2,740.5	2,730.5	2,730.5	6.6	53.9	161.52	1,807.0	1,574.3	2,555.5	2,496.7	58.77	43.483	
2,800.0	2,783.6	2,773.6	2,773.6	6.8	54.8	161.58	1,807.0	1,574.3	2,564.2	2,504.5	59.73	42.931	
2,854.3	2,836.7	2,826.7	2,826.7	7.0	55.9	161.66	1,807.0	1,574.3	2,574.9	2,514.0	60.91	42.274	
2,900.0	2,881.4	2,871.4	2,871.4	7.2	56.8	161.73	1,807.0	1,574.3	2,584.0	2,522.1	61.91	41.741	
2,952.7	2,933.0	2,923.0	2,923.0	7.4	57.8	161.80	1,807.0	1,574.3	2,594.4	2,531.4	63.06	41.145	
3,000.0	2,979.2	2,969.2	2,969.2	7.6	58.7	161.87	1,807.0	1,574.3	2,603.8	2,539.7	64.09	40.630	
3,051.2	3,029.3	3,019.3	3,019.3	7.8	59.7	161.94	1,807.0	1,574.3	2,613.9	2,548.7	65.20	40.089	
3,100.0	3,077.1	3,067.1	3,067.1	8.0	60.7	162.01	1,807.0	1,574.3	2,623.6	2,557.3	66.27	39.591	
3,149.6	3,125.6	3,115.6	3,115.6	8.2	61.7	162.08	1,807.0	1,574.3	2,633.4	2,566.0	67.35	39.100	
3,200.0	3,174.9	3,164.9	3,164.9	8.4	62.7	162.15	1,807.0	1,574.3	2,643.4	2,574.9	68.45	38.617	
3,248.0	3,221.8	3,211.8	3,211.8	8.6	63.6	162.22	1,807.0	1,574.3	2,652.9	2,583.4	69.50	38.171	
3,300.0	3,272.7	3,262.7	3,262.7	8.9	64.6	162.29	1,807.0	1,574.3	2,663.2	2,592.6	70.64	37.703	
3,346.4	3,318.1	3,308.1	3,308.1	9.0	65.6	162.35	1,807.0	1,574.3	2,672.4	2,600.8	71.65	37.297	
3,400.0	3,370.5	3,360.5	3,360.5	9.3	66.6	162.42	1,807.0	1,574.3	2,683.1	2,610.2	72.82	36.843	
3,444.9	3,414.4	3,404.4	3,404.4	9.5	67.5	162.48	1,807.0	1,574.3	2,692.0	2,618.2	73.81	36.473	
3,500.0	3,468.3	3,458.3	3,458.3	9.7	68.6	162.55	1,807.0	1,574.3	2,702.9	2,627.9	75.01	36.033	
3,543.3	3,510.7	3,500.7	3,500.7	9.9	69.4	162.61	1,807.0	1,574.3	2,711.5	2,635.6	75.96	35.696	
3,600.0	3,566.1	3,556.1	3,556.1	10.1	70.5	162.68	1,807.0	1,574.3	2,722.8	2,645.6	77.20	35.268	
3,641.7	3,606.9	3,596.9	3,596.9	10.3	71.4	162.74	1,807.0	1,574.3	2,731.1	2,653.0	78.12	34.962	
3,700.0	3,664.0	3,654.0	3,654.0	10.6	72.5	162.81	1,807.0	1,574.3	2,742.7	2,663.3	79.39	34.546	
3,740.1	3,703.2	3,693.2	3,693.2	10.7	73.3	162.86	1,807.0	1,574.3	2,750.7	2,670.4	80.27	34.266	
3,800.0	3,761.8	3,751.8	3,751.8	11.0	74.5	162.94	1,807.0	1,574.3	2,762.6	2,681.0	81.59	33.861	
3,837.4	3,798.3	3,788.3	3,788.3	11.2	75.2	162.99	1,807.0	1,574.3	2,770.0	2,687.6	82.40	33.615	
3,838.6	3,799.5	3,789.5	3,789.5	11.2	75.2	162.99	1,807.0	1,574.3	2,770.3	2,687.8	82.44	33.605	
3,900.0	3,859.7	3,849.7	3,849.7	11.4	76.4	163.13	1,807.0	1,574.3	2,781.9	2,697.8	84.08	33.086	
3,937.0	3,896.1	3,886.1	3,886.1	11.5	77.2	163.21	1,807.0	1,574.3	2,788.3	2,703.2	85.05	32.782	
4,000.0	3,958.3	3,948.3	3,948.3	11.7	78.4	163.33	1,807.0	1,574.3	2,798.1	2,711.4	86.69	32.276	
4,035.4	3,993.3	3,983.3	3,983.3	11.8	79.1	163.39	1,807.0	1,574.3	2,803.1	2,715.5	87.60	31.998	
4,100.0	4,057.4	4,047.4	4,047.4	12.0	80.4	163.48	1,807.0	1,574.3	2,811.0	2,721.8	89.23	31.502	
4,133.8	4,091.0	4,081.0	4,081.0	12.1	81.1	163.52	1,807.0	1,574.3	2,814.6	2,724.6	90.08	31.248	
4,200.0	4,156.8	4,146.8	4,146.8	12.2	82.4	163.59	1,807.0	1,574.3	2,820.6	2,728.9	91.69	30.762	
4,232.3	4,189.0	4,179.0	4,179.0	12.3	83.1	163.62	1,807.0	1,574.3	2,823.0	2,730.5	92.47	30.530	
4,300.0	4,256.6	4,246.6	4,246.6	12.4	84.4	163.67	1,807.0	1,574.3	2,826.9	2,732.8	94.06	30.054	
4,330.7	4,287.3	4,277.3	4,277.3	12.5	85.0	163.68	1,807.0	1,574.3	2,828.1	2,733.4	94.76	29.844	
4,400.0	4,356.6	4,346.6	4,346.6	12.6	86.4	163.70	1,807.0	1,574.3	2,829.8	2,733.5	96.32	29.378	
4,429.1	4,385.7	4,375.7	4,375.7	12.6	87.0	163.70	1,807.0	1,574.3	2,830.0	2,733.1	96.96	29.187	
4,437.2	4,393.8	4,383.8	4,383.8	12.7	87.2	44.12	1,807.0	1,574.3	2,830.0	2,730.4	99.63	28.405	
4,500.0	4,456.6	4,446.6	4,446.6	12.7	88.5	44.12	1,807.0	1,574.3	2,830.0	2,729.1	100.99	28.023	
4,527.5	4,484.1	4,474.1	4,474.1	12.8	89.0	44.12	1,807.0	1,574.3	2,830.0	2,728.5	101.59	27.858	
4,600.0	4,556.6	4,546.6	4,546.6	12.9	90.5	44.12	1,807.0	1,574.3	2,830.0	2,726.9	103.16	27.433	
4,626.0	4,582.6	4,572.6	4,572.6	12.9	91.0	44.12	1,807.0	1,574.3	2,830.0	2,726.3	103.73	27.284	
4,700.0	4,656.6	4,646.6	4,646.6	13.1	92.5	44.12	1,807.0	1,574.3	2,830.0	2,724.7	105.33	26.868	
4,724.4	4,681.0	4,671.0	4,671.0	13.1	93.0	44.12	1,807.0	1,574.3	2,830.0	2,724.2	105.86	26.733	
4,800.0	4,756.6	4,746.6	4,746.6	13.2	94.5	44.12	1,807.0	1,574.3	2,830.0	2,722.5	107.51	26.324	
4,822.8	4,779.4	4,769.4	4,769.4	13.3	94.9	44.12	1,807.0	1,574.3	2,830.0	2,722.0	108.00	26.203	
4,900.0	4,856.6	4,846.6	4,846.6	13.4	96.5	44.12	1,807.0	1,574.3	2,830.0	2,720.4	109.68	25.802	
4,921.2	4,877.8	4,867.8	4,867.8	13.4	96.9	44.12	1,807.0	1,574.3	2,830.0	2,719.9	110.15	25.694	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,946.6	4,946.6	13.6	98.5	44.12	1,807.0	1,574.3	2,830.0	2,718.2	111.86	25.300	
5,019.7	4,976.3	4,966.3	4,966.3	13.6	98.9	44.12	1,807.0	1,574.3	2,830.0	2,717.8	112.29	25.203	
5,100.0	5,056.6	5,046.6	5,046.6	13.7	100.5	44.12	1,807.0	1,574.3	2,830.0	2,716.0	114.04	24.816	
5,118.1	5,074.7	5,064.7	5,064.7	13.8	100.9	44.12	1,807.0	1,574.3	2,830.0	2,715.6	114.44	24.731	
5,200.0	5,156.6	5,146.6	5,146.6	13.9	102.5	44.12	1,807.0	1,574.3	2,830.0	2,713.8	116.22	24.350	
5,216.5	5,173.1	5,163.1	5,163.1	13.9	102.9	44.12	1,807.0	1,574.3	2,830.0	2,713.5	116.58	24.275	
5,300.0	5,256.6	5,246.6	5,246.6	14.1	104.5	44.12	1,807.0	1,574.3	2,830.0	2,711.6	118.40	23.902	
5,314.9	5,271.5	5,261.5	5,261.5	14.1	104.8	44.12	1,807.0	1,574.3	2,830.0	2,711.3	118.73	23.836	
5,400.0	5,356.6	5,346.6	5,346.6	14.2	106.5	44.12	1,807.0	1,574.3	2,830.0	2,709.5	120.59	23.469	
5,413.4	5,370.0	5,360.0	5,360.0	14.3	106.8	44.12	1,807.0	1,574.3	2,830.0	2,709.2	120.88	23.412	
5,500.0	5,456.6	5,446.6	5,446.6	14.4	108.6	44.12	1,807.0	1,574.3	2,830.0	2,707.3	122.77	23.051	
5,511.8	5,468.4	5,458.4	5,458.4	14.4	108.8	44.12	1,807.0	1,574.3	2,830.0	2,707.0	123.03	23.003	
5,600.0	5,556.6	5,546.6	5,546.6	14.6	110.6	44.12	1,807.0	1,574.3	2,830.0	2,705.1	124.96	22.648	
5,610.2	5,566.8	5,556.8	5,556.8	14.6	110.8	44.12	1,807.0	1,574.3	2,830.0	2,704.9	125.18	22.607	
5,700.0	5,656.6	5,646.6	5,646.6	14.8	112.6	44.12	1,807.0	1,574.3	2,830.0	2,702.9	127.15	22.258	
5,708.6	5,665.2	5,655.2	5,655.2	14.8	112.8	44.12	1,807.0	1,574.3	2,830.0	2,702.7	127.34	22.225	
5,800.0	5,756.6	5,746.6	5,746.6	14.9	114.6	44.12	1,807.0	1,574.3	2,830.0	2,700.7	129.34	21.881	
5,807.1	5,763.7	5,753.7	5,753.7	14.9	114.7	44.12	1,807.0	1,574.3	2,830.0	2,700.6	129.49	21.855	
5,900.0	5,856.6	5,846.6	5,846.6	15.1	116.6	44.12	1,807.0	1,574.3	2,830.0	2,698.5	131.53	21.517	
5,905.5	5,862.1	5,852.1	5,852.1	15.1	116.7	44.12	1,807.0	1,574.3	2,830.0	2,698.4	131.65	21.497	
6,000.0	5,956.6	5,946.6	5,946.6	15.3	118.6	44.12	1,807.0	1,574.3	2,830.0	2,696.3	133.72	21.164	
6,003.9	5,960.5	5,950.5	5,950.5	15.3	118.7	44.12	1,807.0	1,574.3	2,830.0	2,696.2	133.81	21.150	
6,100.0	6,056.6	6,046.6	6,046.6	15.5	120.6	44.12	1,807.0	1,574.3	2,830.0	2,694.1	135.91	20.822	
6,102.3	6,058.9	6,048.9	6,048.9	15.5	120.7	44.12	1,807.0	1,574.3	2,830.0	2,694.1	135.97	20.814	
6,200.0	6,156.6	6,146.6	6,146.6	15.7	122.6	44.12	1,807.0	1,574.3	2,830.0	2,691.9	138.11	20.492	
6,200.8	6,157.4	6,147.4	6,147.4	15.7	122.7	44.12	1,807.0	1,574.3	2,830.0	2,691.9	138.12	20.489	
6,272.2	6,228.8	6,218.8	6,218.8	15.8	124.1	44.12	1,807.0	1,574.3	2,830.0	2,690.3	139.69	20.259	
6,299.2	6,255.8	6,245.8	6,245.8	15.8	124.6	-45.91	1,807.0	1,574.3	2,829.7	2,691.4	138.31	20.459	
6,300.0	6,256.6	6,246.6	6,246.6	15.8	124.6	-45.91	1,807.0	1,574.3	2,829.7	2,691.3	138.32	20.457	
6,350.0	6,306.4	6,296.4	6,296.4	15.9	125.7	-46.11	1,807.0	1,574.3	2,827.1	2,688.1	139.04	20.332	
6,397.6	6,353.6	6,343.6	6,343.6	15.9	126.6	-46.48	1,807.0	1,574.3	2,822.4	2,683.0	139.44	20.241	
6,400.0	6,355.9	6,345.9	6,345.9	15.9	126.6	-46.51	1,807.0	1,574.3	2,822.1	2,682.7	139.45	20.237	
6,450.0	6,404.8	6,394.8	6,394.8	15.9	127.6	-47.09	1,807.0	1,574.3	2,814.8	2,675.2	139.57	20.168	
6,496.0	6,449.0	6,439.0	6,439.0	16.0	128.5	-47.81	1,807.0	1,574.3	2,806.0	2,666.5	139.46	20.120	
6,500.0	6,452.8	6,442.8	6,442.8	16.0	128.6	-47.88	1,807.0	1,574.3	2,805.2	2,665.7	139.45	20.117	
6,550.0	6,499.7	6,489.7	6,489.7	15.9	129.5	-48.87	1,807.0	1,574.3	2,793.3	2,654.1	139.14	20.075	
6,594.5	6,540.3	6,530.3	6,530.3	15.9	130.4	-49.92	1,807.0	1,574.3	2,780.9	2,642.1	138.79	20.036	
6,600.0	6,545.3	6,535.3	6,535.3	15.9	130.5	-50.06	1,807.0	1,574.3	2,779.2	2,640.5	138.75	20.031	
6,650.0	6,589.3	6,579.3	6,579.3	15.9	131.3	-51.46	1,807.0	1,574.3	2,763.2	2,624.8	138.36	19.971	
6,692.9	6,625.7	6,615.7	6,615.7	15.9	132.1	-52.84	1,807.0	1,574.3	2,747.8	2,609.7	138.11	19.896	
6,700.0	6,631.6	6,621.6	6,621.6	15.9	132.2	-53.08	1,807.0	1,574.3	2,745.2	2,607.1	138.08	19.881	
6,750.0	6,671.9	6,661.9	6,661.9	15.9	133.0	-54.92	1,807.0	1,574.3	2,725.4	2,587.3	138.04	19.743	
6,791.3	6,703.6	6,693.6	6,693.6	15.9	133.6	-56.59	1,807.0	1,574.3	2,707.8	2,569.5	138.26	19.585	
6,800.0	6,710.1	6,700.1	6,700.1	15.9	133.8	-56.96	1,807.0	1,574.3	2,704.0	2,565.6	138.33	19.547	
6,850.0	6,745.9	6,735.9	6,735.9	16.0	134.5	-59.22	1,807.0	1,574.3	2,681.1	2,542.1	139.04	19.282	
6,889.7	6,772.6	6,762.6	6,762.6	16.1	135.0	-61.15	1,807.0	1,574.3	2,662.0	2,522.0	139.94	19.022	
6,900.0	6,779.2	6,769.2	6,769.2	16.1	135.2	-61.67	1,807.0	1,574.3	2,656.9	2,516.7	140.22	18.948	
6,950.0	6,809.8	6,799.8	6,799.8	16.3	135.8	-64.30	1,807.0	1,574.3	2,631.6	2,489.8	141.86	18.551	
6,988.2	6,831.3	6,821.3	6,821.3	16.4	136.2	-66.41	1,807.0	1,574.3	2,611.7	2,468.3	143.40	18.213	
7,000.0	6,837.6	6,827.6	6,827.6	16.5	136.3	-67.08	1,807.0	1,574.3	2,605.4	2,461.5	143.91	18.105	
7,050.0	6,862.5	6,852.5	6,852.5	16.9	136.8	-69.99	1,807.0	1,574.3	2,578.5	2,432.2	146.26	17.629	
7,086.6	6,878.7	6,868.7	6,868.7	17.2	137.2	-72.17	1,807.0	1,574.3	2,558.4	2,410.3	148.11	17.274	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,884.2	6,874.2	6,874.2	17.3	137.3	-72.98	1,807.0	1,574.3	2,551.0	2,402.2	148.78	17.146	
7,150.0	6,902.7	6,892.7	6,892.7	17.8	137.6	-76.01	1,807.0	1,574.3	2,523.2	2,371.9	151.32	16.674	
7,185.0	6,913.8	6,903.8	6,903.8	18.3	137.9	-78.13	1,807.0	1,574.3	2,503.6	2,350.6	153.04	16.359	
7,200.0	6,918.0	6,908.0	6,908.0	18.5	138.0	-79.03	1,807.0	1,574.3	2,495.3	2,341.6	153.73	16.232	
7,250.0	6,929.9	6,919.9	6,919.9	19.2	138.2	-81.99	1,807.0	1,574.3	2,467.4	2,311.5	155.88	15.828	
7,283.4	6,936.0	6,926.0	6,926.0	19.7	138.3	-83.92	1,807.0	1,574.3	2,448.9	2,291.7	157.15	15.583	
7,300.0	6,938.4	6,928.4	6,928.4	20.0	138.4	-84.86	1,807.0	1,574.3	2,439.8	2,282.1	157.71	15.471	
7,350.0	6,943.4	6,933.4	6,933.4	20.9	138.5	-87.58	1,807.0	1,574.3	2,412.6	2,253.5	159.16	15.159	
7,381.9	6,944.8	6,934.8	6,934.8	21.4	138.5	-89.23	1,807.0	1,574.3	2,395.6	2,235.7	159.90	14.982	
7,403.7	6,945.0	6,935.0	6,935.0	21.8	138.5	-90.32	1,807.0	1,574.3	2,384.1	2,223.8	160.32	14.871	
7,480.3	6,944.3	6,934.3	6,934.3	23.3	138.5	-90.30	1,807.0	1,574.3	2,344.9	2,183.1	161.79	14.493	
7,500.0	6,944.1	6,934.1	6,934.1	23.7	138.5	-90.29	1,807.0	1,574.3	2,335.2	2,173.0	162.17	14.399	
7,578.7	6,943.4	6,933.4	6,933.4	25.4	138.5	-90.27	1,807.0	1,574.3	2,297.4	2,133.6	163.80	14.025	
7,600.0	6,943.2	6,933.2	6,933.2	25.8	138.5	-90.27	1,807.0	1,574.3	2,287.5	2,123.3	164.25	13.927	
7,677.1	6,942.5	6,932.5	6,932.5	27.5	138.4	-90.25	1,807.0	1,574.3	2,253.1	2,087.2	165.94	13.578	
7,700.0	6,942.3	6,932.3	6,932.3	28.0	138.4	-90.24	1,807.0	1,574.3	2,243.3	2,076.9	166.45	13.478	
7,775.6	6,941.6	6,931.6	6,931.6	29.8	138.4	-90.22	1,807.0	1,574.3	2,212.4	2,044.2	168.19	13.154	
7,800.0	6,941.4	6,931.4	6,931.4	30.3	138.4	-90.22	1,807.0	1,574.3	2,202.8	2,034.0	168.75	13.054	
7,874.0	6,940.7	6,930.7	6,930.7	32.1	138.4	-90.20	1,807.0	1,574.3	2,175.3	2,004.8	170.51	12.757	
7,900.0	6,940.5	6,930.5	6,930.5	32.7	138.4	-90.19	1,807.0	1,574.3	2,166.1	1,995.0	171.13	12.658	
7,972.4	6,939.8	6,929.8	6,929.8	34.5	138.4	-90.17	1,807.0	1,574.3	2,142.1	1,969.2	172.90	12.389	
8,000.0	6,939.6	6,929.6	6,929.6	35.2	138.4	-90.17	1,807.0	1,574.3	2,133.5	1,959.9	173.57	12.292	
8,070.8	6,938.9	6,928.9	6,928.9	37.0	138.4	-90.15	1,807.0	1,574.3	2,113.0	1,937.6	175.34	12.051	
8,100.0	6,938.7	6,928.7	6,928.7	37.7	138.4	-90.14	1,807.0	1,574.3	2,105.2	1,929.1	176.06	11.957	
8,169.3	6,938.0	6,928.0	6,928.0	39.5	138.4	-90.12	1,807.0	1,574.3	2,088.1	1,910.3	177.82	11.743	
8,200.0	6,937.7	6,927.7	6,927.7	40.3	138.3	-90.12	1,807.0	1,574.3	2,081.2	1,902.6	178.60	11.653	
8,267.7	6,937.1	6,927.1	6,927.1	42.0	138.3	-90.10	1,807.0	1,574.3	2,067.6	1,887.3	180.33	11.466	
8,300.0	6,936.8	6,926.8	6,926.8	42.8	138.3	-90.09	1,807.0	1,574.3	2,061.8	1,880.7	181.16	11.381	
8,366.1	6,936.2	6,926.2	6,926.2	44.6	138.3	-90.07	1,807.0	1,574.3	2,051.6	1,868.7	182.87	11.219	
8,400.0	6,935.9	6,925.9	6,925.9	45.5	138.3	-90.06	1,807.0	1,574.3	2,047.2	1,863.4	183.75	11.141	
8,464.5	6,935.3	6,925.3	6,925.3	47.2	138.3	-90.05	1,807.0	1,574.3	2,040.3	1,854.8	185.44	11.003	
8,500.0	6,935.0	6,925.0	6,925.0	48.1	138.3	-90.04	1,807.0	1,574.3	2,037.3	1,851.0	186.36	10.932	
8,563.0	6,934.5	6,924.5	6,924.5	49.8	138.3	-90.02	1,807.0	1,574.3	2,033.6	1,845.6	188.02	10.816	
8,600.0	6,934.1	6,924.1	6,924.1	50.7	138.3	-90.01	1,807.0	1,574.3	2,032.4	1,843.4	188.99	10.754	
8,651.2	6,933.7	6,923.7	6,923.7	52.1	138.3	-90.00	1,807.0	1,574.3	2,031.7	1,841.4	190.35	10.674 CC	
8,661.4	6,933.6	6,923.6	6,923.6	52.4	138.3	-90.00	1,807.0	1,574.3	2,031.8	1,841.1	190.62	10.659	
8,700.0	6,933.2	6,923.2	6,923.2	53.4	138.3	-89.99	1,807.0	1,574.3	2,032.3	1,840.7	191.64	10.605 ES	
8,759.8	6,932.7	6,922.7	6,922.7	55.0	138.2	-89.97	1,807.0	1,574.3	2,034.6	1,841.4	193.24	10.529	
8,800.0	6,932.3	6,922.3	6,922.3	56.1	138.2	-89.96	1,807.0	1,574.3	2,037.2	1,842.9	194.30	10.484	
8,858.2	6,931.8	6,921.8	6,921.8	57.7	138.2	-89.95	1,807.0	1,574.3	2,042.3	1,846.4	195.86	10.427	
8,900.0	6,931.4	6,921.4	6,921.4	58.8	138.2	-89.94	1,807.0	1,574.3	2,046.9	1,849.9	196.98	10.391	
8,956.7	6,930.9	6,920.9	6,920.9	60.3	138.2	-89.92	1,807.0	1,574.3	2,054.6	1,856.1	198.50	10.350	
9,000.0	6,930.5	6,920.5	6,920.5	61.5	138.2	-89.91	1,807.0	1,574.3	2,061.5	1,861.8	199.66	10.325	
9,055.1	6,930.0	6,920.0	6,920.0	63.0	138.2	-89.90	1,807.0	1,574.3	2,071.5	1,870.3	201.15	10.298	
9,100.0	6,929.6	6,919.6	6,919.6	64.2	138.2	-89.89	1,807.0	1,574.3	2,080.7	1,878.4	202.36	10.282	
9,153.5	6,929.1	6,919.1	6,919.1	65.6	138.2	-89.87	1,807.0	1,574.3	2,092.9	1,889.1	203.80	10.269	
9,200.0	6,928.7	6,918.7	6,918.7	66.9	138.2	-89.86	1,807.0	1,574.3	2,104.5	1,899.5	205.06	10.263	
9,251.9	6,928.2	6,918.2	6,918.2	68.3	138.2	-89.85	1,807.0	1,574.3	2,118.7	1,912.2	206.47	10.262 SF	
9,300.0	6,927.8	6,917.8	6,917.8	69.6	138.1	-89.83	1,807.0	1,574.3	2,132.8	1,925.0	207.77	10.265	
9,350.4	6,927.3	6,917.3	6,917.3	71.0	138.1	-89.82	1,807.0	1,574.3	2,148.7	1,939.5	209.14	10.274	
9,400.0	6,926.9	6,916.9	6,916.9	72.4	138.1	-89.81	1,807.0	1,574.3	2,165.3	1,954.8	210.48	10.287	
9,448.8	6,926.4	6,916.4	6,916.4	73.7	138.1	-89.80	1,807.0	1,574.3	2,182.7	1,970.9	211.81	10.305	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,500.0	6,926.0	6,916.0	6,916.0	75.1	138.1	-89.78	1,807.0	1,574.3	2,201.9	1,988.7	213.21	10.328	
9,547.2	6,925.5	6,915.5	6,915.5	76.4	138.1	-89.77	1,807.0	1,574.3	2,220.5	2,006.0	214.49	10.353	
9,600.0	6,925.1	6,915.1	6,915.1	77.9	138.1	-89.76	1,807.0	1,574.3	2,242.4	2,026.4	215.93	10.385	
9,645.6	6,924.6	6,914.6	6,914.6	79.1	138.1	-89.75	1,807.0	1,574.3	2,262.0	2,044.9	217.18	10.416	
9,700.0	6,924.1	6,914.1	6,914.1	80.6	138.1	-89.73	1,807.0	1,574.3	2,286.5	2,067.8	218.66	10.457	
9,744.1	6,923.7	6,913.7	6,913.7	81.8	138.1	-89.72	1,807.0	1,574.3	2,307.0	2,087.1	219.87	10.493	
9,800.0	6,923.2	6,913.2	6,913.2	83.4	138.1	-89.71	1,807.0	1,574.3	2,334.0	2,112.6	221.40	10.542	
9,842.5	6,922.9	6,912.9	6,912.9	84.5	138.0	-89.70	1,807.0	1,574.3	2,355.2	2,132.7	222.56	10.582	
9,900.0	6,922.3	6,912.3	6,912.3	86.1	138.0	-89.68	1,807.0	1,574.3	2,384.8	2,160.7	224.13	10.640	
9,940.9	6,922.0	6,912.0	6,912.0	87.2	138.0	-89.67	1,807.0	1,574.3	2,406.5	2,181.3	225.26	10.683	
10,000.0	6,921.4	6,911.4	6,911.4	88.9	138.0	-89.66	1,807.0	1,574.3	2,438.7	2,211.8	226.87	10.749	
10,039.3	6,921.1	6,911.1	6,911.1	90.0	138.0	-89.65	1,807.0	1,574.3	2,460.7	2,232.7	227.95	10.795	
10,100.0	6,920.5	6,910.5	6,910.5	91.6	138.0	-89.63	1,807.0	1,574.3	2,495.4	2,265.8	229.62	10.867	
10,137.8	6,920.2	6,910.2	6,910.2	92.7	138.0	-89.62	1,807.0	1,574.3	2,517.5	2,286.8	230.66	10.914	
10,200.0	6,919.6	6,909.6	6,909.6	94.4	138.0	-89.60	1,807.0	1,574.3	2,554.7	2,322.4	232.37	10.994	
10,236.2	6,919.3	6,909.3	6,909.3	95.4	138.0	-89.60	1,807.0	1,574.3	2,576.8	2,343.5	233.36	11.042	
10,300.0	6,918.7	6,908.7	6,908.7	97.2	138.0	-89.58	1,807.0	1,574.3	2,616.6	2,381.4	235.11	11.129	
10,334.6	6,918.4	6,908.4	6,908.4	98.1	138.0	-89.57	1,807.0	1,574.3	2,638.5	2,402.4	236.07	11.177	
10,400.0	6,917.8	6,907.8	6,907.8	99.9	137.9	-89.55	1,807.0	1,574.3	2,680.7	2,442.8	237.87	11.270	
10,433.0	6,917.5	6,907.5	6,907.5	100.9	137.9	-89.55	1,807.0	1,574.3	2,702.4	2,463.6	238.78	11.318	
10,500.0	6,916.9	6,906.9	6,906.9	102.7	137.9	-89.53	1,807.0	1,574.3	2,747.0	2,506.4	240.62	11.416	
10,531.5	6,916.6	6,906.6	6,906.6	103.6	137.9	-89.52	1,807.0	1,574.3	2,768.3	2,526.8	241.49	11.463	
10,600.0	6,916.0	6,906.0	6,906.0	105.5	137.9	-89.50	1,807.0	1,574.3	2,815.2	2,571.9	243.38	11.567	
10,629.9	6,915.7	6,905.7	6,905.7	106.3	137.9	-89.49	1,807.0	1,574.3	2,836.0	2,591.8	244.20	11.614	
10,700.0	6,915.1	6,905.1	6,905.1	108.3	137.9	-89.48	1,807.0	1,574.3	2,885.4	2,639.2	246.13	11.723	
10,728.3	6,914.8	6,904.8	6,904.8	109.1	137.9	-89.47	1,807.0	1,574.3	2,905.5	2,658.6	246.91	11.767	
10,800.0	6,914.2	6,904.2	6,904.2	111.0	137.9	-89.45	1,807.0	1,574.3	2,957.2	2,708.3	248.89	11.881	
10,826.7	6,913.9	6,903.9	6,903.9	111.8	137.9	-89.44	1,807.0	1,574.3	2,976.7	2,727.1	249.63	11.924	
10,900.0	6,913.3	6,903.3	6,903.3	113.8	137.9	-89.43	1,807.0	1,574.3	3,030.6	2,779.0	251.65	12.043	
10,925.2	6,913.1	6,903.1	6,903.1	114.5	137.9	-89.42	1,807.0	1,574.3	3,049.4	2,797.0	252.35	12.084	
11,000.0	6,912.4	6,902.4	6,902.4	116.6	137.8	-89.40	1,807.0	1,574.3	3,105.6	2,851.1	254.41	12.207	
11,023.6	6,912.2	6,902.2	6,902.2	117.3	137.8	-89.39	1,807.0	1,574.3	3,123.4	2,868.4	255.07	12.246	
11,100.0	6,911.5	6,901.5	6,901.5	119.4	137.8	-89.38	1,807.0	1,574.3	3,181.9	2,924.7	257.18	12.372	
11,122.0	6,911.3	6,901.3	6,901.3	120.0	137.8	-89.37	1,807.0	1,574.3	3,198.8	2,941.1	257.79	12.409	
11,200.0	6,910.6	6,900.6	6,900.6	122.2	137.8	-89.35	1,807.0	1,574.3	3,259.4	2,999.5	259.94	12.539	
11,220.4	6,910.4	6,900.4	6,900.4	122.7	137.8	-89.34	1,807.0	1,574.3	3,275.5	3,015.0	260.51	12.573	
11,300.0	6,909.7	6,899.7	6,899.7	125.0	137.8	-89.32	1,807.0	1,574.3	3,338.2	3,075.5	262.71	12.707	
11,318.9	6,909.5	6,899.5	6,899.5	125.5	137.8	-89.32	1,807.0	1,574.3	3,353.2	3,090.0	263.23	12.739	
11,400.0	6,908.8	6,898.8	6,898.8	127.7	137.8	-89.30	1,807.0	1,574.3	3,418.1	3,152.6	265.47	12.876	
11,417.3	6,908.6	6,898.6	6,898.6	128.2	137.8	-89.29	1,807.0	1,574.3	3,432.0	3,166.1	265.95	12.905	
11,500.0	6,907.9	6,897.9	6,897.9	130.5	137.7	-89.27	1,807.0	1,574.3	3,499.0	3,230.8	268.24	13.044	
11,515.7	6,907.7	6,897.7	6,897.7	131.0	137.7	-89.27	1,807.0	1,574.3	3,511.8	3,243.2	268.68	13.071	
11,600.0	6,907.0	6,897.0	6,897.0	133.3	137.7	-89.25	1,807.0	1,574.3	3,580.9	3,309.9	271.01	13.213	
11,614.1	6,906.8	6,896.8	6,896.8	133.7	137.7	-89.24	1,807.0	1,574.3	3,592.6	3,321.2	271.40	13.237	
11,700.0	6,906.0	6,896.0	6,896.0	136.1	137.7	-89.22	1,807.0	1,574.3	3,663.7	3,389.9	273.78	13.382	
11,712.6	6,905.9	6,895.9	6,895.9	136.5	137.7	-89.22	1,807.0	1,574.3	3,674.2	3,400.0	274.13	13.403	
11,800.0	6,905.1	6,895.1	6,895.1	138.9	137.7	-89.20	1,807.0	1,574.3	3,747.3	3,470.8	276.55	13.550	
11,811.0	6,905.0	6,895.0	6,895.0	139.2	137.7	-89.19	1,807.0	1,574.3	3,756.6	3,479.7	276.85	13.569	
11,900.0	6,904.2	6,894.2	6,894.2	141.7	137.7	-89.17	1,807.0	1,574.3	3,831.7	3,552.4	279.32	13.718	
11,909.4	6,904.2	6,894.2	6,894.2	141.9	137.7	-89.17	1,807.0	1,574.3	3,839.7	3,560.1	279.58	13.734	
12,000.0	6,903.3	6,893.3	6,893.3	144.5	137.7	-89.15	1,807.0	1,574.3	3,916.9	3,634.8	282.09	13.885	
12,007.8	6,903.3	6,893.3	6,893.3	144.7	137.7	-89.14	1,807.0	1,574.3	3,923.6	3,641.3	282.31	13.898	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
12,100.0	6,902.4	6,892.4	6,892.4	147.3	137.6	-89.12	1,807.0	1,574.3	4,002.7	3,717.8	284.86	14.051	
12,106.3	6,902.4	6,892.4	6,892.4	147.4	137.6	-89.12	1,807.0	1,574.3	4,008.1	3,723.1	285.04	14.062	
12,200.0	6,901.5	6,891.5	6,891.5	150.1	137.6	-89.10	1,807.0	1,574.3	4,089.2	3,801.5	287.63	14.217	
12,204.7	6,901.5	6,891.5	6,891.5	150.2	137.6	-89.09	1,807.0	1,574.3	4,093.2	3,805.5	287.76	14.224	
12,300.0	6,900.6	6,890.6	6,890.6	152.9	137.6	-89.07	1,807.0	1,574.3	4,176.2	3,885.8	290.41	14.381	
12,303.1	6,900.6	6,890.6	6,890.6	152.9	137.6	-89.07	1,807.0	1,574.3	4,179.0	3,888.5	290.49	14.386	
12,400.0	6,899.7	6,889.7	6,889.7	155.6	137.6	-89.04	1,807.0	1,574.3	4,263.9	3,970.7	293.18	14.544	
12,401.5	6,899.7	6,889.7	6,889.7	155.7	137.6	-89.04	1,807.0	1,574.3	4,265.2	3,972.0	293.22	14.546	
12,500.0	6,898.8	6,888.8	6,888.8	158.4	137.6	-89.02	1,807.0	1,574.3	4,352.0	4,056.1	295.95	14.705	
12,598.4	6,897.9	6,887.9	6,887.9	161.2	137.5	-88.99	1,807.0	1,574.3	4,439.3	4,140.6	298.68	14.863	
12,600.0	6,897.9	6,887.9	6,887.9	161.2	137.5	-88.99	1,807.0	1,574.3	4,440.7	4,142.0	298.73	14.865	
12,696.8	6,897.0	6,887.0	6,887.0	163.9	137.5	-88.97	1,807.0	1,574.3	4,527.0	4,225.6	301.41	15.019	
12,700.0	6,897.0	6,887.0	6,887.0	164.0	137.5	-88.97	1,807.0	1,574.3	4,529.9	4,228.4	301.50	15.024	
12,795.2	6,896.1	6,886.1	6,886.1	166.7	137.5	-88.94	1,807.0	1,574.3	4,615.2	4,311.0	304.15	15.174	
12,800.0	6,896.1	6,886.1	6,886.1	166.8	137.5	-88.94	1,807.0	1,574.3	4,619.5	4,315.2	304.28	15.182	
12,893.7	6,895.3	6,885.3	6,885.3	169.4	137.5	-88.92	1,807.0	1,574.3	4,703.8	4,396.9	306.88	15.328	
12,900.0	6,895.2	6,885.2	6,885.2	169.6	137.5	-88.92	1,807.0	1,574.3	4,709.5	4,402.4	307.05	15.338	
12,992.1	6,894.4	6,884.4	6,884.4	172.2	137.5	-88.89	1,807.0	1,574.3	4,792.7	4,483.1	309.61	15.480	
13,000.0	6,894.3	6,884.3	6,884.3	172.4	137.5	-88.89	1,807.0	1,574.3	4,799.9	4,490.0	309.83	15.492	
13,090.5	6,893.5	6,883.5	6,883.5	175.0	137.5	-88.87	1,807.0	1,574.3	4,882.0	4,569.7	312.34	15.630	
13,100.0	6,893.4	6,883.4	6,883.4	175.2	137.5	-88.87	1,807.0	1,574.3	4,890.7	4,578.0	312.61	15.645	
13,188.9	6,892.6	6,882.6	6,882.6	177.7	137.4	-88.84	1,807.0	1,574.3	4,971.7	4,656.6	315.08	15.779	
13,200.0	6,892.5	6,882.5	6,882.5	178.0	137.4	-88.84	1,807.0	1,574.3	4,981.8	4,666.4	315.38	15.796	
13,287.4	6,891.7	6,881.7	6,881.7	180.5	137.4	-88.82	1,807.0	1,574.3	5,061.7	4,743.9	317.81	15.927	
13,300.0	6,891.6	6,881.6	6,881.6	180.8	137.4	-88.82	1,807.0	1,574.3	5,073.3	4,755.1	318.16	15.946	
13,385.8	6,890.8	6,880.8	6,880.8	183.2	137.4	-88.79	1,807.0	1,574.3	5,152.0	4,831.4	320.54	16.073	
13,400.0	6,890.7	6,880.7	6,880.7	183.6	137.4	-88.79	1,807.0	1,574.3	5,165.0	4,844.1	320.94	16.094	
13,484.2	6,889.9	6,879.9	6,879.9	186.0	137.4	-88.77	1,807.0	1,574.3	5,242.6	4,919.3	323.28	16.217	
13,500.0	6,889.8	6,879.8	6,879.8	186.4	137.4	-88.77	1,807.0	1,574.3	5,257.1	4,933.4	323.71	16.240	
13,582.6	6,889.0	6,879.0	6,879.0	188.7	137.4	-88.74	1,807.0	1,574.3	5,333.4	5,007.4	326.01	16.360	
13,600.0	6,888.9	6,878.9	6,878.9	189.2	137.4	-88.74	1,807.0	1,574.3	5,349.5	5,023.0	326.49	16.385	
13,681.1	6,888.1	6,878.1	6,878.1	191.5	137.3	-88.72	1,807.0	1,574.3	5,424.6	5,095.8	328.74	16.501	
13,700.0	6,888.0	6,878.0	6,878.0	192.0	137.3	-88.71	1,807.0	1,574.3	5,442.1	5,112.9	329.27	16.528	
13,779.5	6,887.3	6,877.3	6,877.3	194.2	137.3	-88.69	1,807.0	1,574.3	5,515.9	5,184.5	331.48	16.641	
13,800.0	6,887.1	6,877.1	6,877.1	194.8	137.3	-88.69	1,807.0	1,574.3	5,535.0	5,203.0	332.05	16.669	
13,877.9	6,886.4	6,876.4	6,876.4	197.0	137.3	-88.67	1,807.0	1,574.3	5,607.6	5,273.4	334.21	16.779	
13,900.0	6,886.2	6,876.2	6,876.2	197.6	137.3	-88.66	1,807.0	1,574.3	5,628.1	5,293.3	334.82	16.809	
13,976.3	6,885.5	6,875.5	6,875.5	199.7	137.3	-88.64	1,807.0	1,574.3	5,699.4	5,362.5	336.95	16.915	
14,000.0	6,885.3	6,875.3	6,875.3	200.4	137.3	-88.64	1,807.0	1,574.3	5,721.5	5,383.9	337.60	16.947	
14,074.8	6,884.6	6,874.6	6,874.6	202.5	137.3	-88.62	1,807.0	1,574.3	5,791.5	5,451.8	339.68	17.050	
14,100.0	6,884.4	6,874.4	6,874.4	203.2	137.3	-88.61	1,807.0	1,574.3	5,815.1	5,474.7	340.38	17.084	
14,173.2	6,883.7	6,873.7	6,873.7	205.3	137.3	-88.60	1,807.0	1,574.3	5,883.7	5,541.3	342.41	17.183	
14,200.0	6,883.5	6,873.5	6,873.5	206.0	137.3	-88.59	1,807.0	1,574.3	5,908.9	5,565.7	343.16	17.219	
14,271.6	6,882.8	6,872.8	6,872.8	208.0	137.2	-88.57	1,807.0	1,574.3	5,976.2	5,631.1	345.15	17.315	
14,300.0	6,882.6	6,872.6	6,872.6	208.8	137.2	-88.56	1,807.0	1,574.3	6,002.9	5,657.0	345.94	17.353	
14,370.0	6,881.9	6,871.9	6,871.9	210.8	137.2	-88.55	1,807.0	1,574.3	6,068.9	5,721.0	347.88	17.445	
14,400.0	6,881.7	6,871.7	6,871.7	211.6	137.2	-88.54	1,807.0	1,574.3	6,097.1	5,748.4	348.72	17.484	
14,468.5	6,881.0	6,871.0	6,871.0	213.5	137.2	-88.52	1,807.0	1,574.3	6,161.7	5,811.1	350.62	17.574	
14,500.0	6,880.8	6,870.8	6,870.8	214.4	137.2	-88.51	1,807.0	1,574.3	6,191.5	5,840.0	351.50	17.615	
14,566.9	6,880.2	6,870.2	6,870.2	216.3	137.2	-88.50	1,807.0	1,574.3	6,254.7	5,901.3	353.35	17.701	
14,584.2	6,880.0	6,870.0	6,870.0	216.8	137.2	-88.49	1,807.0	1,574.3	6,271.0	5,917.2	353.83	17.723	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	88.85	192.7	9,565.9	9,567.8				
98.4	98.4	74.4	74.4	0.1	0.4	88.85	192.7	9,565.9	9,567.8	9,567.3	0.51	N/A	
100.0	100.0	76.0	76.0	0.1	0.4	88.85	192.7	9,565.9	9,567.8	9,567.3	0.52	N/A	
196.8	196.8	172.8	172.8	0.3	2.4	88.85	192.7	9,565.9	9,567.8	9,565.1	2.66	3,591.403	
200.0	200.0	176.0	176.0	0.3	2.4	88.85	192.7	9,565.9	9,567.8	9,565.1	2.75	3,481.162	
295.3	295.3	271.3	271.3	0.5	4.5	88.85	192.7	9,565.9	9,567.8	9,562.8	5.03	1,900.597	
300.0	300.0	276.0	276.0	0.5	4.6	88.85	192.7	9,565.9	9,567.8	9,562.7	5.14	1,860.350	
393.7	393.7	369.7	369.7	0.7	6.5	88.85	192.7	9,565.9	9,567.8	9,560.5	7.28	1,315.124	
400.0	400.0	376.0	376.0	0.8	6.7	88.85	192.7	9,565.9	9,567.8	9,560.4	7.42	1,289.821	
492.1	492.1	468.1	468.1	1.0	8.5	88.85	192.7	9,565.9	9,567.8	9,558.3	9.50	1,007.560	
500.0	500.0	476.0	476.0	1.0	8.7	88.85	192.7	9,565.9	9,567.8	9,558.1	9.67	989.085	
590.5	590.5	566.5	566.5	1.2	10.5	88.85	192.7	9,565.9	9,567.8	9,556.1	11.71	817.142	
600.0	600.0	576.0	576.0	1.2	10.7	88.85	192.7	9,565.9	9,567.8	9,555.9	11.92	802.591	
689.0	689.0	665.0	665.0	1.4	12.5	88.85	192.7	9,565.9	9,567.8	9,553.9	13.92	687.456	
700.0	700.0	676.0	676.0	1.4	12.7	88.85	192.7	9,565.9	9,567.8	9,553.6	14.17	675.454	
787.4	787.4	763.4	763.4	1.6	14.5	88.85	192.7	9,565.9	9,567.8	9,551.7	16.12	593.381	
800.0	800.0	776.0	776.0	1.7	14.7	88.85	192.7	9,565.9	9,567.8	9,551.4	16.41	583.168	
885.8	885.8	861.8	861.8	1.9	16.5	88.85	192.7	9,565.9	9,567.8	9,549.5	18.33	521.996	
900.0	900.0	876.0	876.0	1.9	16.8	88.85	192.7	9,565.9	9,567.8	9,549.2	18.65	513.108	
984.2	984.2	960.2	960.2	2.1	18.5	88.85	192.7	9,565.9	9,567.8	9,547.3	20.53	465.965	
1,000.0	1,000.0	976.0	976.0	2.1	18.8	88.85	192.7	9,565.9	9,567.8	9,546.9	20.89	458.097	
1,082.7	1,082.7	1,058.7	1,058.7	2.3	20.4	88.85	192.7	9,565.9	9,567.8	9,545.1	22.74	420.809	
1,100.0	1,100.0	1,076.0	1,076.0	2.3	20.8	88.85	192.7	9,565.9	9,567.8	9,544.7	23.12	413.752	
1,181.1	1,181.1	1,157.1	1,157.1	2.5	22.4	88.85	192.7	9,565.9	9,567.8	9,542.9	24.94	383.640	
1,200.0	1,200.0	1,176.0	1,176.0	2.6	22.8	88.85	192.7	9,565.9	9,567.8	9,542.4	25.36	377.242	
1,279.5	1,279.5	1,255.5	1,255.5	2.7	24.4	88.85	192.7	9,565.9	9,567.8	9,540.7	27.14	352.509	
1,300.0	1,300.0	1,276.0	1,276.0	2.8	24.8	88.85	192.7	9,565.9	9,567.8	9,540.2	27.60	346.658	
1,377.9	1,377.9	1,353.9	1,353.9	3.0	26.4	88.85	192.7	9,565.9	9,567.8	9,538.5	29.34	326.055	
1,400.0	1,400.0	1,376.0	1,376.0	3.0	26.8	88.85	192.7	9,565.9	9,567.8	9,538.0	29.84	320.664	
1,476.4	1,476.4	1,452.4	1,452.4	3.2	28.4	88.85	192.7	9,565.9	9,567.8	9,536.3	31.55	303.296	
1,500.0	1,500.0	1,476.0	1,476.0	3.2	28.8	88.85	192.7	9,565.9	9,567.8	9,535.7	32.07	298.298	
1,574.8	1,574.8	1,550.8	1,550.8	3.4	30.3	88.85	192.7	9,565.9	9,567.8	9,534.1	33.75	283.509	
1,600.0	1,600.0	1,576.0	1,576.0	3.5	30.9	88.85	192.7	9,565.9	9,567.8	9,533.5	34.31	278.851	
1,650.0	1,650.0	1,626.0	1,626.0	3.6	31.9	88.85	192.7	9,565.9	9,567.8	9,532.4	35.43	270.049	
1,673.2	1,673.2	1,649.2	1,649.2	3.6	32.3	-151.57	192.7	9,565.9	9,567.9	9,532.0	35.94	266.193	
1,700.0	1,700.0	1,676.0	1,676.0	3.7	32.9	-151.57	192.7	9,565.9	9,568.2	9,531.7	36.53	261.905	
1,771.6	1,771.6	1,747.6	1,747.6	3.8	34.3	-151.56	192.7	9,565.9	9,570.1	9,532.0	38.08	251.289	
1,800.0	1,799.9	1,775.9	1,775.9	3.9	34.9	-151.55	192.7	9,565.9	9,571.3	9,532.6	38.69	247.373	
1,870.1	1,869.9	1,845.9	1,845.9	4.0	36.3	-151.52	192.7	9,565.9	9,575.2	9,535.1	40.18	238.302	
1,900.0	1,899.7	1,875.7	1,875.7	4.1	36.9	-151.51	192.7	9,565.9	9,577.4	9,536.6	40.81	234.685	
1,968.5	1,967.8	1,943.8	1,943.8	4.2	38.3	-151.47	192.7	9,565.9	9,583.4	9,541.1	42.23	226.908	
2,000.0	1,999.1	1,975.1	1,975.1	4.3	38.9	-151.45	192.7	9,565.9	9,586.6	9,543.7	42.88	223.565	
2,066.9	2,065.5	2,041.5	2,041.5	4.4	40.2	-151.40	192.7	9,565.9	9,594.5	9,550.2	44.24	216.877	
2,100.0	2,098.2	2,074.2	2,074.2	4.5	40.9	-151.37	192.7	9,565.9	9,598.8	9,553.9	44.90	213.785	
2,165.3	2,162.6	2,138.6	2,138.6	4.7	42.2	-151.31	192.7	9,565.9	9,608.5	9,562.3	46.19	208.020	
2,200.0	2,196.6	2,172.6	2,172.6	4.7	42.9	-151.27	192.7	9,565.9	9,614.1	9,567.3	46.86	205.158	
2,249.9	2,245.5	2,221.5	2,221.5	4.9	43.8	-151.22	192.7	9,565.9	9,622.9	9,575.1	47.82	201.238	
2,263.8	2,259.1	2,235.1	2,235.1	4.9	44.1	-151.23	192.7	9,565.9	9,625.4	9,577.3	48.12	200.031	
2,300.0	2,294.5	2,270.5	2,270.5	5.0	44.8	-151.25	192.7	9,565.9	9,632.1	9,583.2	48.90	196.958	
2,362.2	2,355.4	2,331.4	2,331.4	5.2	46.0	-151.28	192.7	9,565.9	9,643.5	9,593.2	50.26	191.884	
2,400.0	2,392.3	2,368.3	2,368.3	5.4	46.8	-151.31	192.7	9,565.9	9,650.4	9,599.3	51.08	188.936	
2,460.6	2,451.6	2,427.6	2,427.6	5.6	48.0	-151.34	192.7	9,565.9	9,661.5	9,609.1	52.40	184.383	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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		
2,500.0	2,490.2	2,466.2	2,466.2	5.7	48.8	-151.36	192.7	9,565.9	9,668.7	9,615.5	53.26	181.538		
2,559.0	2,547.9	2,523.9	2,523.9	5.9	49.9	-151.40	192.7	9,565.9	9,679.5	9,625.0	54.55	177.433		
2,600.0	2,588.0	2,564.0	2,564.0	6.1	50.7	-151.42	192.7	9,565.9	9,687.1	9,631.6	55.45	174.697		
2,657.5	2,644.2	2,620.2	2,620.2	6.3	51.9	-151.46	192.7	9,565.9	9,697.6	9,640.9	56.71	170.993		
2,700.0	2,685.8	2,661.8	2,661.8	6.4	52.7	-151.48	192.7	9,565.9	9,705.4	9,647.8	57.65	168.356		
2,755.9	2,740.5	2,716.5	2,716.5	6.6	53.8	-151.51	192.7	9,565.9	9,715.7	9,656.8	58.88	165.009		
2,800.0	2,783.6	2,759.6	2,759.6	6.8	54.7	-151.54	192.7	9,565.9	9,723.8	9,663.9	59.85	162.466		
2,854.3	2,836.7	2,812.7	2,812.7	7.0	55.7	-151.57	192.7	9,565.9	9,733.7	9,672.7	61.05	159.437		
2,900.0	2,881.4	2,857.4	2,857.4	7.2	56.6	-151.60	192.7	9,565.9	9,742.1	9,680.1	62.06	156.981		
2,952.7	2,933.0	2,909.0	2,909.0	7.4	57.7	-151.63	192.7	9,565.9	9,751.8	9,688.6	63.23	154.236		
3,000.0	2,979.2	2,955.2	2,955.2	7.6	58.6	-151.66	192.7	9,565.9	9,760.5	9,696.2	64.27	151.862		
3,051.2	3,029.3	3,005.3	3,005.3	7.8	59.6	-151.68	192.7	9,565.9	9,769.9	9,704.5	65.41	149.373		
3,100.0	3,077.1	3,053.1	3,053.1	8.0	60.6	-151.71	192.7	9,565.9	9,778.9	9,712.4	66.49	147.077		
3,149.6	3,125.6	3,101.6	3,101.6	8.2	61.5	-151.74	192.7	9,565.9	9,788.0	9,720.4	67.59	144.816		
3,200.0	3,174.9	3,150.9	3,150.9	8.4	62.5	-151.77	192.7	9,565.9	9,797.3	9,728.6	68.71	142.593		
3,248.0	3,221.8	3,197.8	3,197.8	8.6	63.5	-151.80	192.7	9,565.9	9,806.1	9,736.4	69.78	140.538		
3,300.0	3,272.7	3,248.7	3,248.7	8.9	64.5	-151.83	192.7	9,565.9	9,815.7	9,744.8	70.93	138.384		
3,346.4	3,318.1	3,294.1	3,294.1	9.0	65.4	-151.85	192.7	9,565.9	9,824.3	9,752.3	71.96	136.516		
3,400.0	3,370.5	3,346.5	3,346.5	9.3	66.5	-151.88	192.7	9,565.9	9,834.1	9,761.0	73.16	134.427		
3,444.9	3,414.4	3,390.4	3,390.4	9.5	67.3	-151.91	192.7	9,565.9	9,842.4	9,768.2	74.16	132.727		
3,500.0	3,468.3	3,444.3	3,444.3	9.7	68.4	-151.94	192.7	9,565.9	9,852.6	9,777.2	75.38	130.700		
3,543.3	3,510.7	3,486.7	3,486.7	9.9	69.3	-151.97	192.7	9,565.9	9,860.5	9,784.2	76.35	129.152		
3,600.0	3,566.1	3,542.1	3,542.1	10.1	70.4	-152.00	192.7	9,565.9	9,871.0	9,793.4	77.61	127.184		
3,641.7	3,606.9	3,582.9	3,582.9	10.3	71.2	-152.02	192.7	9,565.9	9,878.7	9,800.1	78.54	125.775		
3,700.0	3,664.0	3,640.0	3,640.0	10.6	72.4	-152.05	192.7	9,565.9	9,889.4	9,809.6	79.84	123.862		
3,740.1	3,703.2	3,679.2	3,679.2	10.7	73.2	-152.08	192.7	9,565.9	9,896.8	9,816.1	80.74	122.578		
3,800.0	3,761.8	3,737.8	3,737.8	11.0	74.3	-152.11	192.7	9,565.9	9,907.9	9,825.8	82.07	120.718		
3,837.4	3,798.3	3,774.3	3,774.3	11.2	75.1	-152.13	192.7	9,565.9	9,914.8	9,831.9	82.91	119.586		
3,838.6	3,799.5	3,775.5	3,775.5	11.2	75.1	-152.13	192.7	9,565.9	9,915.0	9,832.1	82.94	119.543		
3,900.0	3,859.7	3,835.7	3,835.7	11.4	76.3	-152.27	192.7	9,565.9	9,925.8	9,841.2	84.55	117.393		
3,937.0	3,896.1	3,872.1	3,872.1	11.5	77.0	-152.34	192.7	9,565.9	9,931.7	9,846.2	85.50	116.157		
4,000.0	3,958.3	3,934.3	3,934.3	11.7	78.3	-152.45	192.7	9,565.9	9,940.8	9,853.7	87.11	114.121		
4,035.4	3,993.3	3,969.3	3,969.3	11.8	79.0	-152.51	192.7	9,565.9	9,945.4	9,857.4	88.00	113.019		
4,100.0	4,057.4	4,033.4	4,033.4	12.0	80.3	-152.60	192.7	9,565.9	9,952.8	9,863.2	89.60	111.078		
4,133.8	4,091.0	4,067.0	4,067.0	12.1	81.0	-152.64	192.7	9,565.9	9,956.1	9,865.7	90.43	110.100		
4,200.0	4,156.8	4,132.8	4,132.8	12.2	82.3	-152.71	192.7	9,565.9	9,961.7	9,869.7	92.02	108.252		
4,232.3	4,189.0	4,165.0	4,165.0	12.3	82.9	-152.74	192.7	9,565.9	9,963.9	9,871.1	92.79	107.386		
4,300.0	4,256.6	4,232.6	4,232.6	12.4	84.3	-152.78	192.7	9,565.9	9,967.5	9,873.1	94.36	105.631		
4,330.7	4,287.3	4,263.3	4,263.3	12.5	84.9	-152.79	192.7	9,565.9	9,968.7	9,873.6	95.06	104.867		
4,400.0	4,356.6	4,332.6	4,332.6	12.6	86.3	-152.81	192.7	9,565.9	9,970.2	9,873.6	96.61	103.202		
4,429.1	4,385.7	4,361.7	4,361.7	12.6	86.9	-152.82	192.7	9,565.9	9,970.4	9,873.2	97.24	102.529		
4,437.2	4,393.8	4,369.8	4,369.8	12.7	87.0	87.60	192.7	9,565.9	9,970.4	9,871.3	99.14	100.571		
4,500.0	4,456.6	4,432.6	4,432.6	12.7	88.3	87.60	192.7	9,565.9	9,970.4	9,869.9	100.50	99.209		
4,527.5	4,484.1	4,460.1	4,460.1	12.8	88.9	87.60	192.7	9,565.9	9,970.4	9,869.3	101.10	98.620		
4,600.0	4,556.6	4,532.6	4,532.6	12.9	90.3	87.60	192.7	9,565.9	9,970.4	9,867.7	102.68	97.105		
4,626.0	4,582.6	4,558.6	4,558.6	12.9	90.8	87.60	192.7	9,565.9	9,970.4	9,867.2	103.24	96.573		
4,700.0	4,656.6	4,632.6	4,632.6	13.1	92.3	87.60	192.7	9,565.9	9,970.4	9,865.6	104.86	95.087		
4,724.4	4,681.0	4,657.0	4,657.0	13.1	92.8	87.60	192.7	9,565.9	9,970.4	9,865.0	105.39	94.607		
4,800.0	4,756.6	4,732.6	4,732.6	13.2	94.3	87.60	192.7	9,565.9	9,970.4	9,863.4	107.04	93.150		
4,822.8	4,779.4	4,755.4	4,755.4	13.3	94.8	87.60	192.7	9,565.9	9,970.4	9,862.9	107.53	92.718		
4,900.0	4,856.6	4,832.6	4,832.6	13.4	96.4	87.60	192.7	9,565.9	9,970.4	9,861.2	109.22	91.288		
4,921.2	4,877.8	4,853.8	4,853.8	13.4	96.8	87.60	192.7	9,565.9	9,970.4	9,860.7	109.68	90.902		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,932.6	4,932.6	13.6	98.4	87.60	192.7	9,565.9	9,970.4	9,859.0	111.40	89.499	
5,019.7	4,976.3	4,952.3	4,952.3	13.6	98.8	87.60	192.7	9,565.9	9,970.4	9,858.6	111.83	89.154	
5,100.0	5,056.6	5,032.6	5,032.6	13.7	100.4	87.60	192.7	9,565.9	9,970.4	9,856.8	113.59	87.776	
5,118.1	5,074.7	5,050.7	5,050.7	13.8	100.7	87.60	192.7	9,565.9	9,970.4	9,856.4	113.98	87.472	
5,200.0	5,156.6	5,132.6	5,132.6	13.9	102.4	87.60	192.7	9,565.9	9,970.4	9,854.6	115.78	86.118	
5,216.5	5,173.1	5,149.1	5,149.1	13.9	102.7	87.60	192.7	9,565.9	9,970.4	9,854.3	116.14	85.850	
5,300.0	5,256.6	5,232.6	5,232.6	14.1	104.4	87.60	192.7	9,565.9	9,970.4	9,852.4	117.96	84.521	
5,314.9	5,271.5	5,247.5	5,247.5	14.1	104.7	87.60	192.7	9,565.9	9,970.4	9,852.1	118.29	84.287	
5,400.0	5,356.6	5,332.6	5,332.6	14.2	106.4	87.60	192.7	9,565.9	9,970.4	9,850.3	120.15	82.980	
5,413.4	5,370.0	5,346.0	5,346.0	14.3	106.7	87.60	192.7	9,565.9	9,970.4	9,850.0	120.45	82.778	
5,500.0	5,456.6	5,432.6	5,432.6	14.4	108.4	87.60	192.7	9,565.9	9,970.4	9,848.1	122.35	81.494	
5,511.8	5,468.4	5,444.4	5,444.4	14.4	108.7	87.60	192.7	9,565.9	9,970.4	9,847.8	122.60	81.322	
5,600.0	5,556.6	5,532.6	5,532.6	14.6	110.4	87.60	192.7	9,565.9	9,970.4	9,845.9	124.54	80.059	
5,610.2	5,566.8	5,542.8	5,542.8	14.6	110.6	87.60	192.7	9,565.9	9,970.4	9,845.7	124.76	79.915	
5,700.0	5,656.6	5,632.6	5,632.6	14.8	112.4	87.60	192.7	9,565.9	9,970.4	9,843.7	126.73	78.673	
5,708.6	5,665.2	5,641.2	5,641.2	14.8	112.6	87.60	192.7	9,565.9	9,970.4	9,843.5	126.92	78.556	
5,800.0	5,756.6	5,732.6	5,732.6	14.9	114.5	87.60	192.7	9,565.9	9,970.4	9,841.5	128.93	77.334	
5,807.1	5,763.7	5,739.7	5,739.7	14.9	114.6	87.60	192.7	9,565.9	9,970.4	9,841.3	129.08	77.241	
5,900.0	5,856.6	5,832.6	5,832.6	15.1	116.5	87.60	192.7	9,565.9	9,970.4	9,839.3	131.12	76.039	
5,905.5	5,862.1	5,838.1	5,838.1	15.1	116.6	87.60	192.7	9,565.9	9,970.4	9,839.2	131.24	75.969	
6,000.0	5,956.6	5,932.6	5,932.6	15.3	118.5	87.60	192.7	9,565.9	9,970.4	9,837.1	133.32	74.786	
6,003.9	5,960.5	5,936.5	5,936.5	15.3	118.6	87.60	192.7	9,565.9	9,970.4	9,837.0	133.41	74.737	
6,100.0	6,056.6	6,032.6	6,032.6	15.5	120.5	87.60	192.7	9,565.9	9,970.4	9,834.9	135.52	73.572	
6,102.3	6,058.9	6,034.9	6,034.9	15.5	120.5	87.60	192.7	9,565.9	9,970.4	9,834.8	135.57	73.544	
6,200.0	6,156.6	6,132.6	6,132.6	15.7	122.5	87.60	192.7	9,565.9	9,970.4	9,832.7	137.72	72.398	
6,200.8	6,157.4	6,133.4	6,133.4	15.7	122.5	87.60	192.7	9,565.9	9,970.4	9,832.7	137.73	72.389	
6,272.2	6,228.8	6,204.8	6,204.8	15.8	123.9	87.60	192.7	9,565.9	9,970.4	9,831.1	139.31	71.572	
6,299.2	6,255.8	6,231.8	6,231.8	15.8	124.5	-2.40	192.7	9,565.9	9,969.9	9,831.5	138.38	72.046	
6,300.0	6,256.6	6,232.6	6,232.6	15.8	124.5	-2.40	192.7	9,565.9	9,969.9	9,831.5	138.39	72.040	
6,350.0	6,306.4	6,282.4	6,282.4	15.9	125.5	-2.41	192.7	9,565.9	9,966.2	9,827.5	138.73	71.839	
6,397.6	6,353.6	6,329.6	6,329.6	15.9	126.5	-2.44	192.7	9,565.9	9,959.5	9,821.1	138.41	71.956	
6,400.0	6,355.9	6,331.9	6,331.9	15.9	126.5	-2.44	192.7	9,565.9	9,959.1	9,820.7	138.38	71.970	
6,450.0	6,404.8	6,380.8	6,380.8	15.9	127.5	-2.48	192.7	9,565.9	9,948.5	9,811.2	137.33	72.443	
6,496.0	6,449.0	6,425.0	6,425.0	16.0	128.4	-2.53	192.7	9,565.9	9,935.8	9,800.0	135.74	73.197	
6,500.0	6,452.8	6,428.8	6,428.8	16.0	128.5	-2.54	192.7	9,565.9	9,934.5	9,799.0	135.58	73.277	
6,550.0	6,499.7	6,475.7	6,475.7	15.9	129.4	-2.61	192.7	9,565.9	9,917.3	9,784.1	133.12	74.501	
6,594.5	6,540.3	6,516.3	6,516.3	15.9	130.2	-2.68	192.7	9,565.9	9,899.2	9,768.9	130.34	75.950	
6,600.0	6,545.3	6,521.3	6,521.3	15.9	130.3	-2.69	192.7	9,565.9	9,896.8	9,766.8	129.95	76.155	
6,650.0	6,589.3	6,565.3	6,565.3	15.9	131.2	-2.80	192.7	9,565.9	9,873.2	9,747.1	126.10	78.294	
6,692.9	6,625.7	6,601.7	6,601.7	15.9	131.9	-2.92	192.7	9,565.9	9,850.5	9,728.2	122.26	80.570	
6,700.0	6,631.6	6,607.6	6,607.6	15.9	132.0	-2.94	192.7	9,565.9	9,846.5	9,724.9	121.58	80.990	
6,750.0	6,671.9	6,647.9	6,647.9	15.9	132.9	-3.10	192.7	9,565.9	9,817.0	9,700.6	116.40	84.339	
6,791.3	6,703.6	6,679.6	6,679.6	15.9	133.5	-3.26	192.7	9,565.9	9,790.5	9,678.9	111.65	87.688	
6,800.0	6,710.1	6,686.1	6,686.1	15.9	133.6	-3.30	192.7	9,565.9	9,784.8	9,674.2	110.60	88.467	
6,850.0	6,745.9	6,721.9	6,721.9	16.0	134.3	-3.54	192.7	9,565.9	9,749.9	9,645.7	104.23	93.545	
6,889.7	6,772.6	6,748.6	6,748.6	16.1	134.9	-3.78	192.7	9,565.9	9,720.5	9,621.7	98.78	98.406	
6,900.0	6,779.2	6,755.2	6,755.2	16.1	135.0	-3.85	192.7	9,565.9	9,712.7	9,615.4	97.32	99.798	
6,950.0	6,809.8	6,785.8	6,785.8	16.3	135.6	-4.23	192.7	9,565.9	9,673.2	9,583.2	89.96	107.529	
6,988.2	6,831.3	6,807.3	6,807.3	16.4	136.1	-4.58	192.7	9,565.9	9,641.7	9,557.6	84.08	114.672	
7,000.0	6,837.6	6,813.6	6,813.6	16.5	136.2	-4.71	192.7	9,565.9	9,631.7	9,549.5	82.22	117.142	
7,050.0	6,862.5	6,838.5	6,838.5	16.9	136.7	-5.34	192.7	9,565.9	9,588.3	9,514.1	74.24	129.145	
7,086.6	6,878.7	6,854.7	6,854.7	17.2	137.0	-5.94	192.7	9,565.9	9,555.6	9,487.2	68.37	139.758	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
7,100.0	6,884.2	6,860.2	6,860.2	17.3	137.1	-6.20	192.7	9,565.9	9,543.4	9,477.1	66.24	144.070	
7,150.0	6,902.7	6,878.7	6,878.7	17.8	137.5	-7.41	192.7	9,565.9	9,497.0	9,438.4	58.63	161.992	
7,185.0	6,913.8	6,889.8	6,889.8	18.3	137.7	-8.60	192.7	9,565.9	9,463.8	9,409.8	53.99	175.295	
7,200.0	6,918.0	6,894.0	6,894.0	18.5	137.8	-9.24	192.7	9,565.9	9,449.4	9,397.1	52.34	180.534	
7,250.0	6,929.9	6,905.9	6,905.9	19.2	138.0	-12.29	192.7	9,565.9	9,400.9	9,351.1	49.79	188.795	
7,283.4	6,936.0	6,912.0	6,912.0	19.7	138.2	-15.75	192.7	9,565.9	9,368.1	9,315.1	52.98	176.836	
7,300.0	6,938.4	6,914.4	6,914.4	20.0	138.2	-18.27	192.7	9,565.9	9,351.7	9,294.5	57.19	163.507	
7,350.0	6,943.4	6,919.4	6,919.4	20.9	138.3	-34.29	192.7	9,565.9	9,302.0	9,210.2	91.87	101.253	
7,381.9	6,944.8	6,920.8	6,920.8	21.4	138.3	-64.57	192.7	9,565.9	9,270.2	9,125.7	144.50	64.152	
7,403.7	6,945.0	6,921.0	6,921.0	21.8	138.4	-101.36	192.7	9,565.9	9,248.4	9,091.2	157.21	58.829	
7,480.3	6,944.3	6,920.3	6,920.3	23.3	138.3	-101.27	192.7	9,565.9	9,171.9	9,013.2	158.70	57.793	
7,500.0	6,944.1	6,920.1	6,920.1	23.7	138.3	-101.24	192.7	9,565.9	9,152.2	8,993.1	159.09	57.529	
7,578.7	6,943.4	6,919.4	6,919.4	25.4	138.3	-101.15	192.7	9,565.9	9,073.6	8,912.8	160.74	56.448	
7,600.0	6,943.2	6,919.2	6,919.2	25.8	138.3	-101.12	192.7	9,565.9	9,052.3	8,891.1	161.19	56.160	
7,677.1	6,942.5	6,918.5	6,918.5	27.5	138.3	-101.03	192.7	9,565.9	8,975.3	8,812.4	162.90	55.095	
7,700.0	6,942.3	6,918.3	6,918.3	28.0	138.3	-101.00	192.7	9,565.9	8,952.4	8,789.0	163.41	54.784	
7,775.6	6,941.6	6,917.6	6,917.6	29.8	138.3	-100.91	192.7	9,565.9	8,877.0	8,711.8	165.17	53.744	
7,800.0	6,941.4	6,917.4	6,917.4	30.3	138.3	-100.88	192.7	9,565.9	8,852.6	8,686.8	165.74	53.412	
7,874.0	6,940.7	6,916.7	6,916.7	32.1	138.3	-100.79	192.7	9,565.9	8,778.6	8,611.1	167.52	52.404	
7,900.0	6,940.5	6,916.5	6,916.5	32.7	138.3	-100.76	192.7	9,565.9	8,752.7	8,584.5	168.14	52.054	
7,972.4	6,939.8	6,915.8	6,915.8	34.5	138.2	-100.67	192.7	9,565.9	8,680.3	8,510.4	169.93	51.082	
8,000.0	6,939.6	6,915.6	6,915.6	35.2	138.2	-100.64	192.7	9,565.9	8,652.8	8,482.2	170.61	50.717	
8,070.8	6,938.9	6,914.9	6,914.9	37.0	138.2	-100.55	192.7	9,565.9	8,582.0	8,409.6	172.39	49.782	
8,100.0	6,938.7	6,914.7	6,914.7	37.7	138.2	-100.52	192.7	9,565.9	8,552.9	8,379.8	173.12	49.403	
8,169.3	6,938.0	6,914.0	6,914.0	39.5	138.2	-100.43	192.7	9,565.9	8,483.7	8,308.8	174.89	48.508	
8,200.0	6,937.7	6,913.7	6,913.7	40.3	138.2	-100.39	192.7	9,565.9	8,453.0	8,277.4	175.68	48.116	
8,267.7	6,937.1	6,913.1	6,913.1	42.0	138.2	-100.31	192.7	9,565.9	8,385.4	8,208.0	177.43	47.260	
8,300.0	6,936.8	6,912.8	6,912.8	42.8	138.2	-100.27	192.7	9,565.9	8,353.2	8,174.9	178.27	46.858	
8,366.1	6,936.2	6,912.2	6,912.2	44.6	138.2	-100.19	192.7	9,565.9	8,287.1	8,107.1	180.00	46.041	
8,400.0	6,935.9	6,911.9	6,911.9	45.5	138.2	-100.15	192.7	9,565.9	8,253.3	8,072.4	180.88	45.628	
8,464.5	6,935.3	6,911.3	6,911.3	47.2	138.2	-100.07	192.7	9,565.9	8,188.8	8,006.3	182.59	44.849	
8,500.0	6,935.0	6,911.0	6,911.0	48.1	138.2	-100.03	192.7	9,565.9	8,153.4	7,969.9	183.52	44.427	
8,563.0	6,934.5	6,910.5	6,910.5	49.8	138.1	-99.95	192.7	9,565.9	8,090.5	7,905.3	185.20	43.686	
8,600.0	6,934.1	6,910.1	6,910.1	50.7	138.1	-99.91	192.7	9,565.9	8,053.6	7,867.4	186.18	43.256	
8,661.4	6,933.6	6,909.6	6,909.6	52.4	138.1	-99.83	192.7	9,565.9	7,992.3	7,804.4	187.82	42.552	
8,700.0	6,933.2	6,909.2	6,909.2	53.4	138.1	-99.79	192.7	9,565.9	7,953.7	7,764.9	188.86	42.115	
8,759.8	6,932.7	6,908.7	6,908.7	55.0	138.1	-99.71	192.7	9,565.9	7,894.0	7,703.5	190.47	41.445	
8,800.0	6,932.3	6,908.3	6,908.3	56.1	138.1	-99.66	192.7	9,565.9	7,853.9	7,662.3	191.55	41.002	
8,858.2	6,931.8	6,907.8	6,907.8	57.7	138.1	-99.59	192.7	9,565.9	7,795.7	7,602.6	193.13	40.366	
8,900.0	6,931.4	6,907.4	6,907.4	58.8	138.1	-99.54	192.7	9,565.9	7,754.0	7,559.7	194.25	39.917	
8,956.7	6,930.9	6,906.9	6,906.9	60.3	138.1	-99.47	192.7	9,565.9	7,697.4	7,501.6	195.79	39.314	
9,000.0	6,930.5	6,906.5	6,906.5	61.5	138.1	-99.42	192.7	9,565.9	7,654.2	7,457.2	196.97	38.859	
9,055.1	6,930.0	6,906.0	6,906.0	63.0	138.0	-99.35	192.7	9,565.9	7,599.1	7,400.7	198.47	38.288	
9,100.0	6,929.6	6,905.6	6,905.6	64.2	138.0	-99.30	192.7	9,565.9	7,554.3	7,354.6	199.70	37.829	
9,153.5	6,929.1	6,905.1	6,905.1	65.6	138.0	-99.23	192.7	9,565.9	7,500.9	7,299.7	201.16	37.288	
9,200.0	6,928.7	6,904.7	6,904.7	66.9	138.0	-99.18	192.7	9,565.9	7,454.5	7,252.0	202.43	36.825	
9,251.9	6,928.2	6,904.2	6,904.2	68.3	138.0	-99.11	192.7	9,565.9	7,402.6	7,198.7	203.86	36.313	
9,300.0	6,927.8	6,903.8	6,903.8	69.6	138.0	-99.06	192.7	9,565.9	7,354.6	7,149.5	205.17	35.846	
9,350.4	6,927.3	6,903.3	6,903.3	71.0	138.0	-98.99	192.7	9,565.9	7,304.3	7,097.8	206.56	35.362	
9,400.0	6,926.9	6,902.9	6,902.9	72.4	138.0	-98.93	192.7	9,565.9	7,254.8	7,046.9	207.92	34.891	
9,448.8	6,926.4	6,902.4	6,902.4	73.7	138.0	-98.87	192.7	9,565.9	7,206.1	6,996.8	209.27	34.434	
9,500.0	6,926.0	6,902.0	6,902.0	75.1	138.0	-98.81	192.7	9,565.9	7,155.0	6,944.3	210.68	33.961	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,901.5	6,901.5	76.4	138.0	-98.75	192.7	9,565.9	7,107.8	6,895.8	211.99	33.530	
9,600.0	6,925.1	6,901.1	6,901.1	77.9	138.0	-98.69	192.7	9,565.9	7,055.1	6,841.7	213.44	33.054	
9,645.6	6,924.6	6,900.6	6,900.6	79.1	137.9	-98.63	192.7	9,565.9	7,009.6	6,794.9	214.71	32.647	
9,700.0	6,924.1	6,900.1	6,900.1	80.6	137.9	-98.57	192.7	9,565.9	6,955.3	6,739.1	216.21	32.169	
9,744.1	6,923.7	6,899.7	6,899.7	81.8	137.9	-98.51	192.7	9,565.9	6,911.3	6,693.9	217.43	31.786	
9,800.0	6,923.2	6,899.2	6,899.2	83.4	137.9	-98.44	192.7	9,565.9	6,855.5	6,636.5	218.98	31.306	
9,842.5	6,922.9	6,898.9	6,898.9	84.5	137.9	-98.39	192.7	9,565.9	6,813.1	6,592.9	220.16	30.946	
9,900.0	6,922.3	6,898.3	6,898.3	86.1	137.9	-98.32	192.7	9,565.9	6,755.7	6,533.9	221.76	30.464	
9,940.9	6,922.0	6,898.0	6,898.0	87.2	137.9	-98.27	192.7	9,565.9	6,714.9	6,492.0	222.90	30.125	
10,000.0	6,921.4	6,897.4	6,897.4	88.9	137.9	-98.20	192.7	9,565.9	6,655.9	6,431.4	224.54	29.642	
10,039.3	6,921.1	6,897.1	6,897.1	90.0	137.9	-98.15	192.7	9,565.9	6,616.6	6,391.0	225.64	29.324	
10,100.0	6,920.5	6,896.5	6,896.5	91.6	137.9	-98.08	192.7	9,565.9	6,556.1	6,328.8	227.32	28.840	
10,137.8	6,920.2	6,896.2	6,896.2	92.7	137.9	-98.03	192.7	9,565.9	6,518.4	6,290.0	228.38	28.542	
10,200.0	6,919.6	6,895.6	6,895.6	94.4	137.8	-97.95	192.7	9,565.9	6,456.3	6,226.2	230.11	28.057	
10,236.2	6,919.3	6,895.3	6,895.3	95.4	137.8	-97.91	192.7	9,565.9	6,420.2	6,189.1	231.12	27.778	
10,300.0	6,918.7	6,894.7	6,894.7	97.2	137.8	-97.83	192.7	9,565.9	6,356.5	6,123.6	232.90	27.293	
10,334.6	6,918.4	6,894.4	6,894.4	98.1	137.8	-97.79	192.7	9,565.9	6,322.0	6,088.1	233.87	27.032	
10,400.0	6,917.8	6,893.8	6,893.8	99.9	137.8	-97.71	192.7	9,565.9	6,256.8	6,021.1	235.70	26.546	
10,433.0	6,917.5	6,893.5	6,893.5	100.9	137.8	-97.67	192.7	9,565.9	6,223.8	5,987.2	236.62	26.303	
10,500.0	6,916.9	6,892.9	6,892.9	102.7	137.8	-97.59	192.7	9,565.9	6,157.0	5,918.5	238.49	25.816	
10,531.5	6,916.6	6,892.6	6,892.6	103.6	137.8	-97.55	192.7	9,565.9	6,125.6	5,886.2	239.37	25.590	
10,600.0	6,916.0	6,892.0	6,892.0	105.5	137.8	-97.46	192.7	9,565.9	6,057.2	5,815.9	241.29	25.103	
10,629.9	6,915.7	6,891.7	6,891.7	106.3	137.8	-97.43	192.7	9,565.9	6,027.4	5,785.3	242.13	24.893	
10,700.0	6,915.1	6,891.1	6,891.1	108.3	137.8	-97.34	192.7	9,565.9	5,957.5	5,713.4	244.09	24.407	
10,728.3	6,914.8	6,890.8	6,890.8	109.1	137.7	-97.31	192.7	9,565.9	5,929.2	5,684.3	244.89	24.212	
10,800.0	6,914.2	6,890.2	6,890.2	111.0	137.7	-97.22	192.7	9,565.9	5,857.7	5,610.8	246.89	23.726	
10,826.7	6,913.9	6,889.9	6,889.9	111.8	137.7	-97.19	192.7	9,565.9	5,831.0	5,583.4	247.64	23.546	
10,900.0	6,913.3	6,889.3	6,889.3	113.8	137.7	-97.10	192.7	9,565.9	5,758.0	5,508.3	249.70	23.060	
10,925.2	6,913.1	6,889.1	6,889.1	114.5	137.7	-97.06	192.7	9,565.9	5,732.9	5,482.5	250.41	22.894	
11,000.0	6,912.4	6,888.4	6,888.4	116.6	137.7	-96.97	192.7	9,565.9	5,658.3	5,405.8	252.51	22.408	
11,023.6	6,912.2	6,888.2	6,888.2	117.3	137.7	-96.94	192.7	9,565.9	5,634.7	5,381.6	253.17	22.257	
11,100.0	6,911.5	6,887.5	6,887.5	119.4	137.7	-96.85	192.7	9,565.9	5,558.5	5,303.2	255.31	21.771	
11,122.0	6,911.3	6,887.3	6,887.3	120.0	137.7	-96.82	192.7	9,565.9	5,536.6	5,280.7	255.93	21.633	
11,200.0	6,910.6	6,886.6	6,886.6	122.2	137.7	-96.73	192.7	9,565.9	5,458.8	5,200.7	258.12	21.148	
11,220.4	6,910.4	6,886.4	6,886.4	122.7	137.7	-96.70	192.7	9,565.9	5,438.4	5,179.8	258.70	21.022	
11,300.0	6,909.7	6,885.7	6,885.7	125.0	137.6	-96.60	192.7	9,565.9	5,359.1	5,098.2	260.93	20.538	
11,318.9	6,909.5	6,885.5	6,885.5	125.5	137.6	-96.58	192.7	9,565.9	5,340.3	5,078.9	261.46	20.425	
11,400.0	6,908.8	6,884.8	6,884.8	127.7	137.6	-96.48	192.7	9,565.9	5,259.5	4,995.7	263.75	19.941	
11,417.3	6,908.6	6,884.6	6,884.6	128.2	137.6	-96.46	192.7	9,565.9	5,242.2	4,978.0	264.23	19.839	
11,500.0	6,907.9	6,883.9	6,883.9	130.5	137.6	-96.36	192.7	9,565.9	5,159.8	4,893.2	266.56	19.357	
11,515.7	6,907.7	6,883.7	6,883.7	131.0	137.6	-96.34	192.7	9,565.9	5,144.1	4,877.1	267.00	19.266	
11,600.0	6,907.0	6,883.0	6,883.0	133.3	137.6	-96.23	192.7	9,565.9	5,060.1	4,790.7	269.37	18.785	
11,614.1	6,906.8	6,882.8	6,882.8	133.7	137.6	-96.22	192.7	9,565.9	5,046.0	4,776.2	269.77	18.705	
11,700.0	6,906.0	6,882.0	6,882.0	136.1	137.6	-96.11	192.7	9,565.9	4,960.5	4,688.3	272.19	18.224	
11,712.6	6,905.9	6,881.9	6,881.9	136.5	137.6	-96.10	192.7	9,565.9	4,947.9	4,675.4	272.54	18.155	
11,800.0	6,905.1	6,881.1	6,881.1	138.9	137.6	-95.99	192.7	9,565.9	4,860.8	4,585.8	275.01	17.675	
11,811.0	6,905.0	6,881.0	6,881.0	139.2	137.5	-95.97	192.7	9,565.9	4,849.9	4,574.6	275.31	17.616	
11,900.0	6,904.2	6,880.2	6,880.2	141.7	137.5	-95.86	192.7	9,565.9	4,761.2	4,483.4	277.82	17.138	
11,909.4	6,904.2	6,880.2	6,880.2	141.9	137.5	-95.85	192.7	9,565.9	4,751.8	4,473.7	278.09	17.088	
12,000.0	6,903.3	6,879.3	6,879.3	144.5	137.5	-95.74	192.7	9,565.9	4,661.6	4,381.0	280.64	16.611	
12,007.8	6,903.3	6,879.3	6,879.3	144.7	137.5	-95.73	192.7	9,565.9	4,653.8	4,372.9	280.86	16.570	
12,100.0	6,902.4	6,878.4	6,878.4	147.3	137.5	-95.62	192.7	9,565.9	4,562.0	4,278.6	283.46	16.094	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,902.4	6,878.4	6,878.4	147.4	137.5	-95.61	192.7	9,565.9	4,555.8	4,272.1	283.63	16.062	
12,200.0	6,901.5	6,877.5	6,877.5	150.1	137.5	-95.49	192.7	9,565.9	4,462.5	4,176.2	286.28	15.588	
12,204.7	6,901.5	6,877.5	6,877.5	150.2	137.5	-95.49	192.7	9,565.9	4,457.8	4,171.4	286.41	15.564	
12,300.0	6,900.6	6,876.6	6,876.6	152.9	137.5	-95.37	192.7	9,565.9	4,362.9	4,073.8	289.10	15.092	
12,303.1	6,900.6	6,876.6	6,876.6	152.9	137.5	-95.37	192.7	9,565.9	4,359.8	4,070.6	289.18	15.076	
12,400.0	6,899.7	6,875.7	6,875.7	155.6	137.4	-95.25	192.7	9,565.9	4,263.4	3,971.5	291.92	14.605	
12,401.5	6,899.7	6,875.7	6,875.7	155.7	137.4	-95.25	192.7	9,565.9	4,261.8	3,969.9	291.96	14.597	
12,500.0	6,898.8	6,874.8	6,874.8	158.4	137.4	-95.12	192.7	9,565.9	4,163.9	3,869.1	294.74	14.128	
12,598.4	6,897.9	6,873.9	6,873.9	161.2	137.4	-95.00	192.7	9,565.9	4,066.0	3,768.5	297.51	13.667	
12,600.0	6,897.9	6,873.9	6,873.9	161.2	137.4	-95.00	192.7	9,565.9	4,064.4	3,766.8	297.56	13.659	
12,696.8	6,897.0	6,873.0	6,873.0	163.9	137.4	-94.88	192.7	9,565.9	3,968.1	3,667.8	300.29	13.214	
12,700.0	6,897.0	6,873.0	6,873.0	164.0	137.4	-94.88	192.7	9,565.9	3,965.0	3,664.6	300.38	13.200	
12,795.2	6,896.1	6,872.1	6,872.1	166.7	137.4	-94.76	192.7	9,565.9	3,870.2	3,567.2	303.06	12.770	
12,800.0	6,896.1	6,872.1	6,872.1	166.8	137.4	-94.75	192.7	9,565.9	3,865.5	3,562.3	303.20	12.749	
12,893.7	6,895.3	6,871.3	6,871.3	169.4	137.4	-94.64	192.7	9,565.9	3,772.4	3,466.6	305.84	12.335	
12,900.0	6,895.2	6,871.2	6,871.2	169.6	137.4	-94.63	192.7	9,565.9	3,766.1	3,460.1	306.02	12.307	
12,992.1	6,894.4	6,870.4	6,870.4	172.2	137.3	-94.52	192.7	9,565.9	3,674.6	3,366.0	308.61	11.907	
13,000.0	6,894.3	6,870.3	6,870.3	172.4	137.3	-94.51	192.7	9,565.9	3,666.8	3,357.9	308.84	11.873	
13,090.5	6,893.5	6,869.5	6,869.5	175.0	137.3	-94.39	192.7	9,565.9	3,576.8	3,265.5	311.39	11.487	
13,100.0	6,893.4	6,869.4	6,869.4	175.2	137.3	-94.38	192.7	9,565.9	3,567.4	3,255.8	311.66	11.447	
13,188.9	6,892.6	6,868.6	6,868.6	177.7	137.3	-94.27	192.7	9,565.9	3,479.1	3,165.0	314.17	11.074	
13,200.0	6,892.5	6,868.5	6,868.5	178.0	137.3	-94.26	192.7	9,565.9	3,468.2	3,153.7	314.48	11.028	
13,287.4	6,891.7	6,867.7	6,867.7	180.5	137.3	-94.15	192.7	9,565.9	3,381.4	3,064.5	316.94	10.669	
13,300.0	6,891.6	6,867.6	6,867.6	180.8	137.3	-94.14	192.7	9,565.9	3,368.9	3,051.6	317.30	10.617	
13,385.8	6,890.8	6,866.8	6,866.8	183.2	137.3	-94.03	192.7	9,565.9	3,283.8	2,964.1	319.72	10.271	
13,400.0	6,890.7	6,866.7	6,866.7	183.6	137.3	-94.01	192.7	9,565.9	3,269.7	2,949.6	320.12	10.214	
13,484.2	6,889.9	6,865.9	6,865.9	186.0	137.2	-93.91	192.7	9,565.9	3,186.2	2,863.7	322.49	9.880	
13,500.0	6,889.8	6,865.8	6,865.8	186.4	137.2	-93.89	192.7	9,565.9	3,170.5	2,847.6	322.94	9.818	
13,582.6	6,889.0	6,865.0	6,865.0	188.7	137.2	-93.79	192.7	9,565.9	3,088.6	2,763.4	325.27	9.496	
13,600.0	6,888.9	6,864.9	6,864.9	189.2	137.2	-93.76	192.7	9,565.9	3,071.5	2,745.7	325.76	9.429	
13,681.1	6,888.1	6,864.1	6,864.1	191.5	137.2	-93.66	192.7	9,565.9	2,991.2	2,663.1	328.04	9.118	
13,700.0	6,888.0	6,864.0	6,864.0	192.0	137.2	-93.64	192.7	9,565.9	2,972.4	2,643.8	328.58	9.046	
13,779.5	6,887.3	6,863.3	6,863.3	194.2	137.2	-93.54	192.7	9,565.9	2,893.7	2,562.9	330.82	8.747	
13,800.0	6,887.1	6,863.1	6,863.1	194.8	137.2	-93.52	192.7	9,565.9	2,873.4	2,542.0	331.40	8.671	
13,877.9	6,886.4	6,862.4	6,862.4	197.0	137.2	-93.42	192.7	9,565.9	2,796.4	2,462.8	333.59	8.383	
13,900.0	6,886.2	6,862.2	6,862.2	197.6	137.2	-93.39	192.7	9,565.9	2,774.5	2,440.3	334.21	8.302	
13,976.3	6,885.5	6,861.5	6,861.5	199.7	137.2	-93.30	192.7	9,565.9	2,699.1	2,362.7	336.37	8.024	
14,000.0	6,885.3	6,861.3	6,861.3	200.4	137.2	-93.27	192.7	9,565.9	2,675.7	2,338.7	337.03	7.939	
14,074.8	6,884.6	6,860.6	6,860.6	202.5	137.1	-93.18	192.7	9,565.9	2,601.9	2,262.8	339.14	7.672	
14,100.0	6,884.4	6,860.4	6,860.4	203.2	137.1	-93.15	192.7	9,565.9	2,577.0	2,237.2	339.85	7.583	
14,173.2	6,883.7	6,859.7	6,859.7	205.3	137.1	-93.06	192.7	9,565.9	2,504.8	2,162.9	341.91	7.326	
14,200.0	6,883.5	6,859.5	6,859.5	206.0	137.1	-93.02	192.7	9,565.9	2,478.4	2,135.7	342.67	7.233	
14,271.6	6,882.8	6,858.8	6,858.8	208.0	137.1	-92.93	192.7	9,565.9	2,407.8	2,063.1	344.68	6.986	
14,300.0	6,882.6	6,858.6	6,858.6	208.8	137.1	-92.90	192.7	9,565.9	2,379.9	2,034.4	345.48	6.889	
14,370.0	6,881.9	6,857.9	6,857.9	210.8	137.1	-92.81	192.7	9,565.9	2,311.0	1,963.5	347.45	6.651	
14,400.0	6,881.7	6,857.7	6,857.7	211.6	137.1	-92.77	192.7	9,565.9	2,281.5	1,933.2	348.30	6.550	
14,468.5	6,881.0	6,857.0	6,857.0	213.5	137.1	-92.69	192.7	9,565.9	2,214.2	1,864.0	350.22	6.322	
14,500.0	6,880.8	6,856.8	6,856.8	214.4	137.1	-92.65	192.7	9,565.9	2,183.3	1,832.2	351.11	6.218	
14,566.9	6,880.2	6,856.2	6,856.2	216.3	137.0	-92.57	192.7	9,565.9	2,117.6	1,764.7	352.99	5.999	
14,584.2	6,880.0	6,856.0	6,856.0	216.8	137.0	-92.55	192.7	9,565.9	2,100.7	1,747.3	353.48	5.943 CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	34.11	349.7	236.9	423.1				
98.4	98.4	73.1	73.1	0.1	0.0	34.10	349.8	236.8	422.4	422.3	0.12	3,550.149	
100.0	100.0	74.6	74.6	0.1	0.0	34.10	349.8	236.8	422.4	422.3	0.12	3,476.987	
196.8	196.8	171.8	171.8	0.3	0.2	34.08	349.9	236.8	422.5	422.0	0.46	928.288	
200.0	200.0	175.0	175.0	0.3	0.2	34.08	349.9	236.8	422.5	422.0	0.47	905.071	
295.3	295.3	270.5	270.5	0.5	0.2	34.08	349.9	236.7	422.5	421.7	0.72	583.765	
300.0	300.0	275.2	275.2	0.5	0.2	34.08	349.9	236.7	422.5	421.7	0.73	574.978	
393.7	393.7	369.0	369.0	0.7	0.3	34.12	349.7	236.9	422.4	421.4	1.01	419.032	
400.0	400.0	375.3	375.3	0.8	0.3	34.12	349.7	236.9	422.4	421.4	1.03	410.984	
492.1	492.1	467.4	467.4	1.0	0.3	34.16	349.5	237.1	422.3	421.0	1.30	323.979	
500.0	500.0	475.3	475.3	1.0	0.3	34.16	349.4	237.2	422.3	421.0	1.33	318.310	
590.5	590.5	565.8	565.8	1.2	0.4	34.21	349.2	237.4	422.3	420.7	1.59	266.041	
600.0	600.0	575.2	575.2	1.2	0.4	34.21	349.2	237.4	422.3	420.6	1.61	261.596	
689.0	689.0	664.5	664.5	1.4	0.5	34.25	349.0	237.6	422.2	420.3	1.86	226.524	
700.0	700.0	675.6	675.6	1.4	0.5	34.26	348.9	237.6	422.2	420.3	1.89	222.841	
787.4	787.4	763.0	763.0	1.6	0.5	34.29	348.7	237.8	422.0	419.9	2.14	197.536	
800.0	800.0	775.6	775.6	1.7	0.5	34.30	348.6	237.8	422.0	419.8	2.17	194.362	
885.8	885.8	861.3	861.3	1.9	0.6	34.33	348.4	237.9	421.9	419.5	2.41	175.359	
900.0	900.0	875.4	875.4	1.9	0.6	34.33	348.4	237.9	421.9	419.5	2.44	172.582	
984.2	984.2	959.5	959.5	2.1	0.6	34.37	348.2	238.1	421.8	419.2	2.67	157.788	
1,000.0	1,000.0	975.3	975.2	2.1	0.6	34.38	348.1	238.2	421.8	419.1	2.72	155.303	
1,082.7	1,082.7	1,058.3	1,058.3	2.3	0.6	34.40	348.0	238.2	421.7	418.8	2.93	143.700	
1,100.0	1,100.0	1,075.7	1,075.7	2.3	0.6	34.40	348.0	238.2	421.7	418.7	2.98	141.503	
1,181.1	1,181.1	1,156.9	1,156.9	2.5	0.7	34.40	347.8	238.2	421.6	418.4	3.19	132.236	
1,200.0	1,200.0	1,175.8	1,175.8	2.6	0.7	34.40	347.8	238.2	421.5	418.3	3.24	130.266	
1,279.5	1,279.5	1,255.6	1,255.6	2.7	0.7	34.38	347.7	237.9	421.4	417.9	3.44	122.585	
1,300.0	1,300.0	1,276.3	1,276.2	2.8	0.7	34.37	347.7	237.9	421.3	417.8	3.49	120.746	
1,377.9	1,377.9	1,354.1	1,354.1	3.0	0.7	34.34	347.7	237.5	421.1	417.4	3.69	114.240	
1,400.0	1,400.0	1,376.1	1,376.1	3.0	0.7	34.33	347.7	237.4	421.0	417.3	3.74	112.527	
1,476.4	1,476.4	1,452.2	1,452.2	3.2	0.8	34.31	347.6	237.2	420.8	416.9	3.93	106.977	
1,500.0	1,500.0	1,475.7	1,475.7	3.2	0.8	34.31	347.6	237.2	420.8	416.8	3.99	105.364	
1,574.8	1,574.8	1,551.0	1,551.0	3.4	0.8	34.29	347.5	237.0	420.6	416.5	4.18	100.540	
1,600.0	1,600.0	1,576.5	1,576.5	3.5	0.8	34.29	347.5	236.9	420.6	416.3	4.25	99.013	
1,650.0	1,650.0	1,627.0	1,627.0	3.6	0.8	34.28	347.4	236.7	420.4	416.0	4.37	96.116	
1,665.8	1,665.8	1,642.9	1,642.9	3.6	0.8	153.86	347.3	236.7	420.3	415.9	4.41	95.226 CC	
1,673.2	1,673.2	1,650.4	1,650.4	3.6	0.8	153.86	347.3	236.6	420.3	415.9	4.43	94.849 ES	
1,700.0	1,700.0	1,677.4	1,677.4	3.7	0.8	153.88	347.2	236.5	420.5	416.0	4.50	93.534	
1,771.6	1,771.6	1,749.7	1,749.6	3.8	0.9	153.99	346.8	236.3	422.0	417.3	4.66	90.646	
1,800.0	1,799.9	1,778.2	1,778.2	3.9	0.9	154.07	346.6	236.2	423.0	418.2	4.72	89.643	
1,870.1	1,869.9	1,848.2	1,848.2	4.0	0.9	154.32	346.1	236.0	426.5	421.6	4.88	87.402	
1,900.0	1,899.7	1,877.9	1,877.9	4.1	0.9	154.45	345.8	235.9	428.5	423.5	4.95	86.589	
1,968.5	1,967.8	1,946.8	1,946.8	4.2	0.9	154.82	345.3	235.7	434.1	428.9	5.11	84.923	
2,000.0	1,999.1	1,978.7	1,978.7	4.3	0.9	155.01	345.0	235.6	437.1	431.9	5.19	84.293	
2,066.9	2,065.5	2,045.7	2,045.6	4.4	1.0	155.48	344.2	235.4	444.4	439.1	5.35	83.089	
2,100.0	2,098.2	2,078.5	2,078.5	4.5	1.0	155.73	343.8	235.3	448.6	443.2	5.43	82.640	
2,165.3	2,162.6	2,143.1	2,143.1	4.7	1.0	156.25	343.0	235.1	457.9	452.3	5.59	81.846	
2,200.0	2,196.6	2,177.2	2,177.2	4.7	1.0	156.55	342.5	235.0	463.3	457.7	5.68	81.568	
2,249.9	2,245.5	2,226.7	2,226.7	4.9	1.0	157.01	341.9	234.9	471.9	466.1	5.81	81.233	
2,263.8	2,259.1	2,240.6	2,240.6	4.9	1.0	157.15	341.7	234.8	474.4	468.5	5.84	81.162	
2,300.0	2,294.5	2,276.9	2,276.9	5.0	1.0	157.52	341.2	234.6	480.8	474.9	5.94	80.995	
2,362.2	2,355.4	2,338.3	2,338.2	5.2	1.1	158.12	340.3	234.1	491.9	485.8	6.10	80.636	
2,400.0	2,392.3	2,375.2	2,375.1	5.4	1.1	158.46	339.8	233.8	498.6	492.4	6.20	80.471	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
2,460.6	2,451.6	2,434.5	2,434.4	5.6	1.1	158.99	339.1	233.3	509.5	503.1	6.36	80.139	
2,500.0	2,490.2	2,473.0	2,473.0	5.7	1.1	159.32	338.6	233.0	516.5	510.1	6.46	79.937	
2,559.0	2,547.9	2,530.6	2,530.5	5.9	1.1	159.80	337.8	232.5	527.2	520.6	6.62	79.622	
2,600.0	2,588.0	2,570.3	2,570.2	6.1	1.1	160.13	337.3	232.2	534.7	527.9	6.73	79.422	
2,657.5	2,644.2	2,626.2	2,626.2	6.3	1.2	160.57	336.7	231.9	545.2	538.3	6.89	79.135	
2,700.0	2,685.8	2,667.8	2,667.8	6.4	1.2	160.88	336.2	231.6	553.0	546.0	7.01	78.946	
2,755.9	2,740.5	2,722.5	2,722.4	6.6	1.2	161.28	335.6	231.2	563.4	556.2	7.16	78.683	
2,800.0	2,783.6	2,765.6	2,765.5	6.8	1.2	161.58	335.2	231.0	571.5	564.3	7.28	78.502	
2,854.3	2,836.7	2,818.5	2,818.4	7.0	1.2	161.95	334.6	230.7	581.7	574.2	7.43	78.268	
2,900.0	2,881.4	2,862.7	2,862.6	7.2	1.2	162.25	334.1	230.5	590.2	582.7	7.56	78.095	
2,952.7	2,933.0	2,914.1	2,914.0	7.4	1.3	162.58	333.6	230.3	600.2	592.5	7.71	77.891	
3,000.0	2,979.2	2,960.5	2,960.4	7.6	1.3	162.88	333.1	230.1	609.1	601.3	7.84	77.727	
3,051.2	3,029.3	3,010.7	3,010.6	7.8	1.3	163.19	332.6	229.9	618.8	610.8	7.98	77.542	
3,100.0	3,077.1	3,058.3	3,058.2	8.0	1.3	163.47	332.1	229.7	628.0	619.9	8.12	77.387	
3,149.6	3,125.6	3,106.7	3,106.6	8.2	1.3	163.76	331.6	229.6	637.5	629.2	8.25	77.226	
3,200.0	3,174.9	3,156.2	3,156.1	8.4	1.4	164.04	331.1	229.5	647.1	638.7	8.40	77.078	
3,248.0	3,221.8	3,203.3	3,203.2	8.6	1.4	164.31	330.6	229.3	656.3	647.7	8.53	76.932	
3,300.0	3,272.7	3,254.0	3,253.9	8.9	1.4	164.59	329.9	229.3	666.2	657.5	8.67	76.803	
3,346.4	3,318.1	3,299.3	3,299.2	9.0	1.4	164.86	329.2	229.4	675.1	666.3	8.80	76.691	
3,400.0	3,370.5	3,353.6	3,353.4	9.3	1.4	165.18	328.3	229.6	685.4	676.4	8.95	76.578	
3,444.9	3,414.4	3,399.1	3,398.9	9.5	1.4	165.45	327.3	229.7	693.8	684.8	9.07	76.468	
3,500.0	3,468.3	3,453.5	3,453.3	9.7	1.4	165.77	326.0	229.8	704.2	695.0	9.22	76.338	
3,543.3	3,510.7	3,496.3	3,496.1	9.9	1.5	166.01	325.0	229.9	712.3	703.0	9.34	76.234	
3,600.0	3,566.1	3,551.3	3,551.1	10.1	1.5	166.32	323.7	230.1	723.0	713.5	9.50	76.098	
3,641.7	3,606.9	3,591.8	3,591.6	10.3	1.5	166.53	322.9	230.1	730.9	721.3	9.62	75.997	
3,700.0	3,664.0	3,649.2	3,648.9	10.6	1.5	166.81	321.8	230.1	741.9	732.1	9.78	75.861	
3,740.1	3,703.2	3,688.8	3,688.6	10.7	1.5	167.00	321.0	230.1	749.5	739.6	9.89	75.766	
3,800.0	3,761.8	3,747.3	3,747.1	11.0	1.5	167.28	319.8	230.1	760.8	750.8	10.06	75.633	
3,837.4	3,798.3	3,783.7	3,783.5	11.2	1.6	167.44	319.1	230.1	767.9	757.8	10.16	75.552	
3,838.6	3,799.5	3,784.9	3,784.7	11.2	1.6	167.45	319.1	230.1	768.2	758.0	10.17	75.552	
3,900.0	3,859.7	3,844.6	3,844.3	11.4	1.6	167.75	317.9	230.1	779.2	768.9	10.32	75.517	
3,937.0	3,896.1	3,880.5	3,880.3	11.5	1.6	167.92	317.3	230.1	785.3	774.9	10.40	75.491	
4,000.0	3,958.3	3,942.9	3,942.6	11.7	1.6	168.17	316.1	230.1	794.6	784.1	10.54	75.360	
4,035.4	3,993.3	3,978.2	3,978.0	11.8	1.6	168.30	315.5	230.1	799.3	788.7	10.62	75.254	
4,100.0	4,057.4	4,041.7	4,041.4	12.0	1.6	168.52	314.3	230.1	806.7	795.9	10.76	74.970	
4,133.8	4,091.0	4,074.7	4,074.4	12.1	1.7	168.61	313.8	230.1	810.0	799.2	10.83	74.795	
4,200.0	4,156.8	4,140.6	4,140.3	12.2	1.7	168.77	312.8	230.1	815.4	804.5	10.97	74.363	
4,232.3	4,189.0	4,173.2	4,172.9	12.3	1.7	168.84	312.3	230.1	817.5	806.5	11.03	74.123	
4,300.0	4,256.6	4,241.2	4,240.9	12.4	1.7	168.96	311.2	230.0	820.8	809.6	11.16	73.522	
4,330.7	4,287.3	4,271.9	4,271.6	12.5	1.7	169.00	310.8	230.0	821.7	810.5	11.22	73.223	
4,400.0	4,356.6	4,340.7	4,340.4	12.6	1.7	169.08	309.7	229.8	822.6	811.3	11.35	72.456	
4,429.1	4,385.7	4,369.5	4,369.2	12.6	1.8	169.10	309.3	229.8	822.5	811.1	11.41	72.109	
4,437.2	4,393.8	4,377.5	4,377.2	12.7	1.8	49.52	309.2	229.8	822.5	808.4	14.07	58.460	
4,500.0	4,456.6	4,439.8	4,439.5	12.7	1.8	49.57	308.3	229.7	821.9	807.7	14.18	57.953	
4,527.5	4,484.1	4,467.3	4,466.9	12.8	1.8	49.59	307.9	229.7	821.6	807.4	14.23	57.726	
4,600.0	4,556.6	4,539.1	4,538.8	12.9	1.8	49.65	306.8	229.8	820.9	806.6	14.37	57.136	
4,626.0	4,582.6	4,564.8	4,564.5	12.9	1.8	49.67	306.4	229.8	820.7	806.3	14.42	56.926	
4,700.0	4,656.6	4,637.6	4,637.2	13.1	1.8	49.73	305.4	230.0	820.1	805.6	14.56	56.338	
4,724.4	4,681.0	4,661.4	4,661.0	13.1	1.9	49.75	305.1	230.0	820.0	805.4	14.60	56.147	
4,800.0	4,756.6	4,733.3	4,732.9	13.2	1.9	49.81	304.3	230.3	819.6	804.9	14.75	55.579	
4,817.5	4,774.1	4,749.4	4,749.1	13.3	1.9	49.82	304.1	230.4	819.6	804.8	14.78	55.453	
4,822.8	4,779.4	4,754.4	4,754.0	13.3	1.9	49.82	304.1	230.4	819.6	804.8	14.79	55.416	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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							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		
4,900.0	4,856.6	4,826.3	4,825.9	13.4	1.9	49.87	303.8	231.0	819.9	805.0	14.93	54.900		
4,921.2	4,877.8	4,846.3	4,846.0	13.4	1.9	49.87	303.8	231.2	820.1	805.1	14.97	54.766		
5,000.0	4,956.6	4,922.0	4,921.6	13.6	1.9	49.89	304.1	232.0	820.9	805.8	15.12	54.294		
5,019.7	4,976.3	4,941.6	4,941.2	13.6	1.9	49.90	304.2	232.3	821.2	806.0	15.16	54.179		
5,100.0	5,056.6	5,021.8	5,021.4	13.7	1.9	49.92	304.6	233.2	822.2	806.9	15.31	53.716		
5,118.1	5,074.7	5,040.0	5,039.6	13.8	1.9	49.92	304.7	233.4	822.4	807.0	15.34	53.612		
5,200.0	5,156.6	5,122.9	5,122.6	13.9	1.9	49.94	305.2	234.3	823.4	807.9	15.49	53.150		
5,216.5	5,173.1	5,140.1	5,139.7	13.9	1.9	49.94	305.3	234.5	823.5	808.0	15.52	53.058		
5,300.0	5,256.6	5,226.5	5,226.1	14.1	1.9	49.93	305.8	235.0	824.2	808.5	15.67	52.588		
5,314.9	5,271.5	5,241.8	5,241.4	14.1	1.9	49.93	305.9	235.0	824.3	808.6	15.70	52.503		
5,400.0	5,356.6	5,328.3	5,327.9	14.2	1.9	49.93	306.2	235.3	824.8	808.9	15.85	52.022		
5,413.4	5,370.0	5,341.7	5,341.3	14.3	1.9	49.93	306.3	235.3	824.8	808.9	15.88	51.948		
5,500.0	5,456.6	5,428.3	5,427.9	14.4	1.9	49.91	306.7	235.5	825.2	809.1	16.03	51.471		
5,511.8	5,468.4	5,439.9	5,439.5	14.4	1.9	49.91	306.8	235.5	825.2	809.2	16.05	51.407		
5,600.0	5,556.6	5,527.6	5,527.2	14.6	1.9	49.88	307.4	235.6	825.7	809.5	16.21	50.942		
5,610.2	5,566.8	5,538.0	5,537.6	14.6	1.9	49.87	307.5	235.6	825.8	809.5	16.23	50.889		
5,700.0	5,656.6	5,629.0	5,628.6	14.8	1.9	49.85	308.0	235.6	826.1	809.8	16.39	50.416		
5,708.6	5,665.2	5,637.7	5,637.3	14.8	1.9	49.84	308.1	235.6	826.2	809.8	16.40	50.371		
5,800.0	5,756.6	5,729.9	5,729.5	14.9	1.9	49.83	308.4	235.7	826.4	809.9	16.57	49.886		
5,807.1	5,763.7	5,736.9	5,736.5	14.9	1.9	49.82	308.5	235.7	826.5	809.9	16.58	49.849		
5,900.0	5,856.6	5,831.0	5,830.6	15.1	1.8	49.82	308.7	235.8	826.7	809.9	16.75	49.362		
5,905.5	5,862.1	5,836.7	5,836.3	15.1	1.8	49.82	308.7	235.8	826.7	809.9	16.76	49.334		
6,000.0	5,956.6	5,933.9	5,933.6	15.3	1.8	49.80	308.8	235.6	826.6	809.7	16.93	48.837		
6,003.9	5,960.5	5,937.9	5,937.5	15.3	1.8	49.80	308.8	235.5	826.6	809.6	16.93	48.815		
6,100.0	6,056.6	6,036.9	6,036.5	15.5	1.9	49.78	308.8	235.1	826.2	809.1	17.11	48.287		
6,102.3	6,058.9	6,039.4	6,039.0	15.5	1.9	49.78	308.8	235.1	826.2	809.1	17.11	48.274		
6,200.0	6,156.6	6,141.8	6,141.4	15.7	1.9	49.78	308.1	234.4	825.3	808.0	17.30	47.697		
6,200.8	6,157.4	6,142.6	6,142.2	15.7	1.9	49.78	308.1	234.4	825.3	808.0	17.30	47.693		
6,272.2	6,228.8	6,216.3	6,215.9	15.8	1.9	49.79	307.4	233.7	824.3	806.9	17.45	47.250		
6,299.2	6,255.8	6,243.2	6,242.8	15.8	1.9	-40.27	307.1	233.4	823.5	808.1	15.39	53.521		
6,300.0	6,256.6	6,244.0	6,243.6	15.8	1.9	-40.27	307.1	233.4	823.5	808.1	15.39	53.514		
6,350.0	6,306.4	6,293.7	6,293.3	15.9	1.9	-40.62	306.6	232.9	820.0	804.5	15.49	52.919		
6,397.6	6,353.6	6,342.5	6,342.1	15.9	1.9	-41.24	306.1	232.3	814.1	798.5	15.62	52.112		
6,400.0	6,355.9	6,344.9	6,344.5	15.9	1.9	-41.28	306.0	232.3	813.8	798.1	15.63	52.066		
6,450.0	6,404.8	6,395.7	6,395.3	15.9	1.9	-42.26	305.3	231.7	804.9	789.1	15.78	50.994		
6,496.0	6,449.0	6,440.7	6,440.3	16.0	2.0	-43.46	304.6	231.2	794.5	778.5	15.94	49.852		
6,500.0	6,452.8	6,444.5	6,444.1	16.0	2.0	-43.57	304.5	231.1	793.5	777.5	15.95	49.748		
6,550.0	6,499.7	6,492.1	6,491.6	15.9	2.0	-45.22	303.6	230.6	779.7	763.6	16.12	48.359		
6,594.5	6,540.3	6,535.9	6,535.5	15.9	2.0	-47.07	302.7	230.0	765.5	749.3	16.29	47.004		
6,600.0	6,545.3	6,541.3	6,540.9	15.9	2.0	-47.32	302.6	229.9	763.7	747.3	16.31	46.829		
6,650.0	6,589.3	6,589.3	6,588.8	15.9	2.0	-49.86	301.3	229.1	745.4	728.9	16.50	45.169		
6,692.9	6,625.7	6,628.2	6,627.7	15.9	2.0	-52.38	300.2	228.3	728.3	711.6	16.68	43.650		
6,700.0	6,631.6	6,634.5	6,633.9	15.9	2.0	-52.82	300.1	228.2	725.3	708.6	16.71	43.394		
6,750.0	6,671.9	6,677.1	6,676.5	15.9	2.0	-56.20	298.7	227.1	703.7	686.7	16.95	41.522		
6,791.3	6,703.6	6,710.5	6,709.9	15.9	2.0	-59.31	297.6	226.1	684.9	667.7	17.16	39.914		
6,800.0	6,710.1	6,717.4	6,716.8	15.9	2.0	-60.00	297.4	225.9	680.9	663.7	17.20	39.578		
6,850.0	6,745.9	6,755.3	6,754.7	16.0	2.1	-64.16	296.0	224.6	657.3	639.9	17.48	37.598		
6,889.7	6,772.6	6,783.2	6,782.5	16.1	2.1	-67.63	295.0	223.6	638.5	620.7	17.73	36.019		
6,900.0	6,779.2	6,790.0	6,789.3	16.1	2.1	-68.55	294.7	223.3	633.6	615.8	17.78	35.627		
6,950.0	6,809.8	6,822.4	6,821.6	16.3	2.1	-73.10	293.3	222.0	610.2	592.1	18.11	33.698		
6,988.2	6,831.3	6,845.1	6,844.3	16.4	2.1	-76.55	292.3	221.0	592.9	574.5	18.38	32.258		
7,000.0	6,837.6	6,851.7	6,850.9	16.5	2.1	-77.60	291.9	220.7	587.7	569.2	18.46	31.838		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
7,050.0	6,862.5	6,877.5	6,876.6	16.9	2.1	-81.83	290.6	219.6	566.9	548.0	18.86	30.057	
7,086.6	6,878.7	6,894.0	6,893.1	17.2	2.1	-84.66	289.6	218.9	553.0	533.8	19.21	28.795	
7,100.0	6,884.2	6,899.6	6,898.6	17.3	2.1	-85.63	289.3	218.6	548.4	529.0	19.33	28.364	
7,150.0	6,902.7	6,915.8	6,914.8	17.8	2.1	-88.61	288.3	217.9	533.0	513.1	19.90	26.785	
7,185.0	6,913.8	6,925.2	6,924.2	18.3	2.1	-90.32	287.8	217.4	524.5	504.2	20.36	25.761	
7,200.0	6,918.0	6,928.7	6,927.7	18.5	2.1	-90.95	287.6	217.3	521.5	501.0	20.56	25.367	
7,250.0	6,929.9	6,938.3	6,937.2	19.2	2.1	-92.57	287.0	216.8	514.5	493.2	21.30	24.153	
7,283.4	6,936.0	6,942.8	6,941.7	19.7	2.1	-93.23	286.7	216.6	512.4	490.6	21.84	23.463	
7,297.3	6,938.0	6,944.2	6,943.1	20.0	2.1	-93.40	286.6	216.6	512.2	490.2	22.06	23.218	
7,300.0	6,938.4	6,944.4	6,943.4	20.0	2.1	-93.43	286.6	216.6	512.3	490.1	22.11	23.172	
7,350.0	6,943.4	6,947.2	6,946.1	20.9	2.1	-93.51	286.5	216.4	515.1	492.1	22.96	22.431	
7,381.9	6,944.8	6,947.1	6,946.0	21.4	2.1	-93.15	286.5	216.4	519.5	495.9	23.54	22.072	
7,403.7	6,945.0	6,946.3	6,945.2	21.8	2.1	-92.71	286.5	216.5	523.6	499.7	23.93	21.884	
7,480.3	6,944.3	6,942.1	6,941.1	23.3	2.1	-92.25	286.8	216.7	544.9	519.5	25.41	21.447	
7,500.0	6,944.1	6,941.0	6,940.0	23.7	2.1	-92.13	286.8	216.7	552.0	526.2	25.79	21.403	
7,578.7	6,943.4	6,936.8	6,935.7	25.4	2.1	-91.65	287.1	216.9	586.0	558.6	27.43	21.361 SF	
7,600.0	6,943.2	6,935.6	6,934.6	25.8	2.1	-91.52	287.1	217.0	596.7	568.8	27.88	21.402	
7,677.1	6,942.5	6,931.4	6,930.4	27.5	2.1	-91.05	287.4	217.1	639.7	610.1	29.59	21.621	
7,700.0	6,942.3	6,930.2	6,929.2	28.0	2.1	-90.92	287.5	217.2	653.7	623.6	30.09	21.721	
7,775.6	6,941.6	6,926.0	6,925.0	29.8	2.1	-90.46	287.7	217.4	703.1	671.2	31.85	22.077	
7,800.0	6,941.4	6,924.7	6,923.7	30.3	2.1	-90.31	287.8	217.5	720.0	687.6	32.41	22.214	
7,874.0	6,940.7	6,920.7	6,919.7	32.1	2.1	-89.86	288.0	217.6	773.8	739.6	34.19	22.634	
7,900.0	6,940.5	6,919.2	6,918.3	32.7	2.1	-89.70	288.1	217.7	793.5	758.6	34.81	22.794	
7,972.4	6,939.8	6,915.3	6,914.3	34.5	2.1	-89.26	288.4	217.9	850.0	813.4	36.59	23.230	
8,000.0	6,939.6	6,913.8	6,912.8	35.2	2.1	-89.09	288.4	218.0	872.1	834.9	37.27	23.402	
8,070.8	6,938.9	6,909.9	6,908.9	37.0	2.1	-88.66	288.7	218.1	930.3	891.3	39.04	23.830	
8,100.0	6,938.7	6,908.3	6,907.3	37.7	2.1	-88.48	288.8	218.2	954.8	915.0	39.77	24.007	
8,169.3	6,938.0	6,904.5	6,903.5	39.5	2.1	-88.06	289.0	218.4	1,013.9	972.3	41.53	24.411	
8,200.0	6,937.7	6,902.8	6,901.8	40.3	2.1	-87.87	289.1	218.5	1,040.5	998.2	42.31	24.589	
8,267.7	6,937.1	6,899.0	6,898.1	42.0	2.1	-87.45	289.3	218.6	1,099.8	1,055.8	44.05	24.965	
8,300.0	6,936.8	6,897.1	6,896.2	42.8	2.1	-87.25	289.4	218.7	1,128.5	1,083.6	44.88	25.142	
8,366.1	6,936.2	6,893.3	6,892.4	44.6	2.1	-86.83	289.7	218.9	1,187.7	1,141.1	46.60	25.487	
8,400.0	6,935.9	6,891.4	6,890.5	45.5	2.1	-86.61	289.8	219.0	1,218.3	1,170.8	47.48	25.660	
8,464.5	6,935.3	6,887.7	6,886.8	47.2	2.1	-86.21	290.0	219.1	1,277.1	1,227.9	49.16	25.976	
8,500.0	6,935.0	6,885.7	6,884.8	48.1	2.1	-85.99	290.1	219.2	1,309.6	1,259.5	50.09	26.145	
8,563.0	6,934.5	6,882.2	6,881.3	49.8	2.1	-85.60	290.3	219.4	1,367.7	1,315.9	51.74	26.432	
8,600.0	6,934.1	6,880.1	6,879.3	50.7	2.1	-85.38	290.4	219.5	1,402.0	1,349.3	52.71	26.597	
8,661.4	6,933.6	6,876.7	6,875.9	52.4	2.1	-85.00	290.6	219.6	1,459.3	1,405.0	54.33	26.859	
8,700.0	6,933.2	6,874.6	6,873.7	53.4	2.1	-84.77	290.7	219.7	1,495.4	1,440.1	55.35	27.019	
8,759.8	6,932.7	6,871.3	6,870.5	55.0	2.1	-84.41	290.9	219.9	1,551.7	1,494.8	56.93	27.257	
8,800.0	6,932.3	6,869.1	6,868.3	56.1	2.1	-84.17	291.0	220.0	1,589.6	1,531.6	57.99	27.413	
8,858.2	6,931.8	6,866.0	6,865.1	57.7	2.1	-83.83	291.2	220.1	1,644.8	1,585.3	59.53	27.630	
8,900.0	6,931.4	6,863.7	6,862.9	58.8	2.1	-83.58	291.3	220.2	1,684.5	1,623.8	60.63	27.782	
8,956.7	6,930.9	6,860.6	6,859.8	60.3	2.1	-83.25	291.5	220.4	1,738.5	1,676.3	62.13	27.980	
9,000.0	6,930.5	6,858.3	6,857.5	61.5	2.1	-83.00	291.6	220.5	1,779.9	1,716.6	63.28	28.128	
9,055.1	6,930.0	6,855.4	6,854.6	63.0	2.1	-82.68	291.7	220.6	1,832.6	1,767.9	64.74	28.309	
9,100.0	6,929.6	6,853.0	6,852.2	64.2	2.1	-82.42	291.9	220.7	1,875.7	1,809.8	65.92	28.453	
9,153.5	6,929.1	6,850.2	6,849.4	65.6	2.1	-82.12	292.0	220.8	1,927.2	1,859.8	67.34	28.619	
9,200.0	6,928.7	6,847.8	6,847.0	66.9	2.1	-81.86	292.1	220.9	1,972.0	1,903.4	68.57	28.760	
9,251.9	6,928.2	6,845.1	6,844.3	68.3	2.1	-81.57	292.3	221.0	2,022.1	1,952.2	69.94	28.913	
9,300.0	6,927.8	6,842.6	6,841.8	69.6	2.1	-81.30	292.4	221.1	2,068.6	1,997.4	71.20	29.051	
9,350.4	6,927.3	6,840.0	6,839.2	71.0	2.1	-81.02	292.5	221.3	2,117.3	2,044.8	72.53	29.191	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
9,400.0	6,926.9	6,837.4	6,836.6	72.4	2.1	-80.75	292.6	221.4	2,165.4	2,091.6	73.84	29.326	
9,448.8	6,926.4	6,834.9	6,834.2	73.7	2.1	-80.48	292.8	221.5	2,212.8	2,137.7	75.12	29.456	
9,500.0	6,926.0	6,832.3	6,831.6	75.1	2.1	-80.21	292.9	221.6	2,262.6	2,186.1	76.47	29.589	
9,547.2	6,925.5	6,829.9	6,829.2	76.4	2.1	-79.95	293.0	221.7	2,308.6	2,230.8	77.71	29.708	
9,600.0	6,925.1	6,827.3	6,826.5	77.9	2.1	-79.67	293.1	221.8	2,360.0	2,280.9	79.09	29.839	
9,645.6	6,924.6	6,825.0	6,824.3	79.1	2.1	-79.43	293.2	221.9	2,404.5	2,324.2	80.28	29.949	
9,700.0	6,924.1	6,822.3	6,821.6	80.6	2.1	-79.14	293.3	222.0	2,457.6	2,375.8	81.70	30.079	
9,744.1	6,923.7	6,820.1	6,819.4	81.8	2.1	-78.91	293.4	222.1	2,500.6	2,417.8	82.85	30.181	
9,800.0	6,923.2	6,817.4	6,816.6	83.4	2.1	-78.63	293.6	222.2	2,555.3	2,471.0	84.31	30.309	
9,842.5	6,922.9	6,815.3	6,814.5	84.5	2.1	-78.41	293.7	222.3	2,596.9	2,511.5	85.41	30.403	
9,900.0	6,922.3	6,812.5	6,811.7	86.1	2.1	-78.11	293.8	222.4	2,653.2	2,566.3	86.91	30.530	
9,940.9	6,922.0	6,810.5	6,809.8	87.2	2.1	-77.91	293.9	222.5	2,693.3	2,605.4	87.97	30.618	
10,000.0	6,921.4	6,807.6	6,806.9	88.9	2.1	-77.61	294.0	222.6	2,751.3	2,661.8	89.49	30.743	
10,039.3	6,921.1	6,805.7	6,805.0	90.0	2.1	-77.41	294.1	222.7	2,789.9	2,699.4	90.51	30.825	
10,100.0	6,920.5	6,802.9	6,802.1	91.6	2.1	-77.11	294.2	222.8	2,849.5	2,757.4	92.07	30.949	
10,137.8	6,920.2	6,800.0	6,799.3	92.7	2.1	-76.82	294.3	222.9	2,886.6	2,793.6	93.01	31.035	
10,200.0	6,919.6	6,800.0	6,799.3	94.4	2.1	-76.82	294.3	222.9	2,947.7	2,853.1	94.69	31.131	
10,236.2	6,919.3	6,800.0	6,799.3	95.4	2.1	-76.82	294.3	222.9	2,983.4	2,887.7	95.67	31.185	
10,300.0	6,918.7	6,800.0	6,799.3	97.2	2.1	-76.82	294.3	222.9	3,046.2	2,948.8	97.39	31.277	
10,334.6	6,918.4	6,800.0	6,799.3	98.1	2.1	-76.82	294.3	222.9	3,080.2	2,981.9	98.33	31.326	
10,400.0	6,917.8	6,800.0	6,799.3	99.9	2.1	-76.82	294.3	222.9	3,144.7	3,044.6	100.10	31.417	
10,433.0	6,917.5	6,800.0	6,799.3	100.9	2.1	-76.82	294.3	222.9	3,177.2	3,076.2	100.99	31.461	
10,500.0	6,916.9	6,787.3	6,786.6	102.7	2.1	-75.51	294.8	223.4	3,243.2	3,140.8	102.38	31.680	
10,531.5	6,916.6	6,786.1	6,785.5	103.6	2.1	-75.39	294.9	223.5	3,274.3	3,171.1	103.18	31.733	
10,600.0	6,916.0	6,783.7	6,783.0	105.5	2.1	-75.14	294.9	223.6	3,341.9	3,236.9	104.94	31.846	
10,629.9	6,915.7	6,782.6	6,781.9	106.3	2.1	-75.03	295.0	223.6	3,371.4	3,265.7	105.70	31.895	
10,700.0	6,915.1	6,780.1	6,779.5	108.3	2.1	-74.78	295.1	223.7	3,440.6	3,333.1	107.49	32.008	
10,728.3	6,914.8	6,779.2	6,778.5	109.1	2.1	-74.68	295.1	223.8	3,468.6	3,360.4	108.21	32.053	
10,800.0	6,914.2	6,776.7	6,776.0	111.0	2.1	-74.43	295.2	223.8	3,539.4	3,429.4	110.04	32.165	
10,826.7	6,913.9	6,775.7	6,775.1	111.8	2.1	-74.34	295.3	223.9	3,565.9	3,455.1	110.72	32.206	
10,900.0	6,913.3	6,773.2	6,772.6	113.8	2.1	-74.09	295.4	224.0	3,638.3	3,525.7	112.58	32.317	
10,925.2	6,913.1	6,772.4	6,771.7	114.5	2.1	-74.00	295.4	224.0	3,663.2	3,550.0	113.22	32.355	
11,000.0	6,912.4	6,769.9	6,769.2	116.6	2.1	-73.75	295.5	224.1	3,737.2	3,622.1	115.11	32.465	
11,023.6	6,912.2	6,769.1	6,768.4	117.3	2.1	-73.67	295.5	224.1	3,760.5	3,644.8	115.71	32.500	
11,100.0	6,911.5	6,766.6	6,765.9	119.4	2.1	-73.42	295.6	224.2	3,836.2	3,718.5	117.64	32.610	
11,122.0	6,911.3	6,765.9	6,765.2	120.0	2.1	-73.35	295.6	224.3	3,858.0	3,739.8	118.19	32.641	
11,200.0	6,910.6	6,763.3	6,762.7	122.2	2.1	-73.10	295.7	224.3	3,935.2	3,815.0	120.16	32.750	
11,220.4	6,910.4	6,762.7	6,762.0	122.7	2.1	-73.03	295.8	224.4	3,955.4	3,834.8	120.67	32.779	
11,300.0	6,909.7	6,760.1	6,759.5	125.0	2.1	-72.78	295.9	224.5	4,034.2	3,911.6	122.67	32.887	
11,318.9	6,909.5	6,759.5	6,758.9	125.5	2.1	-72.72	295.9	224.5	4,052.9	3,929.8	123.14	32.913	
11,400.0	6,908.8	6,757.0	6,756.3	127.7	2.1	-72.47	296.0	224.6	4,133.3	4,008.2	125.17	33.021	
11,417.3	6,908.6	6,756.4	6,755.8	128.2	2.1	-72.41	296.0	224.6	4,150.5	4,024.9	125.60	33.044	
11,500.0	6,907.9	6,753.9	6,753.2	130.5	2.1	-72.16	296.1	224.7	4,232.5	4,104.8	127.67	33.152	
11,515.7	6,907.7	6,753.4	6,752.8	131.0	2.1	-72.11	296.1	224.7	4,248.1	4,120.0	128.06	33.172	
11,600.0	6,907.0	6,750.8	6,750.2	133.3	2.1	-71.86	296.2	224.8	4,331.7	4,201.5	130.16	33.280	
11,614.1	6,906.8	6,750.4	6,749.8	133.7	2.0	-71.82	296.2	224.8	4,345.7	4,215.2	130.51	33.298	
11,700.0	6,906.0	6,747.8	6,747.2	136.1	2.0	-71.57	296.3	224.9	4,430.9	4,298.2	132.64	33.405	
11,712.6	6,905.9	6,747.5	6,746.8	136.5	2.0	-71.53	296.3	224.9	4,443.4	4,310.4	132.95	33.421	
11,800.0	6,905.1	6,744.9	6,744.2	138.9	2.0	-71.28	296.4	225.0	4,530.1	4,395.0	135.12	33.528	
11,811.0	6,905.0	6,744.5	6,743.9	139.2	2.0	-71.25	296.4	225.0	4,541.0	4,405.7	135.39	33.541	
11,900.0	6,904.2	6,742.0	6,741.3	141.7	2.0	-71.00	296.5	225.1	4,629.4	4,491.8	137.59	33.648	
11,909.4	6,904.2	6,741.7	6,741.1	141.9	2.0	-70.97	296.5	225.1	4,638.8	4,500.9	137.82	33.659	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
12,000.0	6,903.3	6,739.1	6,738.5	144.5	2.0	-70.72	296.6	225.2	4,728.7	4,588.7	140.05	33.765	
12,007.8	6,903.3	6,738.9	6,738.3	144.7	2.0	-70.70	296.6	225.2	4,736.5	4,596.3	140.24	33.774	
12,100.0	6,902.4	6,736.3	6,735.7	147.3	2.0	-70.45	296.7	225.3	4,828.0	4,685.5	142.50	33.880	
12,106.3	6,902.4	6,736.1	6,735.5	147.4	2.0	-70.44	296.7	225.3	4,834.3	4,691.6	142.66	33.887	
12,200.0	6,901.5	6,733.5	6,732.9	150.1	2.0	-70.19	296.8	225.4	4,927.4	4,782.4	144.95	33.993	
12,204.7	6,901.5	6,733.4	6,732.8	150.2	2.0	-70.17	296.8	225.4	4,932.1	4,787.0	145.07	33.999	
12,300.0	6,900.6	6,730.8	6,730.1	152.9	2.0	-69.92	296.9	225.5	5,026.8	4,879.4	147.39	34.104	
12,303.1	6,900.6	6,730.7	6,730.1	152.9	2.0	-69.92	296.9	225.5	5,029.9	4,882.4	147.47	34.108	
12,400.0	6,899.7	6,728.1	6,727.5	155.6	2.0	-69.67	297.0	225.6	5,126.2	4,976.3	149.83	34.213	
12,401.5	6,899.7	6,728.0	6,727.4	155.7	2.0	-69.66	297.0	225.6	5,127.7	4,977.8	149.87	34.215	
12,500.0	6,898.8	6,725.4	6,724.8	158.4	2.0	-69.42	297.1	225.6	5,225.6	5,073.3	152.26	34.320	
12,598.4	6,897.9	6,722.8	6,722.2	161.2	2.0	-69.17	297.2	225.7	5,323.4	5,168.8	154.64	34.424	
12,600.0	6,897.9	6,722.8	6,722.2	161.2	2.0	-69.17	297.2	225.7	5,325.0	5,170.3	154.68	34.426	
12,696.8	6,897.0	6,720.3	6,719.7	163.9	2.0	-68.93	297.3	225.8	5,421.3	5,264.3	157.02	34.526	
12,700.0	6,897.0	6,720.2	6,719.6	164.0	2.0	-68.93	297.3	225.8	5,424.5	5,267.4	157.10	34.529	
12,795.2	6,896.1	6,700.0	6,699.4	166.7	2.0	-67.05	298.0	226.4	5,519.3	5,361.4	157.86	34.963	
12,800.0	6,896.1	6,700.0	6,699.4	166.8	2.0	-67.05	298.0	226.4	5,524.0	5,366.0	157.98	34.966	
12,893.7	6,895.3	6,700.0	6,699.4	169.4	2.0	-67.05	298.0	226.4	5,617.2	5,456.8	160.41	35.017	
12,900.0	6,895.2	6,700.0	6,699.4	169.6	2.0	-67.05	298.0	226.4	5,623.5	5,462.9	160.58	35.020	
12,992.1	6,894.4	6,700.0	6,699.4	172.2	2.0	-67.05	298.0	226.4	5,715.1	5,552.1	162.97	35.069	
13,000.0	6,894.3	6,700.0	6,699.4	172.4	2.0	-67.05	298.0	226.4	5,723.0	5,559.8	163.17	35.074	
13,090.5	6,893.5	6,700.0	6,699.4	175.0	2.0	-67.05	298.0	226.4	5,813.1	5,647.5	165.52	35.120	
13,100.0	6,893.4	6,700.0	6,699.4	175.2	2.0	-67.05	298.0	226.4	5,822.5	5,656.7	165.76	35.125	
13,188.9	6,892.6	6,700.0	6,699.4	177.7	2.0	-67.05	298.0	226.4	5,911.0	5,742.9	168.07	35.170	
13,200.0	6,892.5	6,700.0	6,699.4	178.0	2.0	-67.05	298.0	226.4	5,922.0	5,753.7	168.36	35.175	
13,287.4	6,891.7	6,700.0	6,699.4	180.5	2.0	-67.05	298.0	226.4	6,009.0	5,838.4	170.63	35.217	
13,300.0	6,891.6	6,700.0	6,699.4	180.8	2.0	-67.05	298.0	226.4	6,021.6	5,850.6	170.95	35.223	
13,385.8	6,890.8	6,700.0	6,699.4	183.2	2.0	-67.05	298.0	226.4	6,107.0	5,933.8	173.18	35.264	
13,400.0	6,890.7	6,700.0	6,699.4	183.6	2.0	-67.05	298.0	226.4	6,121.1	5,947.6	173.55	35.270	
13,484.2	6,889.9	6,700.0	6,699.4	186.0	2.0	-67.05	298.0	226.4	6,205.0	6,029.3	175.73	35.309	
13,500.0	6,889.8	6,700.0	6,699.4	186.4	2.0	-67.05	298.0	226.4	6,220.7	6,044.6	176.14	35.316	
13,582.6	6,889.0	6,700.0	6,699.4	188.7	2.0	-67.05	298.0	226.4	6,303.0	6,124.7	178.29	35.353	
13,600.0	6,888.9	6,700.0	6,699.4	189.2	2.0	-67.05	298.0	226.4	6,320.3	6,141.6	178.74	35.360	
13,681.1	6,888.1	6,700.0	6,699.4	191.5	2.0	-67.05	298.0	226.4	6,401.0	6,220.2	180.84	35.395	
13,700.0	6,888.0	6,700.0	6,699.4	192.0	2.0	-67.05	298.0	226.4	6,419.9	6,238.6	181.34	35.403	
13,779.5	6,887.3	6,700.0	6,699.4	194.2	2.0	-67.05	298.0	226.4	6,499.1	6,315.7	183.40	35.437	
13,800.0	6,887.1	6,700.0	6,699.4	194.8	2.0	-67.05	298.0	226.4	6,519.5	6,335.6	183.93	35.445	
13,877.9	6,886.4	6,700.0	6,699.4	197.0	2.0	-67.05	298.0	226.4	6,597.1	6,411.2	185.96	35.477	
13,900.0	6,886.2	6,700.0	6,699.4	197.6	2.0	-67.05	298.0	226.4	6,619.1	6,432.6	186.53	35.486	
13,976.3	6,885.5	6,700.0	6,699.4	199.7	2.0	-67.05	298.0	226.4	6,695.2	6,506.7	188.51	35.516	
14,000.0	6,885.3	6,700.0	6,699.4	200.4	2.0	-67.05	298.0	226.4	6,718.8	6,529.6	189.13	35.525	
14,074.8	6,884.6	6,700.0	6,699.4	202.5	2.0	-67.05	298.0	226.4	6,793.3	6,602.2	191.07	35.554	
14,100.0	6,884.4	6,700.0	6,699.4	203.2	2.0	-67.05	298.0	226.4	6,818.4	6,626.7	191.72	35.564	
14,173.2	6,883.7	6,700.0	6,699.4	205.3	2.0	-67.05	298.0	226.4	6,891.4	6,697.7	193.63	35.591	
14,200.0	6,883.5	6,700.0	6,699.4	206.0	2.0	-67.06	298.0	226.4	6,918.1	6,723.8	194.32	35.601	
14,271.6	6,882.8	6,700.0	6,699.4	208.0	2.0	-67.06	298.0	226.4	6,989.5	6,793.3	196.18	35.627	
14,300.0	6,882.6	6,700.0	6,699.4	208.8	2.0	-67.06	298.0	226.4	7,017.7	6,820.8	196.92	35.638	
14,370.0	6,881.9	6,680.1	6,679.6	210.8	2.0	-65.26	298.6	227.0	7,087.5	6,891.1	196.42	36.083	
14,400.0	6,881.7	6,679.4	6,678.9	211.6	2.0	-65.20	298.7	227.0	7,117.4	6,920.3	197.11	36.108	
14,468.5	6,881.0	6,677.9	6,677.3	213.5	2.0	-65.07	298.7	227.1	7,185.6	6,986.9	198.68	36.167	
14,500.0	6,880.8	6,677.2	6,676.6	214.4	2.0	-65.00	298.7	227.1	7,217.1	7,017.6	199.40	36.193	
14,566.9	6,880.2	6,675.7	6,675.1	216.3	2.0	-64.87	298.8	227.1	7,283.7	7,082.8	200.93	36.250	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,584.2	6,880.0	6,675.3	6,674.8	216.8	2.0	-64.84	298.8	227.1	7,300.9	7,099.6	201.33	36.264	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	77.10	360.7	1,574.4	1,615.4				
98.4	98.4	70.7	70.7	0.1	0.0	77.10	360.7	1,574.4	1,615.2	1,615.1	0.12	N/A	
100.0	100.0	72.2	72.2	0.1	0.0	77.10	360.7	1,574.4	1,615.2	1,615.1	0.12	N/A	
196.8	196.8	164.8	164.8	0.3	0.2	77.10	360.6	1,574.8	1,615.5	1,615.1	0.46	3,526.878	
200.0	200.0	167.8	167.8	0.3	0.2	77.10	360.6	1,574.8	1,615.5	1,615.1	0.47	3,436.311	
295.3	295.3	263.7	263.7	0.5	0.3	77.11	360.6	1,575.3	1,616.0	1,615.2	0.79	2,041.557	
300.0	300.0	268.6	268.6	0.5	0.3	77.11	360.6	1,575.3	1,616.0	1,615.2	0.81	2,004.250	
393.7	393.7	363.2	363.2	0.7	0.3	77.11	360.5	1,575.6	1,616.3	1,615.3	1.08	1,500.220	
400.0	400.0	369.5	369.5	0.8	0.3	77.11	360.5	1,575.6	1,616.4	1,615.3	1.09	1,476.209	
492.1	492.1	460.2	460.2	1.0	0.4	77.13	360.2	1,576.1	1,616.7	1,615.4	1.35	1,194.920	
500.0	500.0	467.9	467.9	1.0	0.4	77.13	360.2	1,576.1	1,616.7	1,615.4	1.38	1,175.731	
590.5	590.5	557.1	557.1	1.2	0.5	77.14	359.9	1,576.6	1,617.2	1,615.6	1.62	996.312	
600.0	600.0	566.4	566.4	1.2	0.5	77.14	359.9	1,576.7	1,617.2	1,615.6	1.65	980.916	
689.0	689.0	657.4	657.4	1.4	0.5	77.15	359.9	1,577.1	1,617.7	1,615.8	1.89	855.945	
700.0	700.0	668.9	668.9	1.4	0.5	77.15	359.9	1,577.2	1,617.7	1,615.8	1.92	842.610	
787.4	787.4	757.5	757.5	1.6	0.6	77.15	359.7	1,577.5	1,618.0	1,615.8	2.15	751.523	
800.0	800.0	770.1	770.1	1.7	0.6	77.16	359.7	1,577.5	1,618.0	1,615.9	2.19	740.109	
885.8	885.8	853.1	853.1	1.9	0.6	77.17	359.4	1,577.9	1,618.3	1,615.9	2.41	671.422	
900.0	900.0	866.6	866.6	1.9	0.6	77.17	359.4	1,578.0	1,618.4	1,616.0	2.45	661.355	
984.2	984.2	954.8	954.7	2.1	0.6	77.18	359.2	1,578.5	1,618.8	1,616.2	2.66	607.810	
1,000.0	1,000.0	972.3	972.3	2.1	0.7	77.18	359.2	1,578.5	1,618.9	1,616.2	2.70	598.808	
1,082.7	1,082.7	1,058.1	1,058.1	2.3	0.7	77.19	358.9	1,578.6	1,618.9	1,616.0	2.92	554.751	
1,100.0	1,100.0	1,075.5	1,075.5	2.3	0.7	77.19	358.8	1,578.6	1,618.9	1,615.9	2.96	546.257	
1,147.6	1,147.6	1,122.7	1,122.6	2.4	0.7	77.20	358.6	1,578.6	1,618.9	1,615.8	3.09	524.283	
1,181.1	1,181.1	1,155.3	1,155.3	2.5	0.7	77.21	358.5	1,578.7	1,618.9	1,615.7	3.17	509.954	
1,200.0	1,200.0	1,173.8	1,173.7	2.6	0.7	77.21	358.4	1,578.7	1,618.9	1,615.7	3.22	502.204	
1,279.5	1,279.5	1,251.2	1,251.1	2.7	0.8	77.23	358.0	1,578.9	1,619.0	1,615.6	3.43	472.169	
1,300.0	1,300.0	1,271.1	1,271.0	2.8	0.8	77.23	357.9	1,579.0	1,619.1	1,615.6	3.48	465.032	
1,377.9	1,377.9	1,348.4	1,348.4	3.0	0.8	77.25	357.5	1,579.3	1,619.3	1,615.6	3.68	439.721	
1,400.0	1,400.0	1,370.5	1,370.5	3.0	0.8	77.25	357.4	1,579.4	1,619.3	1,615.6	3.74	433.052	
1,476.4	1,476.4	1,445.7	1,445.7	3.2	0.8	77.27	357.0	1,579.7	1,619.6	1,615.6	3.93	411.595	
1,500.0	1,500.0	1,468.7	1,468.6	3.2	0.9	77.27	356.9	1,579.8	1,619.6	1,615.7	4.00	405.416	
1,574.8	1,574.8	1,544.0	1,544.0	3.4	0.9	77.28	356.6	1,580.2	1,620.0	1,615.8	4.19	386.994	
1,600.0	1,600.0	1,570.1	1,570.0	3.5	0.9	77.29	356.5	1,580.3	1,620.0	1,615.8	4.25	381.146	
1,650.0	1,650.0	1,620.8	1,620.8	3.6	0.9	77.29	356.4	1,580.5	1,620.2	1,615.8	4.38	370.078	
1,673.2	1,673.2	1,643.8	1,643.8	3.6	0.9	-163.12	356.3	1,580.6	1,620.3	1,615.8	4.48	362.009	
1,700.0	1,700.0	1,670.3	1,670.3	3.7	0.9	-163.12	356.2	1,580.7	1,620.7	1,616.2	4.54	357.043	
1,771.6	1,771.6	1,740.8	1,740.8	3.8	1.0	-163.11	356.0	1,581.0	1,623.0	1,618.3	4.70	345.586	
1,800.0	1,799.9	1,768.6	1,768.5	3.9	1.0	-163.12	355.9	1,581.1	1,624.4	1,619.6	4.76	341.355	
1,870.1	1,869.9	1,837.9	1,837.9	4.0	1.0	-163.12	355.6	1,581.4	1,629.0	1,624.1	4.92	331.284	
1,900.0	1,899.7	1,867.8	1,867.7	4.1	1.0	-163.13	355.5	1,581.6	1,631.5	1,626.5	4.99	327.280	
1,968.5	1,967.8	1,933.7	1,933.6	4.2	1.0	-163.14	355.2	1,582.0	1,638.3	1,633.2	5.14	318.475	
2,000.0	1,999.1	1,963.0	1,962.9	4.3	1.1	-163.15	355.1	1,582.2	1,642.0	1,636.8	5.22	314.752	
2,066.9	2,065.5	2,026.4	2,026.4	4.4	1.1	-163.17	354.8	1,582.8	1,651.1	1,645.7	5.38	307.043	
2,100.0	2,098.2	2,058.6	2,058.6	4.5	1.1	-163.18	354.6	1,583.1	1,656.2	1,650.7	5.46	303.512	
2,165.3	2,162.6	2,121.2	2,121.1	4.7	1.1	-163.20	354.2	1,583.8	1,667.2	1,661.6	5.62	296.696	
2,200.0	2,196.6	2,153.2	2,153.2	4.7	1.1	-163.21	354.0	1,584.2	1,673.7	1,668.0	5.70	293.410	
2,249.9	2,245.5	2,200.0	2,200.0	4.9	1.1	-163.23	353.8	1,584.8	1,683.9	1,678.0	5.83	288.765	
2,263.8	2,259.1	2,212.9	2,212.9	4.9	1.1	-163.26	353.7	1,585.0	1,686.8	1,680.9	5.87	287.557	
2,300.0	2,294.5	2,248.9	2,248.8	5.0	1.2	-163.32	353.5	1,585.5	1,694.5	1,688.5	5.96	284.471	
2,362.2	2,355.4	2,311.8	2,311.7	5.2	1.2	-163.44	353.3	1,586.3	1,707.6	1,701.5	6.12	279.189	
2,400.0	2,392.3	2,353.1	2,353.0	5.4	1.2	-163.51	353.0	1,586.8	1,715.5	1,709.3	6.21	276.306	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,451.6	2,417.9	2,417.8	5.6	1.2	-163.60	352.2	1,587.4	1,728.0	1,721.6	6.36	271.651	
2,500.0	2,490.2	2,457.5	2,457.4	5.7	1.2	-163.66	351.6	1,587.7	1,736.0	1,729.6	6.46	268.686	
2,559.0	2,547.9	2,516.4	2,516.3	5.9	1.3	-163.74	350.7	1,588.2	1,748.1	1,741.5	6.61	264.354	
2,600.0	2,588.0	2,556.4	2,556.3	6.1	1.3	-163.80	350.1	1,588.5	1,756.4	1,749.7	6.72	261.430	
2,657.5	2,644.2	2,612.1	2,612.0	6.3	1.3	-163.87	349.2	1,588.9	1,768.1	1,761.3	6.87	257.380	
2,700.0	2,685.8	2,651.9	2,651.8	6.4	1.3	-163.93	348.6	1,589.3	1,776.8	1,769.8	6.98	254.490	
2,755.9	2,740.5	2,704.3	2,704.2	6.6	1.3	-164.00	347.9	1,589.8	1,788.3	1,781.2	7.13	250.746	
2,800.0	2,783.6	2,746.1	2,746.0	6.8	1.3	-164.05	347.3	1,590.2	1,797.4	1,790.2	7.25	247.887	
2,854.3	2,836.7	2,797.7	2,797.6	7.0	1.4	-164.12	346.5	1,590.8	1,808.7	1,801.3	7.40	244.421	
2,900.0	2,881.4	2,843.8	2,843.7	7.2	1.4	-164.18	345.8	1,591.3	1,818.2	1,810.7	7.52	241.622	
2,952.7	2,933.0	2,897.3	2,897.2	7.4	1.4	-164.25	345.2	1,591.8	1,829.1	1,821.4	7.67	238.437	
3,000.0	2,979.2	2,946.8	2,946.6	7.6	1.4	-164.32	344.7	1,592.2	1,838.8	1,831.0	7.80	235.729	
3,051.2	3,029.3	3,000.4	3,000.3	7.8	1.4	-164.40	344.2	1,592.5	1,849.2	1,841.3	7.94	232.834	
3,100.0	3,077.1	3,050.9	3,050.7	8.0	1.4	-164.48	343.7	1,592.7	1,859.1	1,851.0	8.08	230.227	
3,149.6	3,125.6	3,102.0	3,101.9	8.2	1.5	-164.55	343.3	1,592.8	1,869.0	1,860.8	8.21	227.612	
3,200.0	3,174.9	3,151.0	3,150.8	8.4	1.5	-164.62	342.8	1,592.9	1,879.1	1,870.8	8.35	225.059	
3,248.0	3,221.8	3,197.7	3,197.5	8.6	1.5	-164.68	342.3	1,593.0	1,888.7	1,880.3	8.48	222.670	
3,300.0	3,272.7	3,248.1	3,247.9	8.9	1.5	-164.75	341.7	1,593.2	1,899.2	1,890.5	8.63	220.154	
3,346.4	3,318.1	3,293.1	3,292.9	9.0	1.5	-164.81	341.1	1,593.3	1,908.5	1,899.7	8.76	217.948	
3,400.0	3,370.5	3,344.4	3,344.2	9.3	1.5	-164.87	340.5	1,593.5	1,919.3	1,910.4	8.91	215.485	
3,444.9	3,414.4	3,387.3	3,387.2	9.5	1.6	-164.93	340.0	1,593.7	1,928.3	1,919.3	9.03	213.463	
3,500.0	3,468.3	3,439.0	3,438.8	9.7	1.6	-164.99	339.4	1,593.9	1,939.5	1,930.3	9.19	211.054	
3,543.3	3,510.7	3,479.3	3,479.1	9.9	1.6	-165.04	338.8	1,594.2	1,948.3	1,939.0	9.31	209.199	
3,600.0	3,566.1	3,531.5	3,531.3	10.1	1.6	-165.09	338.0	1,594.6	1,960.0	1,950.5	9.48	206.842	
3,641.7	3,606.9	3,569.8	3,569.6	10.3	1.6	-165.13	337.3	1,595.0	1,968.6	1,959.0	9.60	205.143	
3,700.0	3,664.0	3,624.4	3,624.2	10.6	1.6	-165.19	336.4	1,595.7	1,980.7	1,971.0	9.76	202.842	
3,740.1	3,703.2	3,663.2	3,662.9	10.7	1.6	-165.23	335.8	1,596.2	1,989.1	1,979.2	9.88	201.286	
3,800.0	3,761.8	3,721.3	3,721.1	11.0	1.7	-165.29	334.9	1,596.9	2,001.6	1,991.6	10.06	199.042	
3,837.4	3,798.3	3,758.1	3,757.9	11.2	1.7	-165.32	334.3	1,597.3	2,009.4	1,999.2	10.17	197.677	
3,838.6	3,799.5	3,759.3	3,759.1	11.2	1.7	-165.33	334.3	1,597.3	2,009.7	1,999.5	10.17	197.644	
3,900.0	3,859.7	3,819.9	3,819.7	11.4	1.7	-165.45	333.4	1,598.1	2,021.8	2,011.5	10.32	195.945	
3,937.0	3,896.1	3,856.7	3,856.4	11.5	1.7	-165.51	332.9	1,598.5	2,028.6	2,018.2	10.40	195.050	
4,000.0	3,958.3	3,921.3	3,921.0	11.7	1.7	-165.61	331.9	1,599.2	2,038.9	2,028.4	10.54	193.482	
4,035.4	3,993.3	3,960.1	3,959.8	11.8	1.7	-165.65	331.3	1,599.6	2,044.1	2,033.5	10.61	192.624	
4,100.0	4,057.4	4,027.3	4,027.1	12.0	1.8	-165.72	330.1	1,600.1	2,052.4	2,041.6	10.75	191.005	
4,133.8	4,091.0	4,060.2	4,059.9	12.1	1.8	-165.74	329.5	1,600.4	2,056.1	2,045.3	10.81	190.187	
4,200.0	4,156.8	4,127.0	4,126.6	12.2	1.8	-165.78	328.2	1,600.9	2,062.4	2,051.4	10.94	188.519	
4,232.3	4,189.0	4,161.5	4,161.2	12.3	1.8	-165.79	327.6	1,601.2	2,064.8	2,053.8	11.00	187.715	
4,300.0	4,256.6	4,232.4	4,232.1	12.4	1.8	-165.80	326.2	1,601.6	2,068.8	2,057.7	11.13	185.957	
4,330.7	4,287.3	4,263.6	4,263.3	12.5	1.9	-165.79	325.6	1,601.8	2,070.0	2,058.9	11.18	185.174	
4,400.0	4,356.6	4,333.0	4,332.6	12.6	1.9	-165.77	323.9	1,602.2	2,071.7	2,060.4	11.30	183.321	
4,429.1	4,385.7	4,361.6	4,361.2	12.6	1.9	-165.75	323.2	1,602.4	2,071.9	2,060.5	11.35	182.532	
4,437.2	4,393.8	4,369.5	4,369.2	12.7	1.9	74.67	323.0	1,602.4	2,071.9	2,057.6	14.28	145.076	
4,457.8	4,414.4	4,389.8	4,389.4	12.7	1.9	74.69	322.4	1,602.6	2,071.9	2,057.6	14.32	144.692	
4,500.0	4,456.6	4,430.9	4,430.5	12.7	1.9	74.72	321.3	1,602.9	2,071.9	2,057.5	14.40	143.913	
4,527.5	4,484.1	4,457.7	4,457.3	12.8	1.9	74.74	320.6	1,603.1	2,071.9	2,057.5	14.45	143.388	
4,600.0	4,556.6	4,524.6	4,524.1	12.9	1.9	74.79	319.0	1,603.6	2,072.1	2,057.5	14.58	142.071	
4,626.0	4,582.6	4,546.6	4,546.2	12.9	1.9	74.80	318.7	1,603.8	2,072.2	2,057.5	14.63	141.627	
4,700.0	4,656.6	4,609.3	4,608.9	13.1	2.0	74.81	318.4	1,604.5	2,072.8	2,058.0	14.76	140.402	
4,724.4	4,681.0	4,630.0	4,629.6	13.1	2.0	74.81	318.4	1,604.7	2,073.1	2,058.3	14.80	140.028	
4,800.0	4,756.6	4,700.0	4,699.6	13.2	2.0	74.80	319.2	1,605.6	2,074.3	2,059.3	14.93	138.892	
4,822.8	4,779.4	4,713.6	4,713.1	13.3	2.0	74.79	319.5	1,605.8	2,074.7	2,059.7	14.97	138.567	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,900.0	4,856.6	4,779.3	4,778.8	13.4	2.0	74.77	320.7	1,607.0	2,076.4	2,061.3	15.10	137.495	
4,921.2	4,877.8	4,800.0	4,799.5	13.4	2.0	74.76	321.2	1,607.5	2,077.0	2,061.8	15.14	137.205	
5,000.0	4,956.6	4,860.6	4,860.1	13.6	2.0	74.73	322.7	1,609.0	2,079.4	2,064.1	15.27	136.158	
5,019.7	4,976.3	4,876.4	4,875.8	13.6	2.0	74.72	323.1	1,609.4	2,080.1	2,064.8	15.31	135.902	
5,100.0	5,056.6	4,951.0	4,950.4	13.7	2.0	74.68	325.3	1,611.8	2,083.2	2,067.7	15.44	134.882	
5,118.1	5,074.7	4,969.2	4,968.6	13.8	2.0	74.67	325.9	1,612.4	2,083.9	2,068.4	15.48	134.652	
5,200.0	5,156.6	5,058.7	5,058.0	13.9	2.0	74.62	328.6	1,615.2	2,087.0	2,071.4	15.62	133.609	
5,216.5	5,173.1	5,077.7	5,077.0	13.9	2.0	74.61	329.0	1,615.7	2,087.6	2,071.9	15.65	133.396	
5,300.0	5,256.6	5,173.8	5,173.0	14.1	2.0	74.59	330.6	1,618.4	2,090.1	2,074.3	15.80	132.283	
5,314.9	5,271.5	5,191.1	5,190.3	14.1	2.0	74.59	330.8	1,618.8	2,090.6	2,074.7	15.83	132.080	
5,400.0	5,356.6	5,285.1	5,284.3	14.2	2.1	74.59	331.4	1,621.1	2,092.7	2,076.7	15.99	130.897	
5,413.4	5,370.0	5,299.8	5,299.0	14.3	2.1	74.59	331.5	1,621.4	2,093.0	2,076.9	16.01	130.709	
5,500.0	5,456.6	5,410.1	5,409.2	14.4	2.1	74.60	331.5	1,623.2	2,094.4	2,078.2	16.18	129.416	
5,511.8	5,468.4	5,425.5	5,424.7	14.4	2.1	74.60	331.4	1,623.4	2,094.5	2,078.3	16.21	129.228	
5,600.0	5,556.6	5,532.0	5,531.1	14.6	2.1	74.63	330.5	1,624.1	2,094.8	2,078.4	16.39	127.799	
5,610.2	5,566.8	5,542.5	5,541.6	14.6	2.1	74.63	330.4	1,624.1	2,094.8	2,078.4	16.41	127.632	
5,676.0	5,632.6	5,608.5	5,607.6	14.7	2.1	74.66	329.6	1,624.3	2,094.8	2,078.2	16.55	126.569	
5,700.0	5,656.6	5,629.1	5,628.2	14.8	2.2	74.66	329.3	1,624.4	2,094.8	2,078.2	16.60	126.196	
5,708.6	5,665.2	5,636.5	5,635.7	14.8	2.2	74.67	329.2	1,624.4	2,094.8	2,078.2	16.62	126.062	
5,800.0	5,756.6	5,717.7	5,716.9	14.9	2.2	74.71	327.8	1,625.2	2,095.3	2,078.4	16.81	124.678	
5,807.1	5,763.7	5,724.9	5,724.0	14.9	2.2	74.71	327.7	1,625.3	2,095.3	2,078.5	16.82	124.570	
5,900.0	5,856.6	5,818.3	5,817.5	15.1	2.2	74.77	326.0	1,626.5	2,095.9	2,078.9	17.02	123.174	
5,905.5	5,862.1	5,823.8	5,822.9	15.1	2.2	74.77	325.9	1,626.5	2,096.0	2,078.9	17.03	123.092	
6,000.0	5,956.6	5,917.7	5,916.8	15.3	2.2	74.83	323.9	1,627.7	2,096.6	2,079.4	17.23	121.702	
6,003.9	5,960.5	5,921.6	5,920.7	15.3	2.2	74.83	323.8	1,627.8	2,096.7	2,079.4	17.24	121.645	
6,100.0	6,056.6	6,020.0	6,019.1	15.5	2.3	74.91	321.4	1,629.1	2,097.3	2,079.9	17.44	120.252	
6,102.3	6,058.9	6,022.7	6,021.8	15.5	2.3	74.91	321.4	1,629.2	2,097.3	2,079.9	17.45	120.217	
6,200.0	6,156.6	6,130.9	6,129.9	15.7	2.3	75.01	317.9	1,630.4	2,097.6	2,079.9	17.66	118.787	
6,200.8	6,157.4	6,131.7	6,130.7	15.7	2.3	75.01	317.9	1,630.4	2,097.6	2,079.9	17.66	118.776	
6,272.2	6,228.8	6,205.1	6,204.0	15.8	2.3	75.09	315.2	1,631.2	2,097.6	2,079.8	17.81	117.748	
6,299.2	6,255.8	6,235.6	6,234.5	15.8	2.3	-14.90	314.0	1,631.5	2,097.1	2,081.6	15.50	135.257	
6,300.0	6,256.6	6,236.5	6,235.4	15.8	2.3	-14.90	313.9	1,631.5	2,097.1	2,081.6	15.51	135.246	
6,350.0	6,306.4	6,293.0	6,291.9	15.9	2.4	-14.94	311.6	1,631.9	2,093.4	2,077.8	15.58	134.354	
6,397.6	6,353.6	6,344.4	6,343.2	15.9	2.4	-15.07	309.4	1,632.2	2,086.6	2,070.9	15.68	133.076	
6,400.0	6,355.9	6,346.9	6,345.8	15.9	2.4	-15.08	309.2	1,632.2	2,086.1	2,070.5	15.68	133.003	
6,450.0	6,404.8	6,399.9	6,398.6	15.9	2.4	-15.32	306.7	1,632.4	2,075.5	2,059.7	15.80	131.328	
6,496.0	6,449.0	6,441.2	6,439.8	16.0	2.4	-15.63	304.6	1,632.6	2,062.8	2,046.9	15.91	129.655	
6,500.0	6,452.8	6,444.7	6,443.3	16.0	2.4	-15.66	304.4	1,632.6	2,061.6	2,045.7	15.92	129.508	
6,550.0	6,499.7	6,488.5	6,487.1	15.9	2.4	-16.11	302.1	1,632.9	2,044.6	2,028.6	16.02	127.628	
6,594.5	6,540.3	6,530.8	6,529.4	15.9	2.4	-16.62	299.7	1,633.3	2,026.9	2,010.8	16.10	125.927	
6,600.0	6,545.3	6,536.3	6,534.8	15.9	2.4	-16.69	299.4	1,633.4	2,024.5	2,008.4	16.10	125.714	
6,650.0	6,589.3	6,584.3	6,582.7	15.9	2.4	-17.43	296.4	1,633.7	2,001.3	1,985.1	16.17	123.790	
6,692.9	6,625.7	6,623.2	6,621.5	15.9	2.5	-18.19	293.8	1,634.0	1,979.0	1,962.8	16.20	122.126	
6,700.0	6,631.6	6,629.4	6,627.7	15.9	2.5	-18.33	293.4	1,634.1	1,975.2	1,959.0	16.21	121.850	
6,750.0	6,671.9	6,671.9	6,670.1	15.9	2.5	-19.43	290.2	1,634.4	1,946.2	1,930.0	16.24	119.850	
6,791.3	6,703.6	6,705.6	6,703.7	15.9	2.5	-20.52	287.5	1,634.8	1,920.3	1,904.0	16.26	118.091	
6,800.0	6,710.1	6,712.6	6,710.7	15.9	2.5	-20.77	287.0	1,634.8	1,914.6	1,898.3	16.27	117.708	
6,850.0	6,745.9	6,751.6	6,749.5	16.0	2.5	-22.42	283.6	1,635.2	1,880.5	1,864.2	16.31	115.293	
6,889.7	6,772.6	6,780.6	6,778.4	16.1	2.5	-24.00	281.0	1,635.5	1,851.8	1,835.4	16.38	113.066	
6,900.0	6,779.2	6,787.8	6,785.6	16.1	2.5	-24.45	280.3	1,635.5	1,844.1	1,827.7	16.40	112.450	
6,950.0	6,809.8	6,823.9	6,821.5	16.3	2.5	-27.01	276.9	1,635.8	1,805.6	1,789.0	16.57	108.935	
6,988.2	6,831.3	6,850.1	6,847.7	16.4	2.5	-29.40	274.4	1,635.9	1,774.8	1,758.0	16.80	105.646	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,000.0	6,837.6	6,857.8	6,855.3	16.5	2.5	-30.23	273.7	1,636.0	1,765.1	1,748.2	16.88	104.540	
7,050.0	6,862.5	6,887.8	6,885.2	16.9	2.5	-34.30	270.8	1,636.0	1,722.9	1,705.5	17.38	99.133	
7,086.6	6,878.7	6,906.3	6,903.6	17.2	2.5	-37.91	269.0	1,636.0	1,691.0	1,673.1	17.89	94.531	
7,100.0	6,884.2	6,912.1	6,909.3	17.3	2.5	-39.37	268.5	1,636.0	1,679.2	1,661.1	18.10	92.782	
7,150.0	6,902.7	6,931.3	6,928.4	17.8	2.6	-45.70	266.7	1,635.9	1,634.3	1,615.3	19.05	85.788	
7,185.0	6,913.8	6,942.6	6,939.7	18.3	2.6	-51.05	265.6	1,635.9	1,602.3	1,582.5	19.84	80.762	
7,200.0	6,918.0	6,947.0	6,944.0	18.5	2.6	-53.58	265.2	1,635.9	1,588.5	1,568.3	20.18	78.701	
7,250.0	6,929.9	6,959.1	6,956.1	19.2	2.6	-63.08	264.1	1,635.8	1,542.0	1,520.7	21.34	72.249	
7,283.4	6,936.0	6,965.2	6,962.2	19.7	2.6	-70.24	263.6	1,635.8	1,510.7	1,488.7	22.04	68.556	
7,300.0	6,938.4	6,967.6	6,964.6	20.0	2.6	-73.95	263.4	1,635.8	1,495.1	1,472.8	22.33	66.971	
7,350.0	6,943.4	6,972.5	6,969.5	20.9	2.6	-85.45	262.9	1,635.8	1,448.1	1,425.0	23.11	62.668	
7,381.9	6,944.8	6,973.8	6,970.8	21.4	2.6	-92.63	262.8	1,635.7	1,418.1	1,394.5	23.66	59.948	
7,403.7	6,945.0	6,973.8	6,970.8	21.8	2.6	-97.33	262.8	1,635.7	1,397.6	1,373.5	24.07	58.057	
7,480.3	6,944.3	6,972.7	6,969.7	23.3	2.6	-97.20	262.9	1,635.8	1,326.2	1,300.7	25.55	51.908	
7,500.0	6,944.1	6,972.4	6,969.4	23.7	2.6	-97.16	262.9	1,635.8	1,307.9	1,282.0	25.93	50.443	
7,578.7	6,943.4	6,971.2	6,968.2	25.4	2.6	-97.03	263.0	1,635.8	1,235.3	1,207.8	27.56	44.818	
7,600.0	6,943.2	6,970.9	6,967.9	25.8	2.6	-96.99	263.1	1,635.8	1,215.8	1,187.8	28.01	43.414	
7,677.1	6,942.5	6,969.8	6,966.8	27.5	2.6	-96.86	263.2	1,635.8	1,145.7	1,116.0	29.70	38.570	
7,700.0	6,942.3	6,969.5	6,966.5	28.0	2.6	-96.82	263.2	1,635.8	1,125.1	1,094.9	30.21	37.245	
7,775.6	6,941.6	6,968.4	6,965.4	29.8	2.6	-96.70	263.3	1,635.8	1,057.6	1,025.7	31.95	33.101	
7,800.0	6,941.4	6,968.0	6,965.0	30.3	2.6	-96.66	263.3	1,635.8	1,036.1	1,003.5	32.52	31.864	
7,874.0	6,940.7	6,967.0	6,964.0	32.1	2.6	-96.53	263.4	1,635.8	971.5	937.3	34.28	28.341	
7,900.0	6,940.5	6,966.6	6,963.6	32.7	2.6	-96.49	263.5	1,635.8	949.2	914.3	34.90	27.198	
7,972.4	6,939.8	6,965.6	6,962.6	34.5	2.6	-96.37	263.6	1,635.8	888.0	851.4	36.67	24.215	
8,000.0	6,939.6	6,965.2	6,962.2	35.2	2.6	-96.33	263.6	1,635.8	865.2	827.8	37.35	23.166	
8,070.8	6,938.9	6,964.3	6,961.3	37.0	2.6	-96.21	263.7	1,635.8	807.9	768.8	39.12	20.653	
8,100.0	6,938.7	6,963.8	6,960.9	37.7	2.6	-96.17	263.7	1,635.8	784.9	745.1	39.84	19.700	
8,169.3	6,938.0	6,962.9	6,959.9	39.5	2.6	-96.05	263.8	1,635.8	732.2	690.6	41.60	17.600	
8,200.0	6,937.7	6,962.5	6,959.5	40.3	2.6	-96.01	263.8	1,635.8	709.7	667.3	42.38	16.745	
8,267.7	6,937.1	6,961.6	6,958.6	42.0	2.6	-95.90	263.9	1,635.8	662.5	618.4	44.12	15.015	
8,300.0	6,936.8	6,961.1	6,958.1	42.8	2.6	-95.85	264.0	1,635.8	641.3	596.3	44.95	14.265	
8,366.1	6,936.2	6,960.2	6,957.3	44.6	2.6	-95.74	264.0	1,635.8	600.9	554.2	46.67	12.875	
8,400.0	6,935.9	6,959.8	6,956.8	45.5	2.6	-95.69	264.1	1,635.8	582.1	534.5	47.55	12.240	
8,464.5	6,935.3	6,958.9	6,956.0	47.2	2.6	-95.59	264.2	1,635.8	550.1	500.9	49.25	11.171	
8,500.0	6,935.0	6,958.5	6,955.5	48.1	2.6	-95.54	264.2	1,635.8	535.1	484.9	50.18	10.664	
8,563.0	6,934.5	6,957.6	6,954.7	49.8	2.6	-95.44	264.3	1,635.8	513.4	461.5	51.84	9.903	
8,600.0	6,934.1	6,957.1	6,954.2	50.7	2.6	-95.38	264.3	1,635.8	503.9	451.0	52.82	9.539	
8,661.4	6,933.6	6,956.4	6,953.4	52.4	2.6	-95.29	264.4	1,635.8	493.8	439.4	54.46	9.068	
8,700.0	6,933.2	6,955.9	6,952.9	53.4	2.6	-95.23	264.4	1,635.8	491.3	435.9	55.48	8.856	
8,712.3	6,933.1	6,955.7	6,952.7	53.7	2.6	-95.21	264.5	1,635.8	491.2	435.4	55.81	8.801 CC, ES	
8,759.8	6,932.7	6,955.1	6,952.1	55.0	2.6	-95.14	264.5	1,635.8	493.5	436.4	57.08	8.645	
8,800.0	6,932.3	6,954.6	6,951.6	56.1	2.6	-95.08	264.6	1,635.8	498.9	440.8	58.16	8.579 SF	
8,858.2	6,931.8	6,953.8	6,950.9	57.7	2.6	-95.00	264.6	1,635.8	512.4	452.7	59.73	8.579	
8,900.0	6,931.4	6,953.3	6,950.4	58.8	2.6	-94.94	264.7	1,635.8	525.8	465.0	60.85	8.642	
8,956.7	6,930.9	6,952.6	6,949.6	60.3	2.6	-94.85	264.7	1,635.8	548.6	486.2	62.38	8.795	
9,000.0	6,930.5	6,952.0	6,949.1	61.5	2.6	-94.79	264.8	1,635.9	569.2	505.7	63.55	8.957	
9,055.1	6,930.0	6,951.4	6,948.4	63.0	2.6	-94.71	264.8	1,635.9	599.0	533.9	65.04	9.209	
9,100.0	6,929.6	6,950.8	6,947.9	64.2	2.6	-94.64	264.9	1,635.9	625.7	559.5	66.26	9.444	
9,153.5	6,929.1	6,950.1	6,947.2	65.6	2.6	-94.57	265.0	1,635.9	660.2	592.5	67.71	9.750	
9,200.0	6,928.7	6,949.6	6,946.6	66.9	2.6	-94.50	265.0	1,635.9	692.1	623.2	68.98	10.034	
9,251.9	6,928.2	6,948.9	6,946.0	68.3	2.6	-94.43	265.1	1,635.9	729.7	659.3	70.39	10.365	
9,300.0	6,927.8	6,948.4	6,945.4	69.6	2.6	-94.36	265.1	1,635.9	765.9	694.2	71.71	10.681	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
9,350.4	6,927.3	6,947.7	6,944.8	71.0	2.6	-94.29	265.2	1,635.9	805.2	732.1	73.08	11.017	
9,400.0	6,926.9	6,947.1	6,944.2	72.4	2.6	-94.22	265.2	1,635.9	845.0	770.6	74.44	11.352	
9,448.8	6,926.4	6,946.6	6,943.6	73.7	2.6	-94.15	265.3	1,635.9	885.2	809.4	75.78	11.682	
9,500.0	6,926.0	6,946.0	6,943.0	75.1	2.6	-94.08	265.3	1,635.9	928.2	851.1	77.18	12.027	
9,547.2	6,925.5	6,945.4	6,942.5	76.4	2.6	-94.01	265.4	1,635.9	968.6	890.1	78.48	12.343	
9,600.0	6,925.1	6,944.8	6,941.9	77.9	2.6	-93.94	265.4	1,635.9	1,014.5	934.5	79.93	12.693	
9,645.6	6,924.6	6,944.2	6,941.3	79.1	2.6	-93.88	265.5	1,635.9	1,054.6	973.4	81.18	12.991	
9,700.0	6,924.1	6,943.6	6,940.7	80.6	2.6	-93.81	265.6	1,635.9	1,103.0	1,020.3	82.68	13.341	
9,744.1	6,923.7	6,943.1	6,940.2	81.8	2.6	-93.75	265.6	1,635.9	1,142.6	1,058.7	83.89	13.621	
9,800.0	6,923.2	6,942.4	6,939.5	83.4	2.6	-93.67	265.7	1,635.9	1,193.4	1,107.9	85.43	13.969	
9,842.5	6,922.9	6,942.0	6,939.1	84.5	2.6	-93.61	265.7	1,635.9	1,232.2	1,145.6	86.60	14.228	
9,900.0	6,922.3	6,941.3	6,938.4	86.1	2.6	-93.54	265.8	1,635.9	1,285.2	1,197.0	88.19	14.572	
9,940.9	6,922.0	6,940.8	6,937.9	87.2	2.6	-93.48	265.8	1,635.9	1,323.1	1,233.7	89.32	14.812	
10,000.0	6,921.4	6,940.2	6,937.3	88.9	2.6	-93.40	265.9	1,635.9	1,378.1	1,287.1	90.95	15.151	
10,039.3	6,921.1	6,939.7	6,936.8	90.0	2.6	-93.35	265.9	1,635.9	1,414.9	1,322.9	92.04	15.372	
10,100.0	6,920.5	6,939.0	6,936.2	91.6	2.6	-93.27	266.0	1,635.9	1,471.9	1,378.2	93.72	15.706	
10,137.8	6,920.2	6,938.6	6,935.7	92.7	2.6	-93.23	266.0	1,635.9	1,507.6	1,412.8	94.77	15.908	
10,200.0	6,919.6	6,937.9	6,935.1	94.4	2.6	-93.14	266.1	1,635.9	1,566.6	1,470.1	96.49	16.235	
10,236.2	6,919.3	6,937.5	6,934.7	95.4	2.6	-93.10	266.1	1,635.9	1,601.0	1,503.5	97.49	16.421	
10,300.0	6,918.7	6,936.8	6,934.0	97.2	2.6	-93.02	266.2	1,635.9	1,661.8	1,562.5	99.26	16.741	
10,334.6	6,918.4	6,936.5	6,933.6	98.1	2.6	-92.97	266.2	1,635.9	1,694.9	1,594.7	100.22	16.911	
10,400.0	6,917.8	6,935.7	6,932.9	99.9	2.6	-92.89	266.3	1,635.9	1,757.6	1,655.5	102.04	17.225	
10,433.0	6,917.5	6,935.4	6,932.5	100.9	2.6	-92.85	266.3	1,635.9	1,789.3	1,686.4	102.96	17.380	
10,500.0	6,916.9	6,934.7	6,931.8	102.7	2.6	-92.76	266.4	1,635.9	1,853.8	1,749.0	104.82	17.686	
10,531.5	6,916.6	6,934.3	6,931.5	103.6	2.6	-92.73	266.4	1,635.9	1,884.2	1,778.5	105.69	17.827	
10,600.0	6,916.0	6,933.6	6,930.7	105.5	2.6	-92.64	266.5	1,635.9	1,950.4	1,842.8	107.60	18.127	
10,629.9	6,915.7	6,933.3	6,930.4	106.3	2.6	-92.60	266.5	1,635.9	1,979.4	1,870.9	108.43	18.255	
10,700.0	6,915.1	6,932.5	6,929.7	108.3	2.6	-92.52	266.6	1,635.9	2,047.3	1,937.0	110.38	18.549	
10,728.3	6,914.8	6,932.2	6,929.4	109.1	2.6	-92.48	266.6	1,635.9	2,074.8	1,963.7	111.17	18.664	
10,800.0	6,914.2	6,931.5	6,928.6	111.0	2.6	-92.40	266.7	1,635.9	2,144.5	2,031.4	113.16	18.951	
10,826.7	6,913.9	6,931.2	6,928.4	111.8	2.6	-92.36	266.7	1,635.9	2,170.6	2,056.7	113.91	19.056	
10,900.0	6,913.3	6,930.5	6,927.6	113.8	2.6	-92.28	266.8	1,635.9	2,242.0	2,126.0	115.94	19.337	
10,925.2	6,913.1	6,930.2	6,927.3	114.5	2.6	-92.24	266.8	1,635.9	2,266.6	2,149.9	116.65	19.431	
11,000.0	6,912.4	6,929.4	6,926.6	116.6	2.6	-92.16	266.9	1,635.9	2,339.7	2,220.9	118.73	19.705	
11,023.6	6,912.2	6,929.2	6,926.3	117.3	2.6	-92.13	266.9	1,635.9	2,362.7	2,243.3	119.39	19.790	
11,100.0	6,911.5	6,928.4	6,925.6	119.4	2.6	-92.04	267.0	1,635.9	2,437.5	2,316.0	121.52	20.059	
11,122.0	6,911.3	6,928.2	6,925.3	120.0	2.6	-92.01	267.0	1,635.9	2,459.1	2,337.0	122.13	20.134	
11,200.0	6,910.6	6,927.4	6,924.6	122.2	2.6	-91.92	267.1	1,635.9	2,535.5	2,411.2	124.31	20.397	
11,220.4	6,910.4	6,927.2	6,924.4	122.7	2.6	-91.90	267.1	1,635.9	2,555.6	2,430.7	124.88	20.465	
11,300.0	6,909.7	6,926.4	6,923.6	125.0	2.6	-91.80	267.2	1,635.9	2,633.7	2,506.6	127.10	20.722	
11,318.9	6,909.5	6,926.2	6,923.4	125.5	2.6	-91.78	267.2	1,635.9	2,652.2	2,524.6	127.62	20.782	
11,400.0	6,908.8	6,925.4	6,922.6	127.7	2.6	-91.69	267.2	1,635.9	2,732.0	2,602.1	129.89	21.033	
11,417.3	6,908.6	6,925.2	6,922.4	128.2	2.6	-91.67	267.3	1,635.9	2,749.0	2,618.7	130.37	21.086	
11,500.0	6,907.9	6,924.4	6,921.6	130.5	2.6	-91.58	267.3	1,635.9	2,830.4	2,697.7	132.68	21.333	
11,515.7	6,907.7	6,924.3	6,921.4	131.0	2.6	-91.56	267.3	1,635.9	2,845.9	2,712.8	133.12	21.379	
11,600.0	6,907.0	6,923.5	6,920.6	133.3	2.5	-91.46	267.4	1,635.9	2,929.0	2,793.5	135.47	21.620	
11,614.1	6,906.8	6,923.3	6,920.5	133.7	2.5	-91.45	267.4	1,635.9	2,942.9	2,807.0	135.87	21.660	
11,700.0	6,906.0	6,922.5	6,919.7	136.1	2.5	-91.35	267.5	1,636.0	3,027.6	2,889.3	138.27	21.897	
11,712.6	6,905.9	6,922.4	6,919.6	136.5	2.5	-91.34	267.5	1,636.0	3,040.0	2,901.4	138.62	21.931	
11,800.0	6,905.1	6,921.5	6,918.7	138.9	2.5	-91.24	267.6	1,636.0	3,126.3	2,985.2	141.06	22.163	
11,811.0	6,905.0	6,921.4	6,918.6	139.2	2.5	-91.23	267.6	1,636.0	3,137.2	2,995.8	141.37	22.191	
11,900.0	6,904.2	6,920.6	6,917.8	141.7	2.5	-91.13	267.7	1,636.0	3,225.1	3,081.2	143.86	22.419	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,904.2	6,920.5	6,917.7	141.9	2.5	-91.12	267.7	1,636.0	3,234.4	3,090.3	144.12	22.443	
12,000.0	6,903.3	6,919.7	6,916.9	144.5	2.5	-91.02	267.8	1,636.0	3,323.9	3,177.3	146.65	22.666	
12,007.8	6,903.3	6,919.6	6,916.8	144.7	2.5	-91.02	267.8	1,636.0	3,331.7	3,184.8	146.87	22.685	
12,100.0	6,902.4	6,918.7	6,915.9	147.3	2.5	-90.92	267.9	1,636.0	3,422.9	3,273.4	149.45	22.904	
12,106.3	6,902.4	6,918.7	6,915.9	147.4	2.5	-90.91	267.9	1,636.0	3,429.1	3,279.5	149.62	22.918	
12,200.0	6,901.5	6,917.8	6,915.0	150.1	2.5	-90.81	268.0	1,636.0	3,521.9	3,369.6	152.24	23.133	
12,204.7	6,901.5	6,917.8	6,915.0	150.2	2.5	-90.80	268.0	1,636.0	3,526.5	3,374.1	152.37	23.144	
12,300.0	6,900.6	6,916.9	6,914.1	152.9	2.5	-90.70	268.0	1,636.0	3,620.9	3,465.9	155.04	23.355	
12,303.1	6,900.6	6,916.9	6,914.1	152.9	2.5	-90.70	268.0	1,636.0	3,624.0	3,468.9	155.13	23.362	
12,400.0	6,899.7	6,916.0	6,913.2	155.6	2.5	-90.60	268.1	1,636.0	3,720.0	3,562.2	157.84	23.569	
12,401.5	6,899.7	6,916.0	6,913.2	155.7	2.5	-90.60	268.1	1,636.0	3,721.5	3,563.7	157.88	23.572	
12,500.0	6,898.8	6,915.1	6,912.3	158.4	2.5	-90.50	268.2	1,636.0	3,819.1	3,658.5	160.63	23.776	
12,598.4	6,897.9	6,914.2	6,911.4	161.2	2.5	-90.40	268.3	1,636.0	3,916.7	3,753.3	163.38	23.972	
12,600.0	6,897.9	6,914.2	6,911.4	161.2	2.5	-90.39	268.3	1,636.0	3,918.3	3,754.9	163.43	23.976	
12,696.8	6,897.0	6,913.4	6,910.6	163.9	2.5	-90.30	268.4	1,636.0	4,014.4	3,848.3	166.14	24.163	
12,700.0	6,897.0	6,913.3	6,910.6	164.0	2.5	-90.29	268.4	1,636.0	4,017.5	3,851.3	166.23	24.169	
12,795.2	6,896.1	6,912.5	6,909.7	166.7	2.5	-90.20	268.5	1,636.0	4,112.1	3,943.2	168.89	24.347	
12,800.0	6,896.1	6,912.5	6,909.7	166.8	2.5	-90.19	268.5	1,636.0	4,116.8	3,947.8	169.02	24.356	
12,893.7	6,895.3	6,911.6	6,908.9	169.4	2.5	-90.10	268.5	1,636.0	4,209.8	4,038.2	171.65	24.526	
12,900.0	6,895.2	6,911.6	6,908.8	169.6	2.5	-90.09	268.5	1,636.0	4,216.1	4,044.3	171.82	24.538	
12,992.1	6,894.4	6,900.0	6,897.3	172.2	2.5	-88.76	269.6	1,636.0	4,307.6	4,133.2	174.37	24.703	
13,000.0	6,894.3	6,900.0	6,897.3	172.4	2.5	-88.76	269.6	1,636.0	4,315.4	4,140.9	174.60	24.717	
13,090.5	6,893.5	6,900.0	6,897.3	175.0	2.5	-88.76	269.6	1,636.0	4,405.4	4,228.3	177.13	24.871	
13,100.0	6,893.4	6,900.0	6,897.3	175.2	2.5	-88.76	269.6	1,636.0	4,414.8	4,237.4	177.39	24.887	
13,188.9	6,892.6	6,900.0	6,897.3	177.7	2.5	-88.76	269.6	1,636.0	4,503.2	4,323.3	179.88	25.034	
13,200.0	6,892.5	6,900.0	6,897.3	178.0	2.5	-88.76	269.6	1,636.0	4,514.2	4,334.0	180.19	25.052	
13,287.4	6,891.7	6,900.0	6,897.3	180.5	2.5	-88.76	269.6	1,636.0	4,601.0	4,418.4	182.63	25.193	
13,300.0	6,891.6	6,900.0	6,897.3	180.8	2.5	-88.76	269.6	1,636.0	4,613.6	4,430.6	182.99	25.213	
13,385.8	6,890.8	6,900.0	6,897.3	183.2	2.5	-88.76	269.6	1,636.0	4,698.9	4,513.5	185.39	25.346	
13,400.0	6,890.7	6,900.0	6,897.3	183.6	2.5	-88.76	269.6	1,636.0	4,713.0	4,527.3	185.78	25.368	
13,484.2	6,889.9	6,900.0	6,897.3	186.0	2.5	-88.76	269.6	1,636.0	4,796.8	4,608.7	188.14	25.496	
13,500.0	6,889.8	6,900.0	6,897.3	186.4	2.5	-88.76	269.6	1,636.0	4,812.5	4,623.9	188.58	25.519	
13,582.6	6,889.0	6,900.0	6,897.3	188.7	2.5	-88.76	269.6	1,636.0	4,894.7	4,703.8	190.90	25.641	
13,600.0	6,888.9	6,900.0	6,897.3	189.2	2.5	-88.76	269.6	1,636.0	4,912.0	4,720.6	191.38	25.666	
13,681.1	6,888.1	6,900.0	6,897.3	191.5	2.5	-88.76	269.6	1,636.0	4,992.6	4,799.0	193.65	25.782	
13,700.0	6,888.0	6,900.0	6,897.3	192.0	2.5	-88.76	269.6	1,636.0	5,011.5	4,817.3	194.18	25.808	
13,779.5	6,887.3	6,900.0	6,897.3	194.2	2.5	-88.76	269.6	1,636.0	5,090.6	4,894.2	196.41	25.919	
13,800.0	6,887.1	6,900.0	6,897.3	194.8	2.5	-88.76	269.6	1,636.0	5,111.0	4,914.0	196.98	25.947	
13,877.9	6,886.4	6,900.0	6,897.3	197.0	2.5	-88.76	269.6	1,636.0	5,188.6	4,989.4	199.16	26.052	
13,900.0	6,886.2	6,900.0	6,897.3	197.6	2.5	-88.76	269.6	1,636.0	5,210.5	5,010.8	199.78	26.081	
13,976.3	6,885.5	6,900.0	6,897.3	199.7	2.5	-88.76	269.6	1,636.0	5,286.6	5,084.6	201.92	26.182	
14,000.0	6,885.3	6,900.0	6,897.3	200.4	2.5	-88.76	269.6	1,636.0	5,310.1	5,107.5	202.58	26.212	
14,074.8	6,884.6	6,900.0	6,897.3	202.5	2.5	-88.76	269.6	1,636.0	5,384.6	5,179.9	204.67	26.308	
14,100.0	6,884.4	6,900.0	6,897.3	203.2	2.5	-88.76	269.6	1,636.0	5,409.7	5,204.3	205.38	26.340	
14,173.2	6,883.7	6,900.0	6,897.3	205.3	2.5	-88.76	269.6	1,636.0	5,482.6	5,275.1	207.43	26.431	
14,200.0	6,883.5	6,900.0	6,897.3	206.0	2.5	-88.76	269.6	1,636.0	5,509.3	5,301.1	208.18	26.464	
14,271.6	6,882.8	6,900.0	6,897.3	208.0	2.5	-88.76	269.6	1,636.0	5,580.6	5,370.4	210.19	26.551	
14,300.0	6,882.6	6,900.0	6,897.3	208.8	2.5	-88.76	269.6	1,636.0	5,608.9	5,397.9	210.98	26.585	
14,370.0	6,881.9	6,900.0	6,897.3	210.8	2.5	-88.76	269.6	1,636.0	5,678.6	5,465.7	212.94	26.667	
14,400.0	6,881.7	6,900.0	6,897.3	211.6	2.5	-88.76	269.6	1,636.0	5,708.5	5,494.7	213.78	26.702	
14,468.5	6,881.0	6,900.0	6,897.3	213.5	2.5	-88.76	269.6	1,636.0	5,776.7	5,561.0	215.70	26.781	
14,500.0	6,880.8	6,900.0	6,897.3	214.4	2.5	-88.76	269.6	1,636.0	5,808.1	5,591.5	216.58	26.817	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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
14,566.9	6,880.2	6,900.0	6,897.3	216.3	2.5	-88.76	269.6	1,636.0	5,874.8	5,656.3	218.46	26.892	
14,584.2	6,880.0	6,900.0	6,897.3	216.8	2.5	-88.76	269.6	1,636.0	5,892.0	5,673.0	218.94	26.911	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	117.78	-772.3	1,465.8	1,657.0				
98.4	98.4	68.2	68.2	0.1	0.0	117.79	-772.5	1,465.8	1,656.9	1,656.8	0.12	N/A	
100.0	100.0	69.7	69.7	0.1	0.0	117.79	-772.5	1,465.8	1,656.9	1,656.8	0.12	N/A	
196.8	196.8	169.7	169.7	0.3	0.2	117.82	-773.4	1,465.7	1,657.2	1,656.8	0.47	3,563.620	
200.0	200.0	173.2	173.1	0.3	0.2	117.82	-773.4	1,465.7	1,657.2	1,656.7	0.48	3,469.332	
295.3	295.3	263.5	263.5	0.5	0.3	117.84	-774.0	1,465.5	1,657.4	1,656.6	0.78	2,117.574	
300.0	300.0	267.7	267.7	0.5	0.3	117.84	-774.1	1,465.5	1,657.4	1,656.6	0.80	2,080.955	
393.7	393.7	359.2	359.2	0.7	0.3	117.86	-774.7	1,465.8	1,657.9	1,656.9	1.07	1,549.719	
400.0	400.0	365.7	365.7	0.8	0.3	117.86	-774.7	1,465.8	1,658.0	1,656.9	1.09	1,523.536	
492.1	492.1	457.2	457.1	1.0	0.4	117.87	-775.2	1,466.1	1,658.5	1,657.1	1.35	1,231.856	
500.0	500.0	464.8	464.8	1.0	0.4	117.87	-775.3	1,466.2	1,658.5	1,657.2	1.37	1,212.463	
590.5	590.5	558.4	558.4	1.2	0.5	117.90	-776.3	1,466.2	1,659.1	1,657.4	1.62	1,023.902	
600.0	600.0	568.5	568.5	1.2	0.5	117.90	-776.3	1,466.2	1,659.1	1,657.5	1.65	1,007.354	
689.0	689.0	667.8	667.7	1.4	0.5	117.93	-777.1	1,466.0	1,659.2	1,657.3	1.89	875.899	
700.0	700.0	680.3	680.3	1.4	0.5	117.93	-777.2	1,465.9	1,659.2	1,657.3	1.92	862.067	
773.3	773.3	748.4	748.3	1.6	0.5	117.96	-777.9	1,465.3	1,659.0	1,656.9	2.12	782.814	
787.4	787.4	760.5	760.5	1.6	0.6	117.97	-778.1	1,465.2	1,659.0	1,656.8	2.16	769.544	
800.0	800.0	771.4	771.4	1.7	0.6	117.97	-778.2	1,465.2	1,659.0	1,656.8	2.19	758.001	
885.8	885.8	864.7	864.6	1.9	0.6	118.02	-779.3	1,464.8	1,659.2	1,656.8	2.42	685.940	
900.0	900.0	882.1	882.0	1.9	0.6	118.02	-779.5	1,464.6	1,659.2	1,656.7	2.46	675.129	
964.2	964.2	939.2	939.2	2.0	0.6	118.04	-780.0	1,464.1	1,658.9	1,656.3	2.62	633.297	
984.2	984.2	955.1	955.1	2.1	0.6	118.05	-780.1	1,464.1	1,658.9	1,656.3	2.67	621.598	
1,000.0	1,000.0	967.6	967.5	2.1	0.6	118.05	-780.2	1,464.1	1,659.0	1,656.3	2.71	612.717	
1,082.7	1,082.7	1,047.6	1,047.5	2.3	0.7	118.08	-781.1	1,464.3	1,659.6	1,656.7	2.92	568.530	
1,100.0	1,100.0	1,067.4	1,067.3	2.3	0.7	118.08	-781.3	1,464.3	1,659.7	1,656.8	2.97	559.748	
1,181.1	1,181.1	1,148.6	1,148.5	2.5	0.7	118.11	-782.1	1,464.2	1,660.0	1,656.8	3.18	522.505	
1,200.0	1,200.0	1,166.0	1,166.0	2.6	0.7	118.12	-782.3	1,464.2	1,660.1	1,656.9	3.23	514.605	
1,279.5	1,279.5	1,242.0	1,242.0	2.7	0.7	118.14	-783.2	1,464.3	1,660.6	1,657.2	3.43	484.020	
1,300.0	1,300.0	1,262.1	1,262.1	2.8	0.8	118.14	-783.4	1,464.4	1,660.8	1,657.3	3.48	476.758	
1,377.9	1,377.9	1,338.7	1,338.6	3.0	0.8	118.16	-784.0	1,464.7	1,661.4	1,657.7	3.68	451.292	
1,400.0	1,400.0	1,360.3	1,360.2	3.0	0.8	118.16	-784.2	1,464.8	1,661.6	1,657.9	3.74	444.551	
1,476.4	1,476.4	1,435.8	1,435.8	3.2	0.8	118.18	-784.9	1,465.3	1,662.3	1,658.4	3.93	422.653	
1,500.0	1,500.0	1,459.4	1,459.4	3.2	0.8	118.18	-785.1	1,465.4	1,662.5	1,658.6	3.99	416.362	
1,574.8	1,574.8	1,541.2	1,541.1	3.4	0.9	118.21	-786.1	1,465.6	1,663.2	1,659.0	4.18	397.461	
1,600.0	1,600.0	1,571.5	1,571.4	3.5	0.9	118.22	-786.5	1,465.6	1,663.3	1,659.0	4.25	391.362	
1,650.0	1,650.0	1,625.0	1,624.9	3.6	0.9	118.25	-787.1	1,465.2	1,663.3	1,658.9	4.38	379.738	
1,673.2	1,673.2	1,647.0	1,646.9	3.6	0.9	-122.16	-787.4	1,465.1	1,663.3	1,658.9	4.43	375.632	
1,700.0	1,700.0	1,672.4	1,672.3	3.7	0.9	-122.16	-787.7	1,465.0	1,663.6	1,659.1	4.49	370.500	
1,771.6	1,771.6	1,739.0	1,738.9	3.8	0.9	-122.16	-788.5	1,464.8	1,664.9	1,660.3	4.64	358.635	
1,800.0	1,799.9	1,764.9	1,764.8	3.9	1.0	-122.17	-788.8	1,464.8	1,665.8	1,661.1	4.70	354.216	
1,870.1	1,869.9	1,831.4	1,831.3	4.0	1.0	-122.23	-789.6	1,464.9	1,668.7	1,663.9	4.86	343.616	
1,900.0	1,899.7	1,861.0	1,860.9	4.1	1.0	-122.27	-789.9	1,465.0	1,670.3	1,665.4	4.92	339.378	
1,968.5	1,967.8	1,929.1	1,929.0	4.2	1.0	-122.39	-790.2	1,465.5	1,674.5	1,669.4	5.08	329.388	
2,000.0	1,999.1	1,960.8	1,960.7	4.3	1.0	-122.46	-790.3	1,465.8	1,676.7	1,671.6	5.16	324.981	
2,066.9	2,065.5	2,028.8	2,028.7	4.4	1.0	-122.63	-790.6	1,466.2	1,682.1	1,676.7	5.33	315.696	
2,100.0	2,098.2	2,062.8	2,062.6	4.5	1.0	-122.72	-790.9	1,466.3	1,685.0	1,679.6	5.41	311.431	
2,165.3	2,162.6	2,128.0	2,127.9	4.7	1.1	-122.90	-791.7	1,466.3	1,691.4	1,685.8	5.59	302.749	
2,200.0	2,196.6	2,161.4	2,161.3	4.7	1.1	-123.00	-792.2	1,466.3	1,695.1	1,689.4	5.68	298.356	
2,249.9	2,245.5	2,210.1	2,210.0	4.9	1.1	-123.16	-792.8	1,466.3	1,700.9	1,695.1	5.83	291.864	
2,263.8	2,259.1	2,224.7	2,224.6	4.9	1.1	-123.24	-793.0	1,466.3	1,702.6	1,696.8	5.87	290.096	
2,300.0	2,294.5	2,262.8	2,262.6	5.0	1.1	-123.45	-793.5	1,466.2	1,707.0	1,701.0	5.98	285.578	
2,362.2	2,355.4	2,326.6	2,326.5	5.2	1.1	-123.79	-794.4	1,466.0	1,714.5	1,708.3	6.17	277.884	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,392.3	2,364.1	2,364.0	5.4	1.2	-123.99	-794.8	1,465.9	1,719.0	1,712.7	6.29	273.449	
2,460.6	2,451.6	2,422.8	2,422.6	5.6	1.2	-124.31	-795.4	1,465.7	1,726.3	1,719.8	6.48	266.383	
2,500.0	2,490.2	2,459.4	2,459.2	5.7	1.2	-124.51	-795.8	1,465.6	1,731.1	1,724.5	6.61	261.916	
2,559.0	2,547.9	2,514.8	2,514.7	5.9	1.2	-124.80	-796.6	1,465.6	1,738.4	1,731.6	6.81	255.374	
2,600.0	2,588.0	2,554.5	2,554.3	6.1	1.2	-125.01	-797.1	1,465.5	1,743.6	1,736.6	6.95	251.020	
2,657.5	2,644.2	2,610.5	2,610.4	6.3	1.2	-125.30	-797.9	1,465.5	1,750.8	1,743.7	7.15	245.040	
2,700.0	2,685.8	2,653.3	2,653.1	6.4	1.3	-125.53	-798.3	1,465.5	1,756.2	1,748.9	7.29	240.818	
2,755.9	2,740.5	2,707.9	2,707.7	6.6	1.3	-125.82	-798.6	1,465.6	1,763.3	1,755.8	7.49	235.398	
2,800.0	2,783.6	2,744.8	2,744.7	6.8	1.3	-126.02	-798.8	1,465.8	1,769.1	1,761.4	7.65	231.315	
2,854.3	2,836.7	2,790.3	2,790.1	7.0	1.3	-126.26	-799.3	1,466.1	1,776.4	1,768.5	7.84	226.436	
2,900.0	2,881.4	2,838.8	2,838.6	7.2	1.3	-126.51	-799.8	1,466.4	1,782.6	1,774.6	8.01	222.526	
2,952.7	2,933.0	2,898.8	2,898.6	7.4	1.3	-126.82	-800.6	1,466.6	1,789.7	1,781.5	8.20	218.120	
3,000.0	2,979.2	2,946.8	2,946.6	7.6	1.4	-127.06	-801.2	1,466.6	1,795.9	1,787.5	8.37	214.450	
3,051.2	3,029.3	2,998.7	2,998.5	7.8	1.4	-127.31	-801.9	1,466.5	1,802.6	1,794.0	8.56	210.549	
3,100.0	3,077.1	3,045.2	3,045.0	8.0	1.4	-127.53	-802.7	1,466.4	1,809.0	1,800.3	8.74	206.991	
3,149.6	3,125.6	3,092.3	3,092.2	8.2	1.4	-127.76	-803.4	1,466.3	1,815.6	1,806.7	8.92	203.494	
3,200.0	3,174.9	3,150.2	3,150.0	8.4	1.4	-128.03	-804.4	1,466.1	1,822.3	1,813.2	9.11	200.127	
3,248.0	3,221.8	3,200.0	3,199.8	8.6	1.4	-128.26	-805.1	1,465.7	1,828.4	1,819.1	9.28	197.009	
3,300.0	3,272.7	3,246.6	3,246.4	8.9	1.5	-128.47	-805.9	1,465.2	1,835.1	1,825.6	9.47	193.753	
3,346.4	3,318.1	3,283.9	3,283.7	9.0	1.5	-128.63	-806.7	1,465.0	1,841.3	1,831.7	9.64	190.958	
3,400.0	3,370.5	3,330.9	3,330.7	9.3	1.5	-128.84	-807.9	1,464.9	1,848.8	1,838.9	9.84	187.826	
3,444.9	3,414.4	3,372.3	3,372.0	9.5	1.5	-129.02	-809.0	1,464.9	1,855.1	1,845.1	10.01	185.271	
3,500.0	3,468.3	3,431.4	3,431.1	9.7	1.5	-129.27	-810.6	1,464.9	1,862.9	1,852.7	10.22	182.295	
3,543.3	3,510.7	3,485.8	3,485.5	9.9	1.5	-129.49	-812.0	1,464.5	1,868.9	1,858.5	10.38	180.038	
3,600.0	3,566.1	3,544.6	3,544.3	10.1	1.6	-129.73	-813.6	1,463.9	1,876.4	1,865.8	10.59	177.194	
3,641.7	3,606.9	3,585.6	3,585.3	10.3	1.6	-129.90	-814.7	1,463.4	1,881.9	1,871.2	10.74	175.167	
3,700.0	3,664.0	3,641.2	3,640.8	10.6	1.6	-130.12	-816.2	1,462.8	1,889.7	1,878.8	10.96	172.419	
3,740.1	3,703.2	3,679.0	3,678.6	10.7	1.6	-130.27	-817.2	1,462.4	1,895.2	1,884.1	11.11	170.577	
3,800.0	3,761.8	3,739.0	3,738.6	11.0	1.6	-130.50	-818.9	1,461.8	1,903.3	1,892.0	11.33	167.945	
3,837.4	3,798.3	3,777.7	3,777.3	11.2	1.6	-130.66	-819.8	1,461.4	1,908.4	1,896.9	11.47	166.343	
3,838.6	3,799.5	3,779.0	3,778.6	11.2	1.6	-130.67	-819.8	1,461.4	1,908.6	1,897.1	11.48	166.304	
3,900.0	3,859.7	3,848.8	3,848.4	11.4	1.7	-131.06	-821.1	1,460.6	1,916.3	1,904.6	11.66	164.394	
3,937.0	3,896.1	3,892.8	3,892.4	11.5	1.7	-131.27	-821.7	1,460.0	1,920.4	1,908.6	11.74	163.521	
4,000.0	3,958.3	3,953.3	3,952.8	11.7	1.7	-131.56	-822.5	1,459.1	1,926.5	1,914.6	11.90	161.948	
4,035.4	3,993.3	3,986.5	3,986.0	11.8	1.7	-131.69	-823.0	1,458.5	1,929.6	1,917.7	11.97	161.144	
4,100.0	4,057.4	4,057.6	4,057.1	12.0	1.7	-131.92	-824.2	1,457.4	1,934.5	1,922.4	12.12	159.619	
4,133.8	4,091.0	4,096.4	4,095.9	12.1	1.7	-132.03	-824.6	1,456.7	1,936.6	1,924.4	12.19	158.884	
4,200.0	4,156.8	4,165.6	4,165.1	12.2	1.8	-132.19	-825.1	1,455.3	1,939.7	1,927.4	12.33	157.375	
4,232.3	4,189.0	4,199.3	4,198.8	12.3	1.8	-132.25	-825.4	1,454.6	1,940.8	1,928.4	12.39	156.699	
4,300.0	4,256.6	4,258.4	4,257.8	12.4	1.8	-132.33	-825.9	1,453.4	1,942.5	1,930.0	12.51	155.214	
4,330.7	4,287.3	4,285.1	4,284.5	12.5	1.8	-132.35	-826.2	1,453.0	1,943.0	1,930.4	12.57	154.609	
4,400.0	4,356.6	4,363.9	4,363.4	12.6	1.8	-132.37	-826.6	1,451.8	1,943.3	1,930.6	12.69	153.170	
4,429.1	4,385.7	4,399.6	4,399.0	12.6	1.8	-132.37	-826.5	1,451.2	1,942.9	1,930.1	12.73	152.570	
4,437.2	4,393.8	4,409.2	4,408.6	12.7	1.8	-108.05	-826.4	1,451.0	1,942.7	1,929.8	12.92	150.411	
4,500.0	4,456.6	4,483.5	4,483.0	12.7	1.8	-108.06	-826.3	1,449.2	1,941.3	1,928.2	13.03	148.932	
4,527.5	4,484.1	4,511.9	4,511.4	12.8	1.8	-108.07	-826.3	1,448.3	1,940.5	1,927.4	13.09	148.263	
4,600.0	4,556.6	4,575.5	4,574.8	12.9	1.8	-108.08	-826.3	1,446.7	1,938.7	1,925.5	13.23	146.559	
4,626.0	4,582.6	4,600.0	4,599.4	12.9	1.8	-108.08	-826.2	1,446.2	1,938.2	1,924.9	13.28	145.952	
4,700.0	4,656.6	4,665.9	4,665.3	13.1	1.8	-108.09	-825.9	1,445.0	1,936.8	1,923.3	13.42	144.284	
4,724.4	4,681.0	4,688.2	4,687.6	13.1	1.8	-108.09	-825.9	1,444.6	1,936.3	1,922.9	13.47	143.741	
4,800.0	4,756.6	4,777.1	4,776.4	13.2	1.8	-108.09	-825.3	1,443.0	1,934.9	1,921.3	13.62	142.077	
4,822.8	4,779.4	4,800.0	4,799.3	13.3	1.8	-108.08	-825.0	1,442.5	1,934.4	1,920.7	13.66	141.572	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
4,900.0	4,856.6	4,866.5	4,865.9	13.4	1.8	108.06	-823.9	1,441.4	1,932.7	1,918.9	13.81	139.987	
4,921.2	4,877.8	4,883.9	4,883.3	13.4	1.8	108.06	-823.6	1,441.2	1,932.3	1,918.5	13.85	139.559	
5,000.0	4,956.6	4,961.0	4,960.3	13.6	1.8	108.02	-822.1	1,440.5	1,931.2	1,917.2	13.99	138.028	
5,019.7	4,976.3	4,981.3	4,980.6	13.6	1.8	108.01	-821.7	1,440.3	1,930.9	1,916.9	14.03	137.648	
5,100.0	5,056.6	5,049.8	5,049.0	13.7	1.8	107.98	-820.4	1,439.7	1,929.9	1,915.7	14.18	136.143	
5,118.1	5,074.7	5,064.2	5,063.5	13.8	1.8	107.98	-820.2	1,439.7	1,929.7	1,915.5	14.21	135.813	
5,200.0	5,156.6	5,134.5	5,133.8	13.9	1.8	107.96	-819.6	1,439.6	1,929.4	1,915.1	14.36	134.380	
5,216.5	5,173.1	5,149.8	5,149.1	13.9	1.8	107.95	-819.4	1,439.7	1,929.4	1,915.0	14.39	134.097	
5,230.7	5,187.2	5,163.0	5,162.2	13.9	1.8	107.95	-819.3	1,439.7	1,929.4	1,915.0	14.41	133.857	
5,300.0	5,256.6	5,225.1	5,224.4	14.1	1.8	107.92	-818.5	1,440.1	1,929.5	1,915.0	14.54	132.692	
5,314.9	5,271.5	5,237.9	5,237.1	14.1	1.8	107.92	-818.4	1,440.2	1,929.6	1,915.0	14.57	132.443	
5,400.0	5,356.6	5,312.6	5,311.8	14.2	1.8	107.88	-817.5	1,441.1	1,930.3	1,915.5	14.73	131.065	
5,413.4	5,370.0	5,326.3	5,325.5	14.3	1.8	107.88	-817.3	1,441.3	1,930.4	1,915.7	14.75	130.851	
5,500.0	5,456.6	5,411.6	5,410.8	14.4	1.8	107.83	-816.0	1,442.6	1,931.2	1,916.3	14.92	129.471	
5,511.8	5,468.4	5,421.0	5,420.2	14.4	1.8	107.82	-815.9	1,442.7	1,931.4	1,916.4	14.94	129.284	
5,600.0	5,556.6	5,500.0	5,499.2	14.6	1.8	107.78	-814.7	1,444.5	1,932.9	1,917.8	15.11	127.937	
5,610.2	5,566.8	5,500.0	5,499.2	14.6	1.8	107.78	-814.7	1,444.5	1,933.1	1,918.0	15.13	127.783	
5,700.0	5,656.6	5,574.0	5,573.2	14.8	1.8	107.74	-814.1	1,446.8	1,935.4	1,920.1	15.30	126.463	
5,708.6	5,665.2	5,581.2	5,580.4	14.8	1.8	107.74	-814.1	1,447.0	1,935.7	1,920.4	15.32	126.340	
5,800.0	5,756.6	5,697.1	5,696.3	14.9	1.8	107.71	-814.1	1,450.2	1,938.2	1,922.7	15.51	124.984	
5,807.1	5,763.7	5,705.3	5,704.4	14.9	1.8	107.71	-814.2	1,450.4	1,938.3	1,922.8	15.52	124.874	
5,900.0	5,856.6	5,803.5	5,802.6	15.1	1.8	107.72	-815.0	1,451.8	1,939.8	1,924.1	15.72	123.426	
5,905.5	5,862.1	5,809.9	5,809.0	15.1	1.8	107.72	-815.0	1,451.9	1,939.9	1,924.2	15.73	123.336	
6,000.0	5,956.6	5,913.8	5,912.9	15.3	1.9	107.76	-816.6	1,452.6	1,941.0	1,925.0	15.94	121.782	
6,003.9	5,960.5	5,917.1	5,916.2	15.3	1.9	107.76	-816.7	1,452.6	1,941.0	1,925.0	15.95	121.719	
6,100.0	6,056.6	6,000.0	5,999.1	15.5	1.9	107.81	-818.6	1,453.2	1,942.3	1,926.2	16.16	120.220	
6,102.3	6,058.9	6,000.4	5,999.4	15.5	1.9	107.81	-818.7	1,453.2	1,942.4	1,926.2	16.16	120.187	
6,200.0	6,156.6	6,126.8	6,125.8	15.7	1.9	107.90	-822.0	1,453.3	1,943.2	1,926.8	16.39	118.586	
6,200.8	6,157.4	6,127.6	6,126.6	15.7	1.9	107.90	-822.0	1,453.3	1,943.2	1,926.8	16.39	118.573	
6,272.2	6,228.8	6,200.0	6,199.0	15.8	2.0	107.94	-823.4	1,453.0	1,943.4	1,926.8	16.55	117.423	
6,299.2	6,255.8	6,224.3	6,223.3	15.8	2.0	17.97	-823.8	1,453.0	1,942.9	1,926.6	16.39	118.526	
6,300.0	6,256.6	6,224.9	6,223.9	15.8	2.0	17.97	-823.8	1,453.0	1,942.9	1,926.5	16.39	118.514	
6,350.0	6,306.4	6,265.6	6,264.6	15.9	2.0	18.10	-824.6	1,453.0	1,939.7	1,923.2	16.50	117.570	
6,397.6	6,353.6	6,305.0	6,304.0	15.9	2.0	18.32	-825.5	1,453.1	1,933.8	1,917.2	16.63	116.292	
6,400.0	6,355.9	6,307.4	6,306.3	15.9	2.0	18.34	-825.5	1,453.2	1,933.5	1,916.8	16.64	116.219	
6,450.0	6,404.8	6,356.2	6,355.2	15.9	2.0	18.71	-826.7	1,453.4	1,924.0	1,907.3	16.79	114.592	
6,496.0	6,449.0	6,400.7	6,399.6	16.0	2.0	19.17	-827.6	1,453.7	1,912.5	1,895.6	16.93	112.975	
6,500.0	6,452.8	6,405.5	6,404.4	16.0	2.0	19.22	-827.7	1,453.8	1,911.4	1,894.5	16.94	112.826	
6,550.0	6,499.7	6,465.3	6,464.2	15.9	2.0	19.92	-828.8	1,454.0	1,895.4	1,878.3	17.09	110.921	
6,594.5	6,540.3	6,511.4	6,510.4	15.9	2.0	20.66	-829.4	1,453.9	1,878.4	1,861.2	17.20	109.226	
6,600.0	6,545.3	6,515.7	6,514.6	15.9	2.0	20.76	-829.5	1,453.9	1,876.1	1,858.9	17.21	109.022	
6,650.0	6,589.3	6,553.7	6,552.6	15.9	2.1	21.72	-830.1	1,453.9	1,854.0	1,836.7	17.30	107.192	
6,692.9	6,625.7	6,585.1	6,584.0	15.9	2.1	22.70	-830.8	1,453.9	1,832.8	1,815.5	17.35	105.619	
6,700.0	6,631.6	6,590.2	6,589.1	15.9	2.1	22.88	-830.9	1,453.9	1,829.2	1,811.8	17.36	105.356	
6,750.0	6,671.9	6,626.9	6,625.8	15.9	2.1	24.28	-831.8	1,454.0	1,801.7	1,784.3	17.42	103.459	
6,791.3	6,703.6	6,656.5	6,655.4	15.9	2.1	25.65	-832.4	1,454.2	1,777.2	1,759.8	17.46	101.793	
6,800.0	6,710.1	6,662.5	6,661.4	15.9	2.1	25.96	-832.5	1,454.2	1,771.9	1,754.4	17.47	101.430	
6,850.0	6,745.9	6,696.0	6,694.9	16.0	2.1	27.96	-833.2	1,454.5	1,739.7	1,722.1	17.54	99.177	
6,889.7	6,772.6	6,724.9	6,723.8	16.1	2.1	29.89	-833.7	1,454.7	1,712.5	1,694.9	17.64	97.091	
6,900.0	6,779.2	6,732.2	6,731.1	16.1	2.1	30.44	-833.9	1,454.8	1,705.3	1,687.6	17.67	96.518	
6,950.0	6,809.8	6,766.1	6,765.0	16.3	2.1	33.41	-834.5	1,455.0	1,668.8	1,651.0	17.87	93.378	
6,988.2	6,831.3	6,789.8	6,788.6	16.4	2.1	36.07	-834.9	1,455.1	1,639.8	1,621.7	18.10	90.584	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,000.0	6,837.6	6,796.7	6,795.6	16.5	2.1	36.97	-835.0	1,455.2	1,630.5	1,612.4	18.18	89.668	
7,050.0	6,862.5	6,823.4	6,822.3	16.9	2.1	41.19	-835.4	1,455.3	1,590.6	1,572.0	18.63	85.369	
7,086.6	6,878.7	6,840.8	6,839.6	17.2	2.1	44.76	-835.6	1,455.4	1,560.6	1,541.5	19.06	81.871	
7,100.0	6,884.2	6,846.7	6,845.5	17.3	2.1	46.17	-835.7	1,455.4	1,549.4	1,530.1	19.23	80.567	
7,150.0	6,902.7	6,866.5	6,865.4	17.8	2.2	51.99	-836.0	1,455.4	1,507.0	1,487.0	19.96	75.486	
7,185.0	6,913.8	6,878.4	6,877.3	18.3	2.2	56.58	-836.1	1,455.5	1,476.8	1,456.2	20.54	71.904	
7,200.0	6,918.0	6,882.9	6,881.8	18.5	2.2	58.66	-836.2	1,455.5	1,463.7	1,443.0	20.78	70.438	
7,250.0	6,929.9	6,895.7	6,894.6	19.2	2.2	66.05	-836.3	1,455.5	1,419.9	1,398.3	21.60	65.722	
7,283.4	6,936.0	6,902.2	6,901.1	19.7	2.2	71.28	-836.4	1,455.6	1,390.3	1,368.2	22.13	62.818	
7,300.0	6,938.4	6,900.0	6,898.9	20.0	2.2	73.50	-836.3	1,455.6	1,375.6	1,353.3	22.37	61.485	
7,350.0	6,943.4	6,900.0	6,898.9	20.9	2.2	80.95	-836.3	1,455.6	1,331.3	1,308.2	23.12	57.590	
7,381.9	6,944.8	6,900.0	6,898.9	21.4	2.2	85.74	-836.3	1,455.6	1,303.2	1,279.5	23.62	55.164	
7,403.7	6,945.0	6,900.0	6,898.9	21.8	2.2	88.98	-836.3	1,455.6	1,283.9	1,259.9	23.99	53.521	
7,480.3	6,944.3	6,900.0	6,898.9	23.3	2.2	88.98	-836.3	1,455.6	1,217.1	1,191.7	25.48	47.774	
7,500.0	6,944.1	6,900.0	6,898.9	23.7	2.2	88.98	-836.3	1,455.6	1,200.1	1,174.3	25.86	46.409	
7,578.7	6,943.4	6,900.0	6,898.9	25.4	2.2	88.98	-836.3	1,455.6	1,133.1	1,105.6	27.51	41.194	
7,600.0	6,943.2	6,900.0	6,898.9	25.8	2.2	88.98	-836.3	1,455.6	1,115.3	1,087.3	27.95	39.899	
7,677.1	6,942.5	6,900.0	6,898.9	27.5	2.2	88.98	-836.3	1,455.6	1,051.6	1,022.0	29.66	35.452	
7,700.0	6,942.3	6,900.0	6,898.9	28.0	2.2	88.98	-836.3	1,455.6	1,033.1	1,002.9	30.17	34.243	
7,775.6	6,941.6	6,900.0	6,898.9	29.8	2.2	88.98	-836.3	1,455.6	973.2	941.3	31.93	30.485	
7,800.0	6,941.4	6,900.0	6,898.9	30.3	2.2	88.98	-836.3	1,455.6	954.4	921.9	32.49	29.372	
7,874.0	6,940.7	6,900.0	6,898.9	32.1	2.2	88.98	-836.3	1,455.6	898.8	864.6	34.27	26.230	
7,900.0	6,940.5	6,900.0	6,898.9	32.7	2.2	88.98	-836.3	1,455.6	880.0	845.1	34.89	25.220	
7,972.4	6,939.8	6,900.0	6,898.9	34.5	2.2	88.98	-836.3	1,455.6	829.4	792.8	36.67	22.617	
8,000.0	6,939.6	6,900.0	6,898.9	35.2	2.2	88.98	-836.3	1,455.6	811.1	773.7	37.35	21.714	
8,070.8	6,938.9	6,900.0	6,898.9	37.0	2.2	88.98	-836.3	1,455.6	766.4	727.3	39.13	19.587	
8,100.0	6,938.7	6,900.0	6,898.9	37.7	2.2	88.98	-836.3	1,455.6	749.2	709.3	39.86	18.796	
8,169.3	6,938.0	6,900.0	6,898.9	39.5	2.2	88.98	-836.3	1,455.6	711.5	669.8	41.63	17.092	
8,200.0	6,937.7	6,900.0	6,898.9	40.3	2.2	88.98	-836.3	1,455.6	696.3	653.9	42.41	16.419	
8,267.7	6,937.1	6,900.0	6,898.9	42.0	2.2	88.98	-836.3	1,455.6	666.6	622.5	44.16	15.097	
8,300.0	6,936.8	6,900.0	6,898.9	42.8	2.2	88.98	-836.3	1,455.6	654.4	609.5	44.99	14.547	
8,366.1	6,936.2	6,900.0	6,898.9	44.6	2.2	88.98	-836.3	1,455.6	634.0	587.3	46.71	13.571	
8,400.0	6,935.9	6,900.0	6,898.9	45.5	2.2	88.98	-836.3	1,455.6	625.9	578.3	47.60	13.151	
8,464.5	6,935.3	6,900.0	6,898.9	47.2	2.2	88.98	-836.3	1,455.6	615.5	566.2	49.30	12.486	
8,500.0	6,935.0	6,900.0	6,898.9	48.1	2.2	88.98	-836.3	1,455.6	612.6	562.4	50.23	12.197	
8,532.5	6,934.7	6,900.0	6,898.9	49.0	2.2	88.98	-836.3	1,455.6	611.7	560.7	51.09	11.974 CC	
8,563.0	6,934.5	6,900.0	6,898.9	49.8	2.2	88.98	-836.3	1,455.6	612.5	560.6	51.90	11.802 ES	
8,600.0	6,934.1	6,900.0	6,898.9	50.7	2.2	88.98	-836.3	1,455.6	615.5	562.6	52.88	11.639	
8,661.4	6,933.6	6,900.0	6,898.9	52.4	2.2	88.98	-836.3	1,455.6	625.2	570.7	54.52	11.468	
8,700.0	6,933.2	6,900.0	6,898.9	53.4	2.2	88.98	-836.3	1,455.6	634.3	578.7	55.54	11.419 SF	
8,759.8	6,932.7	6,900.0	6,898.9	55.0	2.2	88.98	-836.3	1,455.6	652.6	595.5	57.15	11.420	
8,800.0	6,932.3	6,900.0	6,898.9	56.1	2.2	88.98	-836.3	1,455.6	667.7	609.4	58.22	11.467	
8,858.2	6,931.8	6,900.0	6,898.9	57.7	2.2	88.98	-836.3	1,455.6	693.1	633.3	59.79	11.591	
8,900.0	6,931.4	6,900.0	6,898.9	58.8	2.2	88.98	-836.3	1,455.6	713.6	652.7	60.92	11.715	
8,956.7	6,930.9	6,900.0	6,898.9	60.3	2.2	88.98	-836.3	1,455.6	744.4	682.0	62.45	11.920	
9,000.0	6,930.5	6,900.0	6,898.9	61.5	2.2	88.98	-836.3	1,455.6	769.9	706.3	63.62	12.102	
9,055.1	6,930.0	6,901.6	6,900.4	63.0	2.2	89.13	-836.4	1,455.6	804.6	739.4	65.12	12.356	
9,100.0	6,929.6	6,901.3	6,900.2	64.2	2.2	89.10	-836.4	1,455.6	834.4	768.1	66.33	12.579	
9,153.5	6,929.1	6,901.0	6,899.8	65.6	2.2	89.07	-836.4	1,455.6	871.7	803.9	67.79	12.859	
9,200.0	6,928.7	6,900.7	6,899.5	66.9	2.2	89.05	-836.4	1,455.6	905.4	836.3	69.05	13.112	
9,251.9	6,928.2	6,900.3	6,899.2	68.3	2.2	89.02	-836.4	1,455.6	944.3	873.9	70.47	13.401	
9,300.0	6,927.8	6,900.1	6,898.9	69.6	2.2	88.99	-836.3	1,455.6	981.4	909.7	71.78	13.673	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
9,350.4	6,927.3	6,899.7	6,898.6	71.0	2.2	88.96	-836.3	1,455.6	1,021.3	948.2	73.16	13.961		
9,400.0	6,926.9	6,899.4	6,898.3	72.4	2.2	88.93	-836.3	1,455.6	1,061.5	987.0	74.51	14.246		
9,448.8	6,926.4	6,899.1	6,898.0	73.7	2.2	88.90	-836.3	1,455.6	1,101.7	1,025.9	75.85	14.525		
9,500.0	6,926.0	6,898.8	6,897.7	75.1	2.2	88.87	-836.3	1,455.6	1,144.7	1,067.4	77.25	14.818		
9,547.2	6,925.5	6,898.5	6,897.4	76.4	2.2	88.85	-836.3	1,455.6	1,184.8	1,106.3	78.54	15.085		
9,600.0	6,925.1	6,898.2	6,897.1	77.9	2.2	88.82	-836.3	1,455.6	1,230.3	1,150.3	79.99	15.381		
9,645.6	6,924.6	6,897.9	6,896.8	79.1	2.2	88.79	-836.3	1,455.6	1,270.1	1,188.9	81.25	15.633		
9,700.0	6,924.1	6,897.6	6,896.5	80.6	2.2	88.76	-836.3	1,455.6	1,318.0	1,235.3	82.74	15.930		
9,744.1	6,923.7	6,897.3	6,896.2	81.8	2.2	88.73	-836.3	1,455.5	1,357.2	1,273.3	83.95	16.167		
9,800.0	6,923.2	6,897.0	6,895.9	83.4	2.2	88.70	-836.3	1,455.5	1,407.4	1,321.9	85.49	16.462		
9,842.5	6,922.9	6,896.7	6,895.6	84.5	2.2	88.68	-836.3	1,455.5	1,445.8	1,359.1	86.66	16.683		
9,900.0	6,922.3	6,896.4	6,895.2	86.1	2.2	88.64	-836.3	1,455.5	1,498.1	1,409.8	88.25	16.976		
9,940.9	6,922.0	6,896.1	6,895.0	87.2	2.2	88.62	-836.3	1,455.5	1,535.5	1,446.1	89.37	17.181		
10,000.0	6,921.4	6,895.8	6,894.6	88.9	2.2	88.59	-836.3	1,455.5	1,589.9	1,498.9	91.00	17.471		
10,039.3	6,921.1	6,895.5	6,894.4	90.0	2.2	88.57	-836.3	1,455.5	1,626.3	1,534.2	92.09	17.660		
10,100.0	6,920.5	6,895.2	6,894.0	91.6	2.2	88.53	-836.3	1,455.5	1,682.6	1,588.8	93.76	17.945		
10,137.8	6,920.2	6,894.9	6,893.8	92.7	2.2	88.51	-836.3	1,455.5	1,717.9	1,623.0	94.81	18.119		
10,200.0	6,919.6	6,894.6	6,893.4	94.4	2.2	88.47	-836.3	1,455.5	1,776.1	1,679.6	96.53	18.400		
10,236.2	6,919.3	6,894.3	6,893.2	95.4	2.2	88.45	-836.3	1,455.5	1,810.2	1,712.6	97.53	18.561		
10,300.0	6,918.7	6,894.0	6,892.8	97.2	2.2	88.42	-836.3	1,455.5	1,870.3	1,771.0	99.29	18.837		
10,334.6	6,918.4	6,893.8	6,892.6	98.1	2.2	88.40	-836.3	1,455.5	1,903.1	1,802.8	100.25	18.983		
10,400.0	6,917.8	6,893.4	6,892.2	99.9	2.2	88.36	-836.3	1,455.5	1,965.1	1,863.0	102.06	19.254		
10,433.0	6,917.5	6,893.2	6,892.0	100.9	2.2	88.34	-836.3	1,455.5	1,996.5	1,893.6	102.97	19.389		
10,500.0	6,916.9	6,892.8	6,891.6	102.7	2.2	88.31	-836.3	1,455.5	2,060.4	1,955.5	104.83	19.655		
10,531.5	6,916.6	6,892.6	6,891.5	103.6	2.2	88.29	-836.3	1,455.5	2,090.4	1,984.7	105.70	19.777		
10,600.0	6,916.0	6,892.2	6,891.0	105.5	2.2	88.25	-836.3	1,455.5	2,156.1	2,048.5	107.60	20.038		
10,629.9	6,915.7	6,892.0	6,890.9	106.3	2.2	88.24	-836.3	1,455.5	2,184.7	2,076.3	108.43	20.149		
10,700.0	6,915.1	6,891.6	6,890.5	108.3	2.2	88.20	-836.3	1,455.5	2,252.1	2,141.8	110.37	20.405		
10,728.3	6,914.8	6,891.4	6,890.3	109.1	2.2	88.18	-836.3	1,455.5	2,279.4	2,168.2	111.16	20.506		
10,800.0	6,914.2	6,891.0	6,889.9	111.0	2.2	88.14	-836.3	1,455.5	2,348.5	2,235.4	113.15	20.756		
10,826.7	6,913.9	6,890.8	6,889.7	111.8	2.2	88.13	-836.3	1,455.5	2,374.4	2,260.5	113.89	20.848		
10,900.0	6,913.3	6,890.4	6,889.3	113.8	2.2	88.09	-836.2	1,455.5	2,445.2	2,329.3	115.92	21.093		
10,925.2	6,913.1	6,890.3	6,889.1	114.5	2.2	88.07	-836.2	1,455.5	2,469.6	2,353.0	116.62	21.176		
11,000.0	6,912.4	6,889.8	6,888.7	116.6	2.2	88.03	-836.2	1,455.5	2,542.2	2,423.5	118.70	21.417		
11,023.6	6,912.2	6,889.7	6,888.5	117.3	2.2	88.02	-836.2	1,455.5	2,565.1	2,445.7	119.36	21.491		
11,100.0	6,911.5	6,889.2	6,888.1	119.4	2.2	87.98	-836.2	1,455.5	2,639.3	2,517.8	121.48	21.727		
11,122.0	6,911.3	6,889.1	6,888.0	120.0	2.2	87.96	-836.2	1,455.5	2,660.8	2,538.7	122.09	21.793		
11,200.0	6,910.6	6,888.6	6,887.5	122.2	2.2	87.92	-836.2	1,455.5	2,736.7	2,612.4	124.26	22.025		
11,220.4	6,910.4	6,888.5	6,887.4	122.7	2.2	87.91	-836.2	1,455.5	2,756.6	2,631.8	124.82	22.084		
11,300.0	6,909.7	6,888.1	6,886.9	125.0	2.2	87.87	-836.2	1,455.5	2,834.3	2,707.2	127.04	22.311		
11,318.9	6,909.5	6,888.0	6,886.8	125.5	2.2	87.86	-836.2	1,455.5	2,852.7	2,725.1	127.56	22.363		
11,400.0	6,908.8	6,887.5	6,886.4	127.7	2.2	87.81	-836.2	1,455.5	2,932.0	2,802.2	129.82	22.585		
11,417.3	6,908.6	6,887.4	6,886.3	128.2	2.2	87.80	-836.2	1,455.5	2,948.9	2,818.6	130.30	22.632		
11,500.0	6,907.9	6,886.9	6,885.8	130.5	2.2	87.76	-836.2	1,455.5	3,029.8	2,897.2	132.60	22.850		
11,515.7	6,907.7	6,886.8	6,885.7	131.0	2.2	87.75	-836.2	1,455.5	3,045.2	2,912.2	133.04	22.890		
11,600.0	6,907.0	6,886.3	6,885.2	133.3	2.2	87.71	-836.2	1,455.5	3,127.8	2,992.5	135.38	23.104		
11,614.1	6,906.8	6,886.2	6,885.1	133.7	2.2	87.70	-836.2	1,455.5	3,141.7	3,005.9	135.77	23.139		
11,700.0	6,906.0	6,885.8	6,884.6	136.1	2.2	87.65	-836.2	1,455.5	3,226.0	3,087.8	138.16	23.349		
11,712.6	6,905.9	6,885.7	6,884.5	136.5	2.2	87.65	-836.2	1,455.5	3,238.3	3,099.8	138.51	23.379		
11,800.0	6,905.1	6,885.2	6,884.0	138.9	2.2	87.60	-836.2	1,455.5	3,324.2	3,183.3	140.95	23.585		
11,811.0	6,905.0	6,885.1	6,884.0	139.2	2.2	87.59	-836.2	1,455.5	3,335.0	3,193.8	141.25	23.610		
11,900.0	6,904.2	6,884.6	6,883.5	141.7	2.2	87.55	-836.2	1,455.5	3,422.5	3,278.8	143.73	23.812		

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
11,909.4	6,904.2	6,884.6	6,883.4	141.9	2.2	87.54	-836.2	1,455.5	3,431.8	3,287.8	143.99	23.833	
12,000.0	6,903.3	6,884.0	6,882.9	144.5	2.2	87.49	-836.2	1,455.5	3,521.0	3,374.5	146.51	24.032	
12,007.8	6,903.3	6,884.0	6,882.9	144.7	2.2	87.49	-836.2	1,455.5	3,528.7	3,382.0	146.73	24.049	
12,100.0	6,902.4	6,883.5	6,882.3	147.3	2.2	87.44	-836.2	1,455.5	3,619.5	3,470.2	149.30	24.243	
12,106.3	6,902.4	6,883.4	6,882.3	147.4	2.2	87.44	-836.2	1,455.5	3,625.7	3,476.2	149.47	24.256	
12,200.0	6,901.5	6,882.9	6,881.8	150.1	2.2	87.39	-836.2	1,455.5	3,718.1	3,566.0	152.08	24.448	
12,204.7	6,901.5	6,882.9	6,881.7	150.2	2.2	87.38	-836.2	1,455.5	3,722.7	3,570.5	152.21	24.457	
12,300.0	6,900.6	6,882.3	6,881.2	152.9	2.2	87.33	-836.2	1,455.5	3,816.8	3,661.9	154.87	24.645	
12,303.1	6,900.6	6,882.3	6,881.2	152.9	2.2	87.33	-836.2	1,455.5	3,819.9	3,664.9	154.96	24.651	
12,400.0	6,899.7	6,881.8	6,880.6	155.6	2.2	87.28	-836.2	1,455.5	3,915.5	3,757.9	157.65	24.836	
12,401.5	6,899.7	6,881.8	6,880.6	155.7	2.2	87.28	-836.2	1,455.5	3,917.0	3,759.3	157.70	24.839	
12,500.0	6,898.8	6,881.2	6,880.1	158.4	2.2	87.23	-836.1	1,455.5	4,014.3	3,853.9	160.44	25.021	
12,598.4	6,897.9	6,880.7	6,879.5	161.2	2.2	87.18	-836.1	1,455.5	4,111.6	3,948.4	163.18	25.197	
12,600.0	6,897.9	6,880.7	6,879.5	161.2	2.2	87.18	-836.1	1,455.5	4,113.2	3,949.9	163.23	25.199	
12,696.8	6,897.0	6,880.1	6,879.0	163.9	2.2	87.13	-836.1	1,455.5	4,208.9	4,043.0	165.92	25.367	
12,700.0	6,897.0	6,880.1	6,879.0	164.0	2.2	87.13	-836.1	1,455.5	4,212.1	4,046.1	166.01	25.372	
12,795.2	6,896.1	6,879.6	6,878.4	166.7	2.2	87.08	-836.1	1,455.5	4,306.3	4,137.7	168.67	25.532	
12,800.0	6,896.1	6,879.5	6,878.4	166.8	2.2	87.07	-836.1	1,455.5	4,311.0	4,142.2	168.80	25.540	
12,893.7	6,895.3	6,879.0	6,877.9	169.4	2.2	87.03	-836.1	1,455.5	4,403.8	4,232.4	171.41	25.692	
12,900.0	6,895.2	6,879.0	6,877.9	169.6	2.2	87.02	-836.1	1,455.5	4,410.1	4,238.5	171.58	25.702	
12,992.1	6,894.4	6,878.5	6,877.3	172.2	2.2	86.97	-836.1	1,455.5	4,501.3	4,327.1	174.15	25.847	
13,000.0	6,894.3	6,878.4	6,877.3	172.4	2.2	86.97	-836.1	1,455.5	4,509.1	4,334.7	174.37	25.859	
13,090.5	6,893.5	6,877.9	6,876.8	175.0	2.2	86.92	-836.1	1,455.5	4,598.8	4,421.9	176.89	25.998	
13,100.0	6,893.4	6,877.9	6,876.7	175.2	2.2	86.92	-836.1	1,455.5	4,608.2	4,431.0	177.16	26.012	
13,188.9	6,892.6	6,877.4	6,876.3	177.7	2.2	86.87	-836.1	1,455.5	4,696.4	4,516.7	179.64	26.144	
13,200.0	6,892.5	6,877.3	6,876.2	178.0	2.2	86.87	-836.1	1,455.5	4,707.3	4,527.4	179.94	26.160	
13,287.4	6,891.7	6,876.8	6,875.7	180.5	2.2	86.82	-836.1	1,455.5	4,794.0	4,611.6	182.38	26.286	
13,300.0	6,891.6	6,876.8	6,875.6	180.8	2.2	86.82	-836.1	1,455.5	4,806.5	4,623.8	182.73	26.304	
13,385.8	6,890.8	6,876.3	6,875.2	183.2	2.2	86.77	-836.1	1,455.5	4,891.6	4,706.5	185.12	26.424	
13,400.0	6,890.7	6,876.2	6,875.1	183.6	2.2	86.77	-836.1	1,455.5	4,905.7	4,720.2	185.52	26.443	
13,484.2	6,889.9	6,875.8	6,874.6	186.0	2.2	86.72	-836.1	1,455.5	4,989.3	4,801.4	187.86	26.558	
13,500.0	6,889.8	6,875.7	6,874.6	186.4	2.2	86.72	-836.1	1,455.5	5,004.9	4,816.6	188.30	26.579	
13,582.6	6,889.0	6,875.2	6,874.1	188.7	2.2	86.67	-836.1	1,455.5	5,087.0	4,896.4	190.61	26.688	
13,600.0	6,888.9	6,875.1	6,874.0	189.2	2.2	86.67	-836.1	1,455.5	5,104.2	4,913.1	191.09	26.711	
13,681.1	6,888.1	6,874.7	6,873.6	191.5	2.2	86.62	-836.1	1,455.5	5,184.7	4,991.3	193.35	26.815	
13,700.0	6,888.0	6,874.6	6,873.5	192.0	2.2	86.62	-836.1	1,455.5	5,203.5	5,009.6	193.88	26.839	
13,779.5	6,887.3	6,874.2	6,873.0	194.2	2.2	86.58	-836.1	1,455.5	5,282.4	5,086.4	196.09	26.939	
13,800.0	6,887.1	6,874.1	6,872.9	194.8	2.2	86.57	-836.1	1,455.5	5,302.8	5,106.1	196.66	26.964	
13,877.9	6,886.4	6,873.6	6,872.5	197.0	2.2	86.53	-836.1	1,455.5	5,380.2	5,181.4	198.83	27.059	
13,900.0	6,886.2	6,873.5	6,872.4	197.6	2.2	86.52	-836.1	1,455.5	5,402.2	5,202.7	199.45	27.085	
13,976.3	6,885.5	6,873.1	6,872.0	199.7	2.2	86.48	-836.1	1,455.5	5,478.0	5,276.4	201.58	27.176	
14,000.0	6,885.3	6,873.0	6,871.9	200.4	2.2	86.47	-836.1	1,455.5	5,501.5	5,299.3	202.24	27.204	
14,074.8	6,884.6	6,872.6	6,871.5	202.5	2.2	86.43	-836.0	1,455.5	5,575.8	5,371.5	204.32	27.290	
14,100.0	6,884.4	6,872.4	6,871.3	203.2	2.2	86.42	-836.0	1,455.5	5,600.9	5,395.9	205.02	27.319	
14,173.2	6,883.7	6,872.1	6,870.9	205.3	2.2	86.38	-836.0	1,455.5	5,673.7	5,466.6	207.06	27.401	
14,200.0	6,883.5	6,871.9	6,870.8	206.0	2.2	86.37	-836.0	1,455.5	5,700.3	5,492.5	207.81	27.431	
14,271.6	6,882.8	6,871.5	6,870.4	208.0	2.2	86.33	-836.0	1,455.5	5,771.5	5,561.7	209.80	27.509	
14,300.0	6,882.6	6,871.4	6,870.2	208.8	2.2	86.32	-836.0	1,455.5	5,799.7	5,589.2	210.59	27.540	
14,370.0	6,881.9	6,871.0	6,869.9	210.8	2.2	86.28	-836.0	1,455.5	5,869.4	5,656.9	212.54	27.615	
14,400.0	6,881.7	6,870.8	6,869.7	211.6	2.2	86.27	-836.0	1,455.5	5,899.2	5,685.8	213.38	27.647	
14,468.5	6,881.0	6,870.5	6,869.4	213.5	2.2	86.23	-836.0	1,455.5	5,967.3	5,752.0	215.29	27.718	
14,500.0	6,880.8	6,870.3	6,869.2	214.4	2.2	86.22	-836.0	1,455.5	5,998.7	5,782.5	216.16	27.750	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,880.2	6,870.0	6,868.8	216.3	2.2	86.19	-836.0	1,455.5	6,065.2	5,847.2	218.03	27.819	
14,584.2	6,880.0	6,869.9	6,868.7	216.8	2.2	86.18	-836.0	1,455.5	6,082.4	5,863.9	218.51	27.836	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
0.0	0.0	0.0	0.0	0.0	0.0	78.95	1,625.5	8,325.4	8,482.6				
98.4	98.4	69.4	69.4	0.1	0.4	78.95	1,625.5	8,325.4	8,482.6	8,482.1	0.53	N/A	
100.0	100.0	71.0	71.0	0.1	0.5	78.95	1,625.5	8,325.4	8,482.6	8,482.0	0.54	N/A	
196.8	196.8	167.8	167.8	0.3	2.3	78.95	1,625.5	8,325.4	8,482.6	8,480.0	2.59	3,269.722	
200.0	200.0	171.0	171.0	0.3	2.4	78.95	1,625.5	8,325.4	8,482.6	8,479.9	2.68	3,167.492	
295.3	295.3	266.3	266.3	0.5	4.5	78.95	1,625.5	8,325.4	8,482.6	8,477.6	4.98	1,704.332	
300.0	300.0	271.0	271.0	0.5	4.5	78.95	1,625.5	8,325.4	8,482.6	8,477.5	5.09	1,667.822	
393.7	393.7	364.7	364.7	0.7	6.5	78.95	1,625.5	8,325.4	8,482.6	8,475.4	7.22	1,174.731	
400.0	400.0	371.0	371.0	0.8	6.6	78.95	1,625.5	8,325.4	8,482.6	8,475.2	7.36	1,151.956	
492.1	492.1	463.1	463.1	1.0	8.5	78.95	1,625.5	8,325.4	8,482.6	8,473.1	9.44	898.309	
500.0	500.0	471.0	471.0	1.0	8.6	78.95	1,625.5	8,325.4	8,482.6	8,473.0	9.62	881.743	
590.5	590.5	561.5	561.5	1.2	10.5	78.95	1,625.5	8,325.4	8,482.6	8,470.9	11.66	727.723	
600.0	600.0	571.0	571.0	1.2	10.7	78.95	1,625.5	8,325.4	8,482.6	8,470.7	11.87	714.706	
689.0	689.0	660.0	660.0	1.4	12.5	78.95	1,625.5	8,325.4	8,482.6	8,468.7	13.87	611.773	
700.0	700.0	671.0	671.0	1.4	12.7	78.95	1,625.5	8,325.4	8,482.6	8,468.5	14.11	601.052	
787.4	787.4	758.4	758.4	1.6	14.4	78.95	1,625.5	8,325.4	8,482.6	8,466.5	16.07	527.774	
800.0	800.0	771.0	771.0	1.7	14.7	78.95	1,625.5	8,325.4	8,482.6	8,466.2	16.35	518.661	
885.8	885.8	856.8	856.8	1.9	16.4	78.95	1,625.5	8,325.4	8,482.6	8,464.3	18.28	464.096	
900.0	900.0	871.0	871.0	1.9	16.7	78.95	1,625.5	8,325.4	8,482.6	8,464.0	18.60	456.172	
984.2	984.2	955.2	955.2	2.1	18.4	78.95	1,625.5	8,325.4	8,482.6	8,462.1	20.48	414.151	
1,000.0	1,000.0	971.0	971.0	2.1	18.7	78.95	1,625.5	8,325.4	8,482.6	8,461.7	20.83	407.141	
1,082.7	1,082.7	1,053.7	1,053.7	2.3	20.4	78.95	1,625.5	8,325.4	8,482.6	8,459.9	22.69	373.924	
1,100.0	1,100.0	1,071.0	1,071.0	2.3	20.7	78.95	1,625.5	8,325.4	8,482.6	8,459.5	23.07	367.639	
1,181.1	1,181.1	1,152.1	1,152.1	2.5	22.4	78.95	1,625.5	8,325.4	8,482.6	8,457.7	24.89	340.826	
1,200.0	1,200.0	1,171.0	1,171.0	2.6	22.8	78.95	1,625.5	8,325.4	8,482.6	8,457.3	25.31	335.131	
1,279.5	1,279.5	1,250.5	1,250.5	2.7	24.4	78.95	1,625.5	8,325.4	8,482.6	8,455.5	27.09	313.116	
1,300.0	1,300.0	1,271.0	1,271.0	2.8	24.8	78.95	1,625.5	8,325.4	8,482.6	8,455.0	27.55	307.909	
1,377.9	1,377.9	1,348.9	1,348.9	3.0	26.3	78.95	1,625.5	8,325.4	8,482.6	8,453.3	29.29	289.576	
1,400.0	1,400.0	1,371.0	1,371.0	3.0	26.8	78.95	1,625.5	8,325.4	8,482.6	8,452.8	29.79	284.780	
1,476.4	1,476.4	1,447.4	1,447.4	3.2	28.3	78.95	1,625.5	8,325.4	8,482.6	8,451.1	31.50	269.330	
1,500.0	1,500.0	1,471.0	1,471.0	3.2	28.8	78.95	1,625.5	8,325.4	8,482.6	8,450.6	32.02	264.885	
1,574.8	1,574.8	1,545.8	1,545.8	3.4	30.3	78.95	1,625.5	8,325.4	8,482.6	8,448.9	33.70	251.732	
1,600.0	1,600.0	1,571.0	1,571.0	3.5	30.8	78.95	1,625.5	8,325.4	8,482.6	8,448.3	34.26	247.590	
1,650.0	1,650.0	1,621.0	1,621.0	3.6	31.8	78.95	1,625.5	8,325.4	8,482.6	8,447.2	35.38	239.763	
1,673.2	1,673.2	1,644.2	1,644.2	3.6	32.3	-161.46	1,625.5	8,325.4	8,482.7	8,446.8	35.89	236.336	
1,700.0	1,700.0	1,671.0	1,671.0	3.7	32.8	-161.46	1,625.5	8,325.4	8,483.0	8,446.5	36.48	232.528	
1,771.6	1,771.6	1,742.6	1,742.6	3.8	34.3	-161.45	1,625.5	8,325.4	8,485.0	8,447.0	38.03	223.120	
1,800.0	1,799.9	1,770.9	1,770.9	3.9	34.8	-161.45	1,625.5	8,325.4	8,486.3	8,447.7	38.63	219.657	
1,870.1	1,869.9	1,840.9	1,840.9	4.0	36.2	-161.43	1,625.5	8,325.4	8,490.6	8,450.5	40.12	211.653	
1,900.0	1,899.7	1,870.7	1,870.7	4.1	36.8	-161.42	1,625.5	8,325.4	8,492.9	8,452.2	40.74	208.469	
1,968.5	1,967.8	1,938.8	1,938.8	4.2	38.2	-161.39	1,625.5	8,325.4	8,499.4	8,457.2	42.15	201.643	
2,000.0	1,999.1	1,970.1	1,970.1	4.3	38.8	-161.38	1,625.5	8,325.4	8,502.8	8,460.0	42.79	198.717	
2,066.9	2,065.5	2,036.5	2,036.5	4.4	40.2	-161.34	1,625.5	8,325.4	8,511.3	8,467.2	44.13	192.885	
2,100.0	2,098.2	2,069.2	2,069.2	4.5	40.8	-161.32	1,625.5	8,325.4	8,516.0	8,471.3	44.77	190.198	
2,165.3	2,162.6	2,133.6	2,133.6	4.7	42.1	-161.28	1,625.5	8,325.4	8,526.4	8,480.4	46.04	185.210	
2,200.0	2,196.6	2,167.6	2,167.6	4.7	42.8	-161.26	1,625.5	8,325.4	8,532.5	8,485.8	46.69	182.745	
2,249.9	2,245.5	2,216.5	2,216.5	4.9	43.8	-161.21	1,625.5	8,325.4	8,541.9	8,494.3	47.62	179.383	
2,263.8	2,259.1	2,230.1	2,230.1	4.9	44.1	-161.22	1,625.5	8,325.4	8,544.7	8,496.8	47.92	178.321	
2,300.0	2,294.5	2,265.5	2,265.5	5.0	44.8	-161.24	1,625.5	8,325.4	8,551.8	8,503.1	48.70	175.618	
2,362.2	2,355.4	2,326.4	2,326.4	5.2	46.0	-161.26	1,625.5	8,325.4	8,564.1	8,514.1	50.04	171.155	
2,400.0	2,392.3	2,363.3	2,363.3	5.4	46.7	-161.28	1,625.5	8,325.4	8,571.6	8,520.7	50.85	168.565	
2,460.6	2,451.6	2,422.6	2,422.6	5.6	47.9	-161.31	1,625.5	8,325.4	8,583.5	8,531.4	52.16	164.563	

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

Anticollision Report



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Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	2,490.2	2,461.2	2,461.2	5.7	48.7	-161.33	1,625.5	8,325.4	8,591.3	8,538.3	53.01	162.063	
2,559.0	2,547.9	2,518.9	2,518.9	5.9	49.9	-161.35	1,625.5	8,325.4	8,602.9	8,548.6	54.29	158.458	
2,600.0	2,588.0	2,559.0	2,559.0	6.1	50.7	-161.37	1,625.5	8,325.4	8,611.0	8,555.8	55.18	156.054	
2,657.5	2,644.2	2,615.2	2,615.2	6.3	51.8	-161.40	1,625.5	8,325.4	8,622.4	8,565.9	56.43	152.801	
2,700.0	2,685.8	2,656.8	2,656.8	6.4	52.6	-161.41	1,625.5	8,325.4	8,630.8	8,573.4	57.35	150.486	
2,755.9	2,740.5	2,711.5	2,711.5	6.6	53.7	-161.44	1,625.5	8,325.4	8,641.8	8,583.2	58.57	147.546	
2,800.0	2,783.6	2,754.6	2,754.6	6.8	54.6	-161.46	1,625.5	8,325.4	8,650.5	8,591.0	59.53	145.312	
2,854.3	2,836.7	2,807.7	2,807.7	7.0	55.7	-161.48	1,625.5	8,325.4	8,661.2	8,600.5	60.72	142.652	
2,900.0	2,881.4	2,852.4	2,852.4	7.2	56.6	-161.50	1,625.5	8,325.4	8,670.3	8,608.6	61.71	140.495	
2,952.7	2,933.0	2,904.0	2,904.0	7.4	57.6	-161.52	1,625.5	8,325.4	8,680.7	8,617.8	62.87	138.085	
3,000.0	2,979.2	2,950.2	2,950.2	7.6	58.5	-161.55	1,625.5	8,325.4	8,690.0	8,626.1	63.90	136.000	
3,051.2	3,029.3	3,000.3	3,000.3	7.8	59.6	-161.57	1,625.5	8,325.4	8,700.1	8,635.1	65.02	133.812	
3,100.0	3,077.1	3,048.1	3,048.1	8.0	60.5	-161.59	1,625.5	8,325.4	8,709.8	8,643.7	66.09	131.795	
3,149.6	3,125.6	3,096.6	3,096.6	8.2	61.5	-161.61	1,625.5	8,325.4	8,719.6	8,652.4	67.17	129.809	
3,200.0	3,174.9	3,145.9	3,145.9	8.4	62.5	-161.63	1,625.5	8,325.4	8,729.6	8,661.3	68.28	127.855	
3,248.0	3,221.8	3,192.8	3,192.8	8.6	63.4	-161.65	1,625.5	8,325.4	8,739.1	8,669.7	69.33	126.050	
3,300.0	3,272.7	3,243.7	3,243.7	8.9	64.4	-161.67	1,625.5	8,325.4	8,749.3	8,678.9	70.47	124.156	
3,346.4	3,318.1	3,289.1	3,289.1	9.0	65.4	-161.69	1,625.5	8,325.4	8,758.5	8,687.0	71.49	122.514	
3,400.0	3,370.5	3,341.5	3,341.5	9.3	66.4	-161.72	1,625.5	8,325.4	8,769.1	8,696.4	72.67	120.677	
3,444.9	3,414.4	3,385.4	3,385.4	9.5	67.3	-161.74	1,625.5	8,325.4	8,778.0	8,704.3	73.65	119.182	
3,500.0	3,468.3	3,439.3	3,439.3	9.7	68.4	-161.76	1,625.5	8,325.4	8,788.9	8,714.0	74.86	117.399	
3,543.3	3,510.7	3,481.7	3,481.7	9.9	69.2	-161.78	1,625.5	8,325.4	8,797.5	8,721.6	75.82	116.038	
3,600.0	3,566.1	3,537.1	3,537.1	10.1	70.4	-161.80	1,625.5	8,325.4	8,808.7	8,731.6	77.06	114.306	
3,641.7	3,606.9	3,577.9	3,577.9	10.3	71.2	-161.82	1,625.5	8,325.4	8,816.9	8,739.0	77.98	113.066	
3,700.0	3,664.0	3,635.0	3,635.0	10.6	72.3	-161.84	1,625.5	8,325.4	8,828.5	8,749.2	79.26	111.382	
3,740.1	3,703.2	3,674.2	3,674.2	10.7	73.1	-161.86	1,625.5	8,325.4	8,836.4	8,756.3	80.15	110.253	
3,800.0	3,761.8	3,732.8	3,732.8	11.0	74.3	-161.89	1,625.5	8,325.4	8,848.3	8,766.8	81.46	108.615	
3,837.4	3,798.3	3,769.3	3,769.3	11.2	75.0	-161.90	1,625.5	8,325.4	8,855.7	8,773.4	82.29	107.619	
3,838.6	3,799.5	3,770.5	3,770.5	11.2	75.0	-161.90	1,625.5	8,325.4	8,855.9	8,773.6	82.32	107.579	
3,900.0	3,859.7	3,830.7	3,830.7	11.4	76.3	-162.00	1,625.5	8,325.4	8,867.4	8,783.5	83.96	105.613	
3,937.0	3,896.1	3,867.1	3,867.1	11.5	77.0	-162.05	1,625.5	8,325.4	8,873.8	8,788.8	84.93	104.481	
4,000.0	3,958.3	3,929.3	3,929.3	11.7	78.2	-162.13	1,625.5	8,325.4	8,883.5	8,797.0	86.57	102.621	
4,035.4	3,993.3	3,964.3	3,964.3	11.8	78.9	-162.17	1,625.5	8,325.4	8,888.5	8,801.0	87.47	101.615	
4,100.0	4,057.4	4,028.4	4,028.4	12.0	80.2	-162.24	1,625.5	8,325.4	8,896.4	8,807.3	89.10	99.846	
4,133.8	4,091.0	4,062.0	4,062.0	12.1	80.9	-162.27	1,625.5	8,325.4	8,900.0	8,810.0	89.94	98.954	
4,200.0	4,156.8	4,127.8	4,127.8	12.2	82.2	-162.32	1,625.5	8,325.4	8,905.9	8,814.4	91.55	97.275	
4,232.3	4,189.0	4,160.0	4,160.0	12.3	82.9	-162.34	1,625.5	8,325.4	8,908.3	8,816.0	92.33	96.488	
4,300.0	4,256.6	4,227.6	4,227.6	12.4	84.2	-162.37	1,625.5	8,325.4	8,912.1	8,818.2	93.92	94.896	
4,330.7	4,287.3	4,258.3	4,258.3	12.5	84.9	-162.38	1,625.5	8,325.4	8,913.4	8,818.8	94.62	94.203	
4,400.0	4,356.6	4,327.6	4,327.6	12.6	86.2	-162.39	1,625.5	8,325.4	8,915.1	8,818.9	96.17	92.697	
4,429.1	4,385.7	4,356.7	4,356.7	12.6	86.8	-162.39	1,625.5	8,325.4	8,915.3	8,818.5	96.81	92.088	
4,437.2	4,393.8	4,364.8	4,364.8	12.7	87.0	78.02	1,625.5	8,325.4	8,915.3	8,815.9	99.41	89.686	
4,500.0	4,456.6	4,427.6	4,427.6	12.7	88.3	78.02	1,625.5	8,325.4	8,915.3	8,814.5	100.76	88.477	
4,527.5	4,484.1	4,455.1	4,455.1	12.8	88.8	78.02	1,625.5	8,325.4	8,915.3	8,813.9	101.36	87.954	
4,600.0	4,556.6	4,527.6	4,527.6	12.9	90.3	78.02	1,625.5	8,325.4	8,915.3	8,812.3	102.94	86.609	
4,626.0	4,582.6	4,553.6	4,553.6	12.9	90.8	78.02	1,625.5	8,325.4	8,915.3	8,811.8	103.50	86.136	
4,700.0	4,656.6	4,627.6	4,627.6	13.1	92.3	78.02	1,625.5	8,325.4	8,915.3	8,810.2	105.11	84.817	
4,724.4	4,681.0	4,652.0	4,652.0	13.1	92.8	78.02	1,625.5	8,325.4	8,915.3	8,809.6	105.64	84.391	
4,800.0	4,756.6	4,727.6	4,727.6	13.2	94.3	78.02	1,625.5	8,325.4	8,915.3	8,808.0	107.29	83.096	
4,822.8	4,779.4	4,750.4	4,750.4	13.3	94.8	78.02	1,625.5	8,325.4	8,915.3	8,807.5	107.79	82.713	
4,900.0	4,856.6	4,827.6	4,827.6	13.4	96.3	78.02	1,625.5	8,325.4	8,915.3	8,805.8	109.47	81.443	
4,921.2	4,877.8	4,848.8	4,848.8	13.4	96.7	78.02	1,625.5	8,325.4	8,915.3	8,805.4	109.93	81.100	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
5,000.0	4,956.6	4,927.6	4,927.6	13.6	98.3	78.02	1,625.5	8,325.4	8,915.3	8,803.6	111.65	79.852	
5,019.7	4,976.3	4,947.3	4,947.3	13.6	98.7	78.02	1,625.5	8,325.4	8,915.3	8,803.2	112.08	79.547	
5,100.0	5,056.6	5,027.6	5,027.6	13.7	100.3	78.02	1,625.5	8,325.4	8,915.3	8,801.5	113.83	78.322	
5,118.1	5,074.7	5,045.7	5,045.7	13.8	100.7	78.02	1,625.5	8,325.4	8,915.3	8,801.1	114.22	78.051	
5,200.0	5,156.6	5,127.6	5,127.6	13.9	102.3	78.02	1,625.5	8,325.4	8,915.3	8,799.3	116.01	76.848	
5,216.5	5,173.1	5,144.1	5,144.1	13.9	102.7	78.02	1,625.5	8,325.4	8,915.3	8,798.9	116.37	76.610	
5,300.0	5,256.6	5,227.6	5,227.6	14.1	104.3	78.02	1,625.5	8,325.4	8,915.3	8,797.1	118.20	75.427	
5,314.9	5,271.5	5,242.5	5,242.5	14.1	104.6	78.02	1,625.5	8,325.4	8,915.3	8,796.8	118.52	75.219	
5,400.0	5,356.6	5,327.6	5,327.6	14.2	106.4	78.02	1,625.5	8,325.4	8,915.3	8,794.9	120.38	74.058	
5,413.4	5,370.0	5,341.0	5,341.0	14.3	106.6	78.02	1,625.5	8,325.4	8,915.3	8,794.6	120.68	73.878	
5,500.0	5,456.6	5,427.6	5,427.6	14.4	108.4	78.02	1,625.5	8,325.4	8,915.3	8,792.7	122.57	72.736	
5,511.8	5,468.4	5,439.4	5,439.4	14.4	108.6	78.02	1,625.5	8,325.4	8,915.3	8,792.5	122.83	72.583	
5,600.0	5,556.6	5,527.6	5,527.6	14.6	110.4	78.02	1,625.5	8,325.4	8,915.3	8,790.5	124.76	71.460	
5,610.2	5,566.8	5,537.8	5,537.8	14.6	110.6	78.02	1,625.5	8,325.4	8,915.3	8,790.3	124.98	71.332	
5,700.0	5,656.6	5,627.6	5,627.6	14.8	112.4	78.02	1,625.5	8,325.4	8,915.3	8,788.3	126.95	70.227	
5,708.6	5,665.2	5,636.2	5,636.2	14.8	112.6	78.02	1,625.5	8,325.4	8,915.3	8,788.1	127.14	70.122	
5,800.0	5,756.6	5,727.6	5,727.6	14.9	114.4	78.02	1,625.5	8,325.4	8,915.3	8,786.1	129.14	69.035	
5,807.1	5,763.7	5,734.7	5,734.7	14.9	114.5	78.02	1,625.5	8,325.4	8,915.3	8,786.0	129.30	68.952	
5,900.0	5,856.6	5,827.6	5,827.6	15.1	116.4	78.02	1,625.5	8,325.4	8,915.3	8,783.9	131.33	67.883	
5,905.5	5,862.1	5,833.1	5,833.1	15.1	116.5	78.02	1,625.5	8,325.4	8,915.3	8,783.8	131.45	67.820	
6,000.0	5,956.6	5,927.6	5,927.6	15.3	118.4	78.02	1,625.5	8,325.4	8,915.3	8,781.8	133.53	66.767	
6,003.9	5,960.5	5,931.5	5,931.5	15.3	118.5	78.02	1,625.5	8,325.4	8,915.3	8,781.7	133.61	66.724	
6,100.0	6,056.6	6,027.6	6,027.6	15.5	120.4	78.02	1,625.5	8,325.4	8,915.3	8,779.6	135.72	65.687	
6,102.3	6,058.9	6,029.9	6,029.9	15.5	120.5	78.02	1,625.5	8,325.4	8,915.3	8,779.5	135.77	65.662	
6,200.0	6,156.6	6,127.6	6,127.6	15.7	122.4	78.02	1,625.5	8,325.4	8,915.3	8,777.4	137.92	64.642	
6,200.8	6,157.4	6,128.4	6,128.4	15.7	122.5	78.02	1,625.5	8,325.4	8,915.3	8,777.3	137.94	64.634	
6,272.2	6,228.8	6,199.8	6,199.8	15.8	123.9	78.02	1,625.5	8,325.4	8,915.3	8,775.8	139.51	63.906	
6,299.2	6,255.8	6,226.8	6,226.8	15.8	124.4	-11.99	1,625.5	8,325.4	8,914.8	8,776.7	138.06	64.573	
6,300.0	6,256.6	6,227.6	6,227.6	15.8	124.5	-11.99	1,625.5	8,325.4	8,914.8	8,776.7	138.07	64.568	
6,350.0	6,306.4	6,277.4	6,277.4	15.9	125.5	-12.05	1,625.5	8,325.4	8,911.2	8,772.7	138.43	64.372	
6,397.6	6,353.6	6,324.6	6,324.6	15.9	126.4	-12.17	1,625.5	8,325.4	8,904.6	8,766.4	138.17	64.446	
6,400.0	6,355.9	6,326.9	6,326.9	15.9	126.5	-12.18	1,625.5	8,325.4	8,904.2	8,766.0	138.14	64.456	
6,450.0	6,404.8	6,375.8	6,375.8	15.9	127.4	-12.38	1,625.5	8,325.4	8,893.8	8,756.6	137.19	64.828	
6,496.0	6,449.0	6,420.0	6,420.0	16.0	128.3	-12.62	1,625.5	8,325.4	8,881.3	8,745.6	135.73	65.434	
6,500.0	6,452.8	6,423.8	6,423.8	16.0	128.4	-12.64	1,625.5	8,325.4	8,880.2	8,744.6	135.58	65.499	
6,550.0	6,499.7	6,470.7	6,470.7	15.9	129.3	-12.98	1,625.5	8,325.4	8,863.3	8,729.9	133.32	66.483	
6,594.5	6,540.3	6,511.3	6,511.3	15.9	130.2	-13.36	1,625.5	8,325.4	8,845.6	8,714.8	130.77	67.640	
6,600.0	6,545.3	6,516.3	6,516.3	15.9	130.3	-13.41	1,625.5	8,325.4	8,843.2	8,712.8	130.42	67.803	
6,650.0	6,589.3	6,560.3	6,560.3	15.9	131.1	-13.94	1,625.5	8,325.4	8,820.1	8,693.1	126.94	69.482	
6,692.9	6,625.7	6,596.7	6,596.7	15.9	131.9	-14.49	1,625.5	8,325.4	8,797.9	8,674.4	123.52	71.227	
6,700.0	6,631.6	6,602.6	6,602.6	15.9	132.0	-14.59	1,625.5	8,325.4	8,794.0	8,671.1	122.92	71.544	
6,750.0	6,671.9	6,642.9	6,642.9	15.9	132.8	-15.37	1,625.5	8,325.4	8,765.1	8,646.7	118.43	74.011	
6,791.3	6,703.6	6,674.6	6,674.6	15.9	133.4	-16.14	1,625.5	8,325.4	8,739.3	8,624.8	114.45	76.360	
6,800.0	6,710.1	6,681.1	6,681.1	15.9	133.6	-16.32	1,625.5	8,325.4	8,733.6	8,620.0	113.59	76.888	
6,850.0	6,745.9	6,716.9	6,716.9	16.0	134.3	-17.46	1,625.5	8,325.4	8,699.5	8,591.0	108.55	80.139	
6,889.7	6,772.6	6,743.6	6,743.6	16.1	134.8	-18.55	1,625.5	8,325.4	8,670.7	8,566.2	104.57	82.921	
6,900.0	6,779.2	6,750.2	6,750.2	16.1	135.0	-18.86	1,625.5	8,325.4	8,663.1	8,559.5	103.56	83.654	
6,950.0	6,809.8	6,780.8	6,780.8	16.3	135.6	-20.59	1,625.5	8,325.4	8,624.5	8,525.6	98.94	87.171	
6,988.2	6,831.3	6,802.3	6,802.3	16.4	136.0	-22.19	1,625.5	8,325.4	8,593.7	8,497.7	95.96	89.551	
7,000.0	6,837.6	6,808.6	6,808.6	16.5	136.1	-22.74	1,625.5	8,325.4	8,583.9	8,488.7	95.19	90.180	
7,050.0	6,862.5	6,833.5	6,833.5	16.9	136.6	-25.46	1,625.5	8,325.4	8,541.6	8,448.6	93.01	91.838	
7,086.6	6,878.7	6,849.7	6,849.7	17.2	137.0	-27.93	1,625.5	8,325.4	8,509.5	8,416.6	92.94	91.557	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	
7,100.0	6,884.2	6,855.2	6,855.2	17.3	137.1	-28.96	1,625.5	8,325.4	8,497.6	8,404.3	93.33	91.046	
7,150.0	6,902.7	6,873.7	6,873.7	17.8	137.5	-33.54	1,625.5	8,325.4	8,452.3	8,355.0	97.27	86.894	
7,185.0	6,913.8	6,884.8	6,884.8	18.3	137.7	-37.65	1,625.5	8,325.4	8,419.9	8,317.1	102.75	81.944	
7,200.0	6,918.0	6,889.0	6,889.0	18.5	137.8	-39.69	1,625.5	8,325.4	8,405.9	8,300.0	105.85	79.417	
7,250.0	6,929.9	6,900.9	6,900.9	19.2	138.0	-48.04	1,625.5	8,325.4	8,358.5	8,239.1	119.46	69.968	
7,283.4	6,936.0	6,907.0	6,907.0	19.7	138.1	-55.24	1,625.5	8,325.4	8,326.4	8,195.6	130.86	63.628	
7,300.0	6,938.4	6,909.4	6,909.4	20.0	138.2	-59.35	1,625.5	8,325.4	8,310.5	8,173.7	136.80	60.750	
7,350.0	6,943.4	6,914.4	6,914.4	20.9	138.3	-74.00	1,625.5	8,325.4	8,262.0	8,109.0	153.01	53.997	
7,381.9	6,944.8	6,915.8	6,915.8	21.4	138.3	-84.69	1,625.5	8,325.4	8,231.0	8,072.0	159.02	51.761	
7,403.7	6,945.0	6,916.0	6,916.0	21.8	138.3	-92.25	1,625.5	8,325.4	8,209.7	8,049.7	160.02	51.303	
7,480.3	6,944.3	6,915.3	6,915.3	23.3	138.3	-92.23	1,625.5	8,325.4	8,135.1	7,973.6	161.50	50.372	
7,500.0	6,944.1	6,915.1	6,915.1	23.7	138.3	-92.22	1,625.5	8,325.4	8,115.9	7,954.0	161.88	50.136	
7,578.7	6,943.4	6,914.4	6,914.4	25.4	138.3	-92.20	1,625.5	8,325.4	8,039.3	7,875.8	163.51	49.166	
7,600.0	6,943.2	6,914.2	6,914.2	25.8	138.3	-92.19	1,625.5	8,325.4	8,018.6	7,854.6	163.96	48.907	
7,677.1	6,942.5	6,913.5	6,913.5	27.5	138.3	-92.17	1,625.5	8,325.4	7,943.5	7,777.9	165.65	47.953	
7,700.0	6,942.3	6,913.3	6,913.3	28.0	138.2	-92.16	1,625.5	8,325.4	7,921.3	7,755.2	166.16	47.674	
7,775.6	6,941.6	6,912.6	6,912.6	29.8	138.2	-92.14	1,625.5	8,325.4	7,847.9	7,680.0	167.90	46.742	
7,800.0	6,941.4	6,912.4	6,912.4	30.3	138.2	-92.13	1,625.5	8,325.4	7,824.1	7,655.7	168.46	46.445	
7,874.0	6,940.7	6,911.7	6,911.7	32.1	138.2	-92.11	1,625.5	8,325.4	7,752.3	7,582.0	170.22	45.541	
7,900.0	6,940.5	6,911.5	6,911.5	32.7	138.2	-92.11	1,625.5	8,325.4	7,727.0	7,556.2	170.84	45.228	
7,972.4	6,939.8	6,910.8	6,910.8	34.5	138.2	-92.09	1,625.5	8,325.4	7,656.7	7,484.1	172.61	44.358	
8,000.0	6,939.6	6,910.6	6,910.6	35.2	138.2	-92.08	1,625.5	8,325.4	7,630.0	7,456.7	173.29	44.031	
8,070.8	6,938.9	6,909.9	6,909.9	37.0	138.2	-92.06	1,625.5	8,325.4	7,561.2	7,386.2	175.05	43.194	
8,100.0	6,938.7	6,909.7	6,909.7	37.7	138.2	-92.05	1,625.5	8,325.4	7,533.0	7,357.2	175.78	42.855	
8,169.3	6,938.0	6,909.0	6,909.0	39.5	138.2	-92.03	1,625.5	8,325.4	7,465.9	7,288.3	177.53	42.053	
8,200.0	6,937.7	6,908.7	6,908.7	40.3	138.2	-92.02	1,625.5	8,325.4	7,436.1	7,257.8	178.31	41.703	
8,267.7	6,937.1	6,908.1	6,908.1	42.0	138.1	-92.00	1,625.5	8,325.4	7,370.5	7,190.5	180.05	40.937	
8,300.0	6,936.8	6,907.8	6,907.8	42.8	138.1	-91.99	1,625.5	8,325.4	7,339.3	7,158.4	180.87	40.577	
8,366.1	6,936.2	6,907.2	6,907.2	44.6	138.1	-91.98	1,625.5	8,325.4	7,275.3	7,092.7	182.59	39.845	
8,400.0	6,935.9	6,906.9	6,906.9	45.5	138.1	-91.97	1,625.5	8,325.4	7,242.6	7,059.1	183.47	39.476	
8,464.5	6,935.3	6,906.3	6,906.3	47.2	138.1	-91.95	1,625.5	8,325.4	7,180.2	6,995.0	185.15	38.780	
8,500.0	6,935.0	6,906.0	6,906.0	48.1	138.1	-91.94	1,625.5	8,325.4	7,145.9	6,959.9	186.08	38.402	
8,563.0	6,934.5	6,905.5	6,905.5	49.8	138.1	-91.92	1,625.5	8,325.4	7,085.1	6,897.4	187.74	37.739	
8,600.0	6,934.1	6,905.1	6,905.1	50.7	138.1	-91.91	1,625.5	8,325.4	7,049.4	6,860.7	188.71	37.355	
8,661.4	6,933.6	6,904.6	6,904.6	52.4	138.1	-91.89	1,625.5	8,325.4	6,990.2	6,799.8	190.34	36.724	
8,700.0	6,933.2	6,904.2	6,904.2	53.4	138.1	-91.88	1,625.5	8,325.4	6,953.0	6,761.6	191.36	36.334	
8,759.8	6,932.7	6,903.7	6,903.7	55.0	138.1	-91.86	1,625.5	8,325.4	6,895.3	6,702.3	192.96	35.735	
8,800.0	6,932.3	6,903.3	6,903.3	56.1	138.0	-91.85	1,625.5	8,325.4	6,856.6	6,662.6	194.03	35.338	
8,858.2	6,931.8	6,902.8	6,902.8	57.7	138.0	-91.84	1,625.5	8,325.4	6,800.5	6,605.0	195.59	34.770	
8,900.0	6,931.4	6,902.4	6,902.4	58.8	138.0	-91.82	1,625.5	8,325.4	6,760.4	6,563.7	196.70	34.368	
8,956.7	6,930.9	6,901.9	6,901.9	60.3	138.0	-91.81	1,625.5	8,325.4	6,705.9	6,507.7	198.23	33.830	
9,000.0	6,930.5	6,901.5	6,901.5	61.5	138.0	-91.80	1,625.5	8,325.4	6,664.3	6,464.9	199.39	33.423	
9,055.1	6,930.0	6,901.0	6,901.0	63.0	138.0	-91.78	1,625.5	8,325.4	6,611.3	6,410.5	200.87	32.913	
9,100.0	6,929.6	6,900.6	6,900.6	64.2	138.0	-91.77	1,625.5	8,325.4	6,568.3	6,366.2	202.09	32.502	
9,153.5	6,929.1	6,900.1	6,900.1	65.6	138.0	-91.75	1,625.5	8,325.4	6,516.9	6,313.4	203.53	32.019	
9,200.0	6,928.7	6,899.7	6,899.7	66.9	138.0	-91.74	1,625.5	8,325.4	6,472.4	6,267.6	204.79	31.605	
9,251.9	6,928.2	6,899.2	6,899.2	68.3	138.0	-91.73	1,625.5	8,325.4	6,422.6	6,216.4	206.20	31.148	
9,300.0	6,927.8	6,898.8	6,898.8	69.6	138.0	-91.71	1,625.5	8,325.4	6,376.6	6,169.1	207.50	30.731	
9,350.4	6,927.3	6,898.3	6,898.3	71.0	137.9	-91.70	1,625.5	8,325.4	6,328.4	6,119.6	208.87	30.299	
9,400.0	6,926.9	6,897.9	6,897.9	72.4	137.9	-91.68	1,625.5	8,325.4	6,281.0	6,070.8	210.22	29.879	
9,448.8	6,926.4	6,897.4	6,897.4	73.7	137.9	-91.67	1,625.5	8,325.4	6,234.4	6,022.8	211.55	29.471	
9,500.0	6,926.0	6,897.0	6,897.0	75.1	137.9	-91.66	1,625.5	8,325.4	6,185.5	5,972.6	212.94	29.048	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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	6,925.5	6,896.5	6,896.5	76.4	137.9	-91.64	1,625.5	8,325.4	6,140.4	5,926.2	214.23	28.663	
9,600.0	6,925.1	6,896.1	6,896.1	77.9	137.9	-91.63	1,625.5	8,325.4	6,090.1	5,874.5	215.67	28.239	
9,645.6	6,924.6	6,895.6	6,895.6	79.1	137.9	-91.61	1,625.5	8,325.4	6,046.7	5,829.8	216.91	27.876	
9,700.0	6,924.1	6,895.1	6,895.1	80.6	137.9	-91.60	1,625.5	8,325.4	5,995.0	5,776.6	218.40	27.449	
9,744.1	6,923.7	6,894.7	6,894.7	81.8	137.9	-91.59	1,625.5	8,325.4	5,953.0	5,733.4	219.61	27.108	
9,800.0	6,923.2	6,894.2	6,894.2	83.4	137.9	-91.57	1,625.5	8,325.4	5,899.9	5,678.8	221.14	26.680	
9,842.5	6,922.9	6,893.9	6,893.9	84.5	137.9	-91.56	1,625.5	8,325.4	5,859.6	5,637.3	222.30	26.359	
9,900.0	6,922.3	6,893.3	6,893.3	86.1	137.8	-91.54	1,625.5	8,325.4	5,805.1	5,581.2	223.88	25.930	
9,940.9	6,922.0	6,893.0	6,893.0	87.2	137.8	-91.53	1,625.5	8,325.4	5,766.3	5,541.3	225.00	25.628	
10,000.0	6,921.4	6,892.4	6,892.4	88.9	137.8	-91.51	1,625.5	8,325.4	5,710.4	5,483.7	226.62	25.198	
10,039.3	6,921.1	6,892.1	6,892.1	90.0	137.8	-91.50	1,625.5	8,325.4	5,673.2	5,445.5	227.70	24.915	
10,100.0	6,920.5	6,891.5	6,891.5	91.6	137.8	-91.49	1,625.5	8,325.4	5,615.9	5,386.5	229.37	24.484	
10,137.8	6,920.2	6,891.2	6,891.2	92.7	137.8	-91.48	1,625.5	8,325.4	5,580.2	5,349.8	230.41	24.219	
10,200.0	6,919.6	6,890.6	6,890.6	94.4	137.8	-91.46	1,625.5	8,325.4	5,521.5	5,289.4	232.12	23.788	
10,236.2	6,919.3	6,890.3	6,890.3	95.4	137.8	-91.45	1,625.5	8,325.4	5,487.4	5,254.3	233.11	23.540	
10,300.0	6,918.7	6,889.7	6,889.7	97.2	137.8	-91.43	1,625.5	8,325.4	5,427.4	5,192.6	234.87	23.108	
10,334.6	6,918.4	6,889.4	6,889.4	98.1	137.8	-91.42	1,625.5	8,325.4	5,394.9	5,159.1	235.82	22.877	
10,400.0	6,917.8	6,888.8	6,888.8	99.9	137.8	-91.40	1,625.5	8,325.4	5,333.5	5,095.9	237.62	22.445	
10,433.0	6,917.5	6,888.5	6,888.5	100.9	137.7	-91.39	1,625.5	8,325.4	5,302.5	5,064.0	238.53	22.230	
10,500.0	6,916.9	6,887.9	6,887.9	102.7	137.7	-91.37	1,625.5	8,325.4	5,239.9	4,999.5	240.38	21.798	
10,531.5	6,916.6	6,887.6	6,887.6	103.6	137.7	-91.37	1,625.5	8,325.4	5,210.4	4,969.2	241.25	21.598	
10,600.0	6,916.0	6,887.0	6,887.0	105.5	137.7	-91.35	1,625.5	8,325.4	5,146.4	4,903.3	243.14	21.167	
10,629.9	6,915.7	6,886.7	6,886.7	106.3	137.7	-91.34	1,625.5	8,325.4	5,118.5	4,874.6	243.96	20.981	
10,700.0	6,915.1	6,886.1	6,886.1	108.3	137.7	-91.32	1,625.5	8,325.4	5,053.2	4,807.3	245.90	20.550	
10,728.3	6,914.8	6,885.8	6,885.8	109.1	137.7	-91.31	1,625.5	8,325.4	5,026.9	4,780.2	246.68	20.378	
10,800.0	6,914.2	6,885.2	6,885.2	111.0	137.7	-91.29	1,625.5	8,325.4	4,960.3	4,711.7	248.66	19.948	
10,826.7	6,913.9	6,884.9	6,884.9	111.8	137.7	-91.28	1,625.5	8,325.4	4,935.5	4,686.1	249.40	19.790	
10,900.0	6,913.3	6,884.3	6,884.3	113.8	137.7	-91.26	1,625.5	8,325.4	4,867.7	4,616.3	251.42	19.361	
10,925.2	6,913.1	6,884.1	6,884.1	114.5	137.7	-91.25	1,625.5	8,325.4	4,844.4	4,592.3	252.12	19.215	
11,000.0	6,912.4	6,883.4	6,883.4	116.6	137.6	-91.23	1,625.5	8,325.4	4,775.4	4,521.2	254.19	18.787	
11,023.6	6,912.2	6,883.2	6,883.2	117.3	137.6	-91.23	1,625.5	8,325.4	4,753.6	4,498.8	254.84	18.653	
11,100.0	6,911.5	6,882.5	6,882.5	119.4	137.6	-91.21	1,625.5	8,325.4	4,683.3	4,426.4	256.95	18.226	
11,122.0	6,911.3	6,882.3	6,882.3	120.0	137.6	-91.20	1,625.5	8,325.4	4,663.1	4,405.5	257.56	18.105	
11,200.0	6,910.6	6,881.6	6,881.6	122.2	137.6	-91.18	1,625.5	8,325.4	4,591.6	4,331.9	259.72	17.679	
11,220.4	6,910.4	6,881.4	6,881.4	122.7	137.6	-91.17	1,625.5	8,325.4	4,572.9	4,312.6	260.29	17.569	
11,300.0	6,909.7	6,880.7	6,880.7	125.0	137.6	-91.15	1,625.5	8,325.4	4,500.3	4,237.8	262.49	17.145	
11,318.9	6,909.5	6,880.5	6,880.5	125.5	137.6	-91.14	1,625.5	8,325.4	4,483.1	4,220.1	263.01	17.045	
11,400.0	6,908.8	6,879.8	6,879.8	127.7	137.6	-91.12	1,625.5	8,325.4	4,409.3	4,144.1	265.26	16.623	
11,417.3	6,908.6	6,879.6	6,879.6	128.2	137.6	-91.12	1,625.5	8,325.4	4,393.6	4,127.9	265.74	16.534	
11,500.0	6,907.9	6,878.9	6,878.9	130.5	137.6	-91.09	1,625.5	8,325.4	4,318.8	4,050.7	268.03	16.113	
11,515.7	6,907.7	6,878.7	6,878.7	131.0	137.6	-91.09	1,625.5	8,325.4	4,304.6	4,036.1	268.47	16.034	
11,600.0	6,907.0	6,878.0	6,878.0	133.3	137.5	-91.06	1,625.5	8,325.4	4,228.6	3,957.8	270.80	15.615	
11,614.1	6,906.8	6,877.8	6,877.8	133.7	137.5	-91.06	1,625.5	8,325.4	4,215.9	3,944.7	271.19	15.546	
11,700.0	6,906.0	6,877.0	6,877.0	136.1	137.5	-91.04	1,625.5	8,325.4	4,138.9	3,865.4	273.57	15.129	
11,712.6	6,905.9	6,876.9	6,876.9	136.5	137.5	-91.03	1,625.5	8,325.4	4,127.7	3,853.8	273.92	15.069	
11,800.0	6,905.1	6,876.1	6,876.1	138.9	137.5	-91.01	1,625.5	8,325.4	4,049.7	3,773.4	276.35	14.655	
11,811.0	6,905.0	6,876.0	6,876.0	139.2	137.5	-91.01	1,625.5	8,325.4	4,040.0	3,763.3	276.65	14.603	
11,900.0	6,904.2	6,875.2	6,875.2	141.7	137.5	-90.98	1,625.5	8,325.4	3,961.1	3,681.9	279.12	14.191	
11,909.4	6,904.2	6,875.2	6,875.2	141.9	137.5	-90.98	1,625.5	8,325.4	3,952.7	3,673.3	279.38	14.148	
12,000.0	6,903.3	6,874.3	6,874.3	144.5	137.5	-90.95	1,625.5	8,325.4	3,872.9	3,591.0	281.90	13.739	
12,007.8	6,903.3	6,874.3	6,874.3	144.7	137.5	-90.95	1,625.5	8,325.4	3,866.0	3,583.9	282.11	13.704	
12,100.0	6,902.4	6,873.4	6,873.4	147.3	137.4	-90.92	1,625.5	8,325.4	3,785.4	3,500.7	284.67	13.297	

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 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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

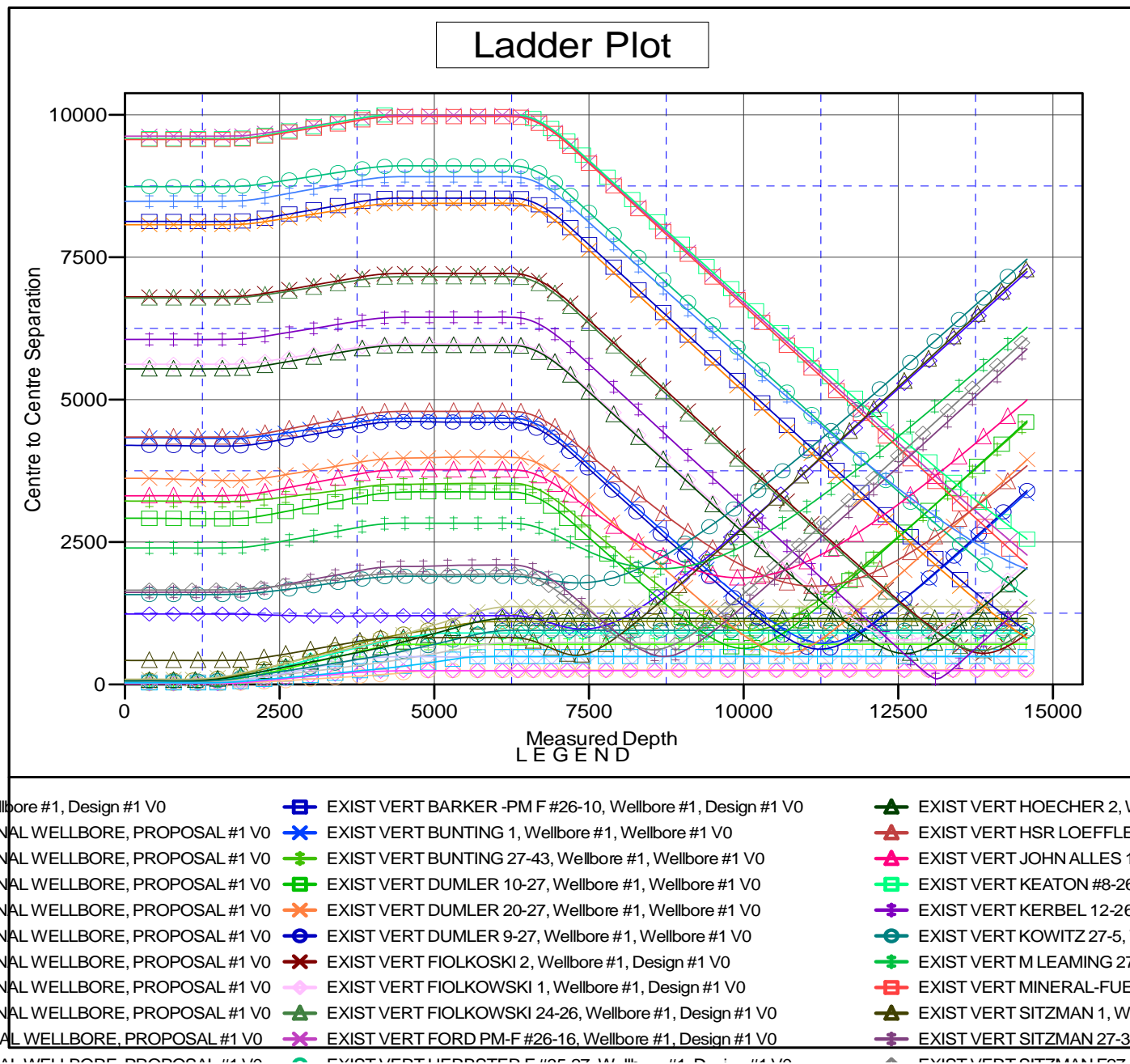
Offset Design NW SW SEC. 27 T5N R65W 6th P.M. - EXIST VERT VETTING PM F-#26-7 - Wellbore #1 - Design #1													Offset Site Error:	0.0 usft
Survey Program: 0-INC													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (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		
12,106.3	6,902.4	6,873.4	6,873.4	147.4	137.4	-90.92	1,625.5	8,325.4	3,779.9	3,495.1	284.85	13.270		
12,200.0	6,901.5	6,872.5	6,872.5	150.1	137.4	-90.90	1,625.5	8,325.4	3,698.5	3,411.0	287.45	12.867		
12,204.7	6,901.5	6,872.5	6,872.5	150.2	137.4	-90.89	1,625.5	8,325.4	3,694.4	3,406.8	287.58	12.847		
12,300.0	6,900.6	6,871.6	6,871.6	152.9	137.4	-90.87	1,625.5	8,325.4	3,612.2	3,322.0	290.22	12.446		
12,303.1	6,900.6	6,871.6	6,871.6	152.9	137.4	-90.87	1,625.5	8,325.4	3,609.5	3,319.2	290.31	12.433		
12,400.0	6,899.7	6,870.7	6,870.7	155.6	137.4	-90.84	1,625.5	8,325.4	3,526.7	3,233.7	293.00	12.037		
12,401.5	6,899.7	6,870.7	6,870.7	155.7	137.4	-90.84	1,625.5	8,325.4	3,525.4	3,232.4	293.04	12.030		
12,500.0	6,898.8	6,869.8	6,869.8	158.4	137.4	-90.81	1,625.5	8,325.4	3,442.0	3,146.2	295.78	11.637		
12,598.4	6,897.9	6,868.9	6,868.9	161.2	137.4	-90.78	1,625.5	8,325.4	3,358.1	3,059.5	298.56	11.248		
12,600.0	6,897.9	6,868.9	6,868.9	161.2	137.4	-90.78	1,625.5	8,325.4	3,358.1	3,059.5	298.56	11.248		
12,696.8	6,897.0	6,868.0	6,868.0	163.9	137.3	-90.76	1,625.5	8,325.4	3,277.7	2,976.5	301.25	10.880		
12,700.0	6,897.0	6,868.0	6,868.0	164.0	137.3	-90.76	1,625.5	8,325.4	3,275.1	2,973.8	301.34	10.869		
12,795.2	6,896.1	6,867.1	6,867.1	166.7	137.3	-90.73	1,625.5	8,325.4	3,197.0	2,893.0	303.98	10.517		
12,800.0	6,896.1	6,867.1	6,867.1	166.8	137.3	-90.73	1,625.5	8,325.4	3,193.1	2,889.0	304.12	10.500		
12,893.7	6,895.3	6,866.3	6,866.3	169.4	137.3	-90.70	1,625.5	8,325.4	3,117.2	2,810.5	306.72	10.163		
12,900.0	6,895.2	6,866.2	6,866.2	169.6	137.3	-90.70	1,625.5	8,325.4	3,112.1	2,805.2	306.90	10.141		
12,992.1	6,894.4	6,865.4	6,865.4	172.2	137.3	-90.67	1,625.5	8,325.4	3,038.6	2,729.1	309.46	9.819		
13,000.0	6,894.3	6,865.3	6,865.3	172.4	137.3	-90.67	1,625.5	8,325.4	3,032.3	2,722.6	309.68	9.792		
13,090.5	6,893.5	6,864.5	6,864.5	175.0	137.3	-90.65	1,625.5	8,325.4	2,961.1	2,648.9	312.19	9.485		
13,100.0	6,893.4	6,864.4	6,864.4	175.2	137.3	-90.64	1,625.5	8,325.4	2,953.7	2,641.3	312.46	9.453		
13,188.9	6,892.6	6,863.6	6,863.6	177.7	137.2	-90.62	1,625.5	8,325.4	2,884.9	2,570.0	314.93	9.161		
13,200.0	6,892.5	6,863.5	6,863.5	178.0	137.2	-90.62	1,625.5	8,325.4	2,876.5	2,561.2	315.24	9.125		
13,287.4	6,891.7	6,862.7	6,862.7	180.5	137.2	-90.59	1,625.5	8,325.4	2,810.1	2,492.5	317.67	8.846		
13,300.0	6,891.6	6,862.6	6,862.6	180.8	137.2	-90.59	1,625.5	8,325.4	2,800.6	2,482.6	318.02	8.807		
13,385.8	6,890.8	6,861.8	6,861.8	183.2	137.2	-90.56	1,625.5	8,325.4	2,736.8	2,416.4	320.41	8.542		
13,400.0	6,890.7	6,861.7	6,861.7	183.6	137.2	-90.56	1,625.5	8,325.4	2,726.4	2,405.6	320.80	8.499		
13,484.2	6,889.9	6,860.9	6,860.9	186.0	137.2	-90.54	1,625.5	8,325.4	2,665.1	2,342.0	323.14	8.247		
13,500.0	6,889.8	6,860.8	6,860.8	186.4	137.2	-90.53	1,625.5	8,325.4	2,653.8	2,330.2	323.58	8.201		
13,582.6	6,889.0	6,860.0	6,860.0	188.7	137.2	-90.51	1,625.5	8,325.4	2,595.2	2,269.3	325.88	7.964		
13,600.0	6,888.9	6,859.9	6,859.9	189.2	137.2	-90.50	1,625.5	8,325.4	2,583.1	2,256.7	326.36	7.915		
13,681.1	6,888.1	6,859.1	6,859.1	191.5	137.2	-90.48	1,625.5	8,325.4	2,527.1	2,198.5	328.62	7.690		
13,700.0	6,888.0	6,859.0	6,859.0	192.0	137.2	-90.48	1,625.5	8,325.4	2,514.3	2,185.1	329.15	7.639		
13,779.5	6,887.3	6,858.3	6,858.3	194.2	137.1	-90.45	1,625.5	8,325.4	2,461.2	2,129.8	331.36	7.427		
13,800.0	6,887.1	6,858.1	6,858.1	194.8	137.1	-90.45	1,625.5	8,325.4	2,447.7	2,115.8	331.93	7.374		
13,877.9	6,886.4	6,857.4	6,857.4	197.0	137.1	-90.43	1,625.5	8,325.4	2,397.4	2,063.3	334.10	7.176		
13,900.0	6,886.2	6,857.2	6,857.2	197.6	137.1	-90.42	1,625.5	8,325.4	2,383.4	2,048.7	334.71	7.121		
13,976.3	6,885.5	6,856.5	6,856.5	199.7	137.1	-90.40	1,625.5	8,325.4	2,336.1	1,999.2	336.84	6.935		
14,000.0	6,885.3	6,856.3	6,856.3	200.4	137.1	-90.39	1,625.5	8,325.4	2,321.7	1,984.2	337.50	6.879		
14,074.8	6,884.6	6,855.6	6,855.6	202.5	137.1	-90.37	1,625.5	8,325.4	2,277.3	1,937.7	339.58	6.706		
14,100.0	6,884.4	6,855.4	6,855.4	203.2	137.1	-90.36	1,625.5	8,325.4	2,262.7	1,922.4	340.28	6.649		
14,173.2	6,883.7	6,854.7	6,854.7	205.3	137.1	-90.34	1,625.5	8,325.4	2,221.4	1,879.0	342.32	6.489		
14,200.0	6,883.5	6,854.5	6,854.5	206.0	137.1	-90.34	1,625.5	8,325.4	2,206.6	1,863.6	343.06	6.432		
14,271.6	6,882.8	6,853.8	6,853.8	208.0	137.1	-90.32	1,625.5	8,325.4	2,168.4	1,823.4	345.06	6.284		
14,300.0	6,882.6	6,853.6	6,853.6	208.8	137.0	-90.31	1,625.5	8,325.4	2,153.8	1,807.9	345.85	6.228		
14,370.0	6,881.9	6,852.9	6,852.9	210.8	137.0	-90.29	1,625.5	8,325.4	2,118.8	1,771.0	347.80	6.092		
14,400.0	6,881.7	6,852.7	6,852.7	211.6	137.0	-90.28	1,625.5	8,325.4	2,104.4	1,755.7	348.63	6.036		
14,468.5	6,881.0	6,852.0	6,852.0	213.5	137.0	-90.26	1,625.5	8,325.4	2,072.6	1,722.1	350.54	5.913		
14,500.0	6,880.8	6,851.8	6,851.8	214.4	137.0	-90.25	1,625.5	8,325.4	2,058.6	1,707.2	351.42	5.858		
14,566.9	6,880.2	6,851.2	6,851.2	216.3	137.0	-90.23	1,625.5	8,325.4	2,030.2	1,676.9	353.28	5.747		
14,584.2	6,880.0	6,851.0	6,851.0	216.8	137.0	-90.23	1,625.5	8,325.4	2,023.1	1,669.4	353.76	5.719	CC, ES, SF	

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 @ 4681.0usft (Original Well ECoordinates are relative to: BOULTER FARMS 27H-302
 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°



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well BOULTER FARMS 27H-302
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Reference Site:	NW SW SEC. 27 T5N R65W 6th P.M.	MD Reference:	KB-EST @ 4681.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	BOULTER FARMS 27H-302	Survey Calculation Method:	Minimum Curvature
Well Error:	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 @ 4681.0usft (Original Well ECoordinates are relative to: BOULTER FARMS 27H-302

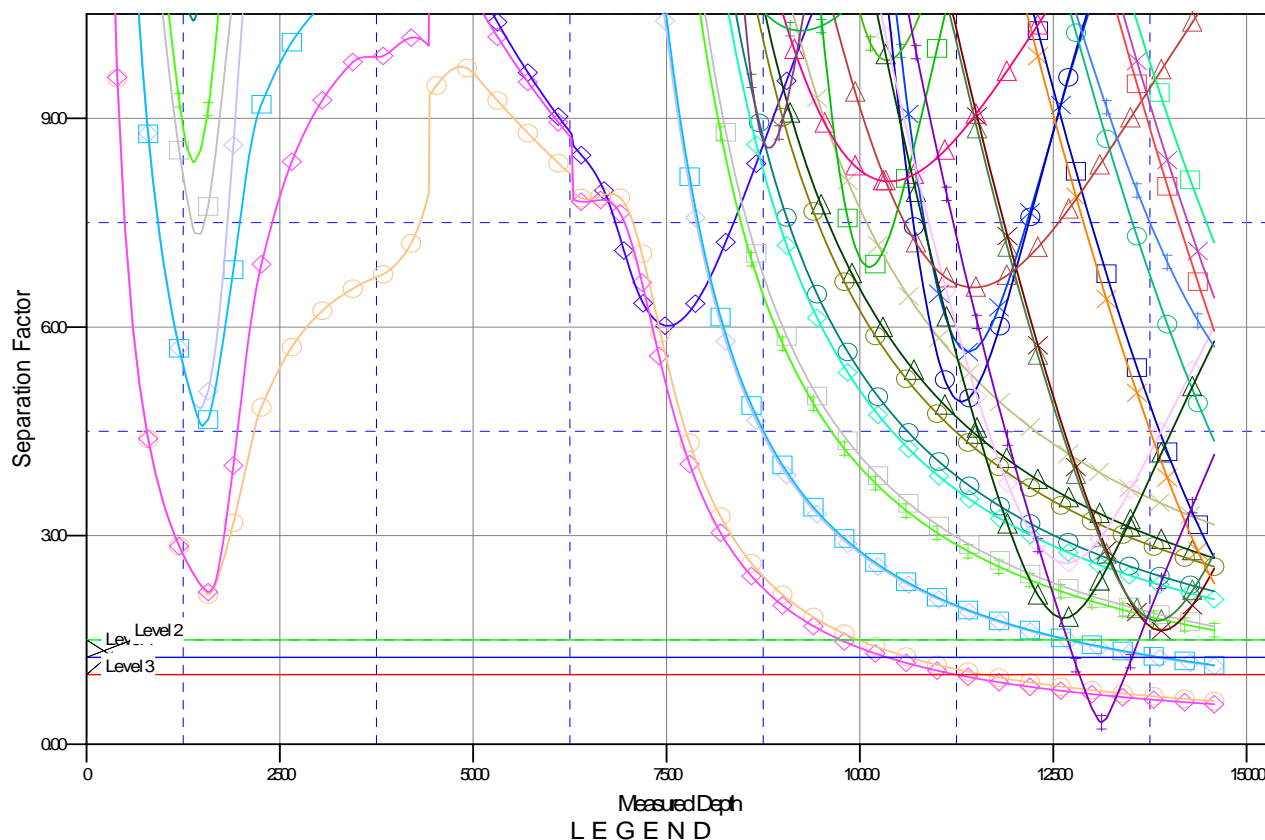
Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000

Grid Convergence at Surface is: 0.54°

Separation Factor Plot



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